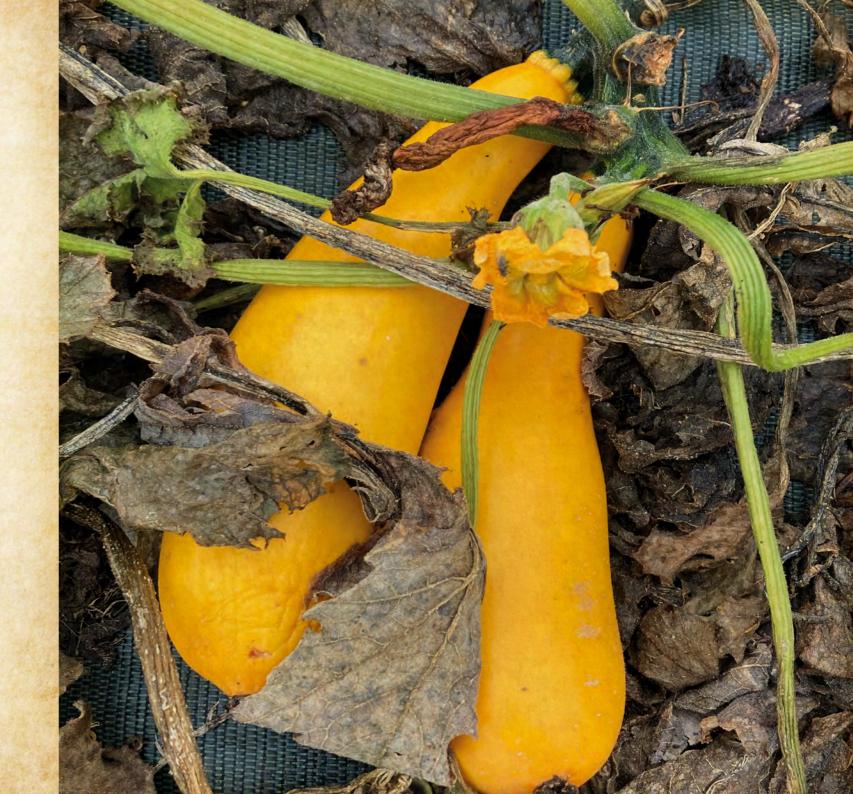




This publication is the result of the cooperation of partners active in the field of agroecology and implementing training and other kind of knowledge transfer activities in the framework of the Erasmus+ Bridging Generations in Agroecology (BAG) Project.

This consortium gathers 6 organizations from Poland, Germany, France, Netherlands, Italy and Switzerland:



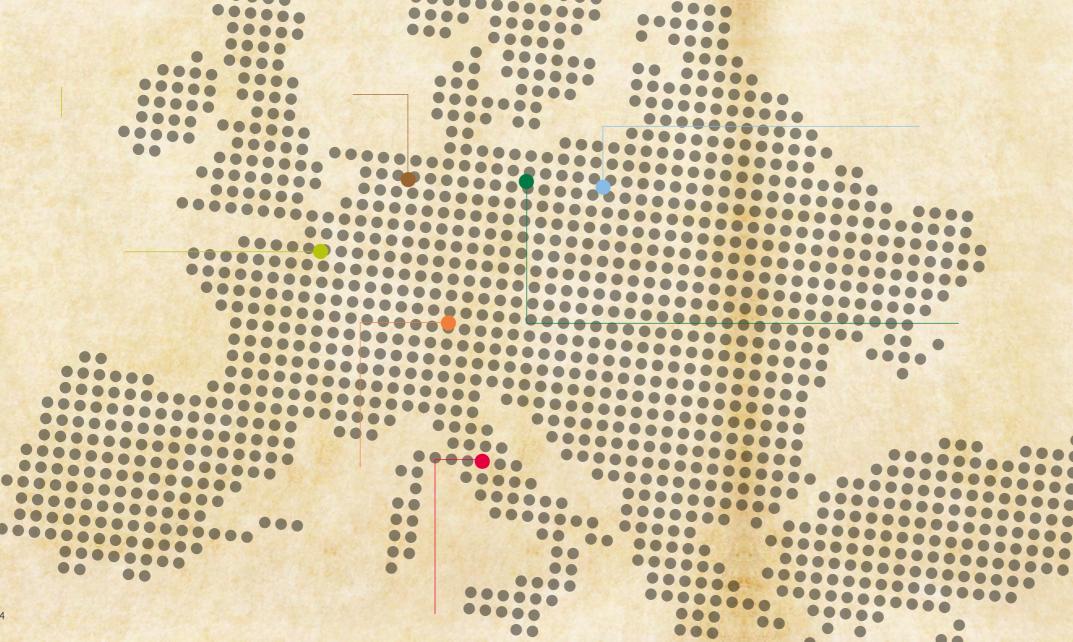
Why this publication?

This publication is the result of the cooperation of partners active in the field of agroecology and implementing training and other kinds of knowledge transfer activities in the framework of the Erasmus+ project Bridging Generations in Agroecology (BAG).

This consortium gathers six organizations from Poland, Germany, France, the Netherlands, Italy and Switzerland:

- ZIARNO Ecological-Cultural Association working in the field of education for sustainability (Poland),
- HNEE University for Sustainable Development in Eberswalde (Germany),
- Toekomstboeren Association of aspiring, new and established farmers working towards agroecology (Netherlands),
- InterAfocg Network by and for farmers, aiming at their decision-making autonomy (France),
- Schola Campesina Aps International agroecology school (Italy),
- Verein für biologisch-dynamische
 Landwirtschaft School of Biodynamic Agriculture
 (Switzerland)

All partners conduct activities of adult education for agroecology and decided to partner to share experiences and improve their activities in terms of content and method as well as to raise awareness on the issue of knowledge dissemination in agroecology.



General Introduction

The BAG project is an answer to the current challenges affecting rural areas in Europe, and specifically the difficulties surrounding the sharing and co-creation of knowledge. In particular, this publication seeks to highlight the importance of knowledge transmission for agroecology in Europe. The guidebook will be - in its final version - divided into three parts:

PART 1 The concept of agroecology

An overview of the main definitions and approaches to agroecology.

PART 2 Transfer of knowledge in agroecology

An overview of practices and needed innovations in this field.

PART 3 Policy recommendations

How knowledge transfer in agroecology can be enabled through policy measures.

This March 2022 publication represents Part 1.

This guidebook is directed to civil society organizations active in the field of agroecology to support them in their transfer of knowledge activities; to academics who wish to explore the topic providing them with content from the ground; to policy makers who want to know better the reality and needs of small-scale food producers in Europe.

In addition to this publication, the Erasmus+ BAG project will develop curricula, short videos and podcasts.



Why is this important?

Agriculture and food systems in Europe are facing various challenges, such as the decline in the number of farms or the ageing of the farming population.

According to Eurostat (2021), almost 90% of farmers are aged 40 or older, while the number of farms in the EU decreased by about 4.1 million between 2005 and 2016, a decline of 28%. Most of this decline is due to small farms of less than 5 hectares. Added to this are the difficulties of starting a farm for young people and new entrants, which include the particularly difficult access to land (Ruralization, 2021) and the generally low profitability of the agricultural sector. The task for European farmers today is to adopt alternative ways of working and managing their territory to free

themselves from the current system that is highly work demanding, poorly valued and remunerated and contributes to environmental damages. Public policies led by the Common Agricultural Policy of the European Union (CAP), while slowly turning to support greener practices, still play a major role in maintaining market--orientated and large-scale agriculture. In this context, the BAG partner organizations defend a model

> of agriculture that is farmer-Almost -centred and stress the importance to adopt a holistic approach to the food system (food system approach).

aged 40 or older

Why a food system approach?

Agriculture and food are embedded in the complex interactions across sectors and actors that shape society. In Europe, as in many other places in the world, farmers' livelihoods and the environment are often seen as competing with each other, even though both elements are victims of the current agricultural model. Approaching the challenges of agriculture today implies integrating aspects that usually are considered separated: rural development, youth employment, gender perspective, human health, climate change, environment, etc. The food system approach highlights the importance of the nexus between food, health, ecology and culture and allows to explore the sustainability of food systems as a holistic challenge where food producers have a central role to play (CSM, 2021; HLPE, 2020). The agroecology concept is capturing the interrelation between these dimensions which is so important to consider in current times. The food system

approach brought by agroecology represents a major reason for the commitment of the BAG partners to agroecology.

Why Agroecology?

Agroecology (the concept of which is introduced in Part 1) is increasingly seen as a response to the multiple crisis situations that societies face with increasing concern today (IAASTD, 2009; IPBES, 2019; IPCC, 2020; HLPE, 2019).

This response is rooted in the traditions of communities and continuously enriched with innovations in a Human Rights-based approach (Nyéléni, 2015). In Europe, the importance of rural areas has greatly diminished, as well as that of farmers, whose numbers are dramatically decreasing, and the complex social and cultural rules that characterised rural life (Tordjman, 2021).

Food Systems "are web of actors, processes, and interactions involved in gathering, fishing, growing, processing, distributing, preparng (cooking, feeding, caring), consuming and disposing of foods [...]. A holistic food systems lense in concentrated with how these processes interact with one another, and how the ecological, social, political and economic context constantly shape and re-shape food systems, whilst recognizing the particular role of power, gender and generational relationships." (CSM, 2021, P.4)



According to the Declaration of Nyéléni (2015), agroecology advocates an agricultural model

- that respects farmers' rights and livelihoods,
- that aims to feed the surrounding population,
- that is based on local biodiversity, culture and knowledge, and
- that is managed at the local level.

The BAG partners have a variety of entry points to agroecology and implement very different kinds of action, in different contexts. Nevertheless, when exchanging ideas together, they found that they all recognise themselves in the Nyéléni concept of agroecology. The diversity of topics, actions and methods expressed in it is a richness that can improve their own actions and which they want to share with this project.

Why Knowledge?

Crucial to have farmers in the future

In an agroecological approach, with a wide range of key actors, food producers are at the centre. It is therefore essential to recover, preserve and develop the knowledge that is useful for their activities and autonomy in order to secure the future of food producers. This is also crucial for new farmers and young people who want to farm in close connection with the ecosystem and their immediate environment. Without knowledge and skills appropriate to local needs (how to grow food on small plots, how to plan and build the appropriate equipment, how to prepare food for storage and marketing, how to find new ways of marketing, etc.) farmers fall into dangerous dependency, e.g. on industrial seed producers.

ource – Eurostat, Farm Structure Survey, Infographics by Access To land – v ccesstoland.eu – March 2017 – Creative Commons, Graphic design – Camille

Co-creation and access to knowledge is a real issue

This knowledge - despite being of high importance - is not easily available and accessible. A great deal of useful knowledge has been lost throughout Europe. What remains from the past, as well as the valuable innovations that have recently been developed - or are still to be developed - are poorly disseminated. Means of transmission, sharing and co-creation of knowledge amongst peers, between generations, and amongst different kinds of actors such as academia (dialogue of knowledge) do exist but greatly remain in the informal sphere, poorly supported by public authorities. The lack of circulation of knowledge for agroecology, specifically between generations and at the benefit of youth, is the element that named this project Bridging Generations in Agroecology. This guidebook, along with the videos, podcasts and curricula, has been developed to share our experiences and knowledge and to co-create tools to facilitate these processes. The co-creation processes are enriched by the variety of the project partners.

It's threatened by the digital economy

In a world where knowledge and data are increasingly seen as an economic value in themselves: local knowledge should be well protected from corporate use (to prevent patenting as it already happened widely in the seed sector). Digitalization of food systems that - under full control of the local community, can potentially be a useful tool for local



development purposes - is currently mainly used to facilitate data collection for corporate control and interest. At the same time, the adoption of new technologies in agriculture - instead of supporting - is currently mainly supplanting food producers. In this context, it is key to protect local knowledge (by adequate regulation) and keep control of the data generated by local food systems (Schola Campesina, 2021).

It's time to make formal and informal knowledge dialogue

In Europe and many parts of the world, local knowledge and practices are under-evaluated by the farming communities themselves as well as by the general society giving more credibility and legitimacy to formal research centres and certified experts. Knowledge is acknowledged as a matter of power where specific profiles coming from the formal education system (and from developed countries) are given high credibility at the expense of other profiles, including informal education systems, farmers' knowledge and knowledge coming from the farming experiences. For this reason, the HLPE (2019) calls for a reconfiguration of knowledge systems and voices are heard in academia calling for a democratisation of knowledge and recognition of the value of informal knowledge systems (Pimbert, 2018).

"Agroecology is also based on a radical conceptualization of knowledge systems, whereby work on cognitive justice, epistemic justice, Indigeneity, and decoloniality is upending the dominance of Western, scientific, Eurocentric, and patriarchal worldviews as the basis for the future of food and agriculture" (Pimbert et al., 2021)

"A recurring theme throughout this report has been the need to change the relationship between formal research and academic outcomes and the local knowledge and experience of farmers, rural and urban communities and other actors along food value chains, many of whom are in the (HLPE 2019, p.106). private sector"

The BAG project highlights different experiences that articulate formal and informal spheres of education for agroecology showing the mutual respect and recognition ongoing among worlds that are still very separated. It reminds us that agroecology cannot be advanced by experts and academia only, but will be advanced by food producers and their organizations in close collaboration with other actors collaborating in trust for the sustainability of the whole society.

This project shows that the formal and non-formal systems of agroecological adult education can work together and improve their respective activities. It is also an opportunity to give visibility to important activities of non-formal knowledge transfer on agroecology in the participating countries and to point out the need for better recognition of these initiatives by formal education systems and public authorities.

References

CSM (Civil Society and Indigenous Peoples' Mechanism) (2021). CSM Vision on Food Systems and Nutrition. An alternative to the CFS Voluntary Guidelines on Food Systems and Nutrition. April 2021. Retrieved from csm4cfs.org (December 2021).

HLPE (High Level Panel of Experts on Food Security and Nutrition) (2019). Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition. HLPE Reports series #14, Rome. https://www.fao.org/3/ca5602en/ca5602en.pdf

Eurostat (2021). Key figures on the European food chain - 2021 edition. Luxembourg: Publications Office of the European Union.

HLPE (High Level Panel of Experts on Food Security and Nutrition) (2020). Food security and nutrition: building a global narrative towards 2030. HLPE Reports series #15, Rome. Available at https://www.fao.org/3/ca9731en/ca9731en.pdf

IAASTD (International Assessment of Agricultural Knowledge, Science and Technology for Development) (2009). Synthesis report: a synthesis of the global and sub-global IAASTD reports / edited by Beverly D. McIntyre et al.. Washington, DC: Island Press.

IPBES (2019): Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services edited by S. Díaz et al. Bonn: IPBES secretariat.

IPCC (Intergovernmental Panel on Climate Change) (2019). Climate change and land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. Geneva: IPCC.

Nyéléni (2015). International Forum for Agroecology. Nyéléni Center, Sélingué, Mali. 24–27 February 2015. Available at https://ag-transition.org/wp-content/uploads/2015/10/NYELENI-2015-ENGLISH-FINAL-WEB.pdf (Downloaded: 31 January 2022).

Pimbert, M.P. (2018). Democratizing knowledge and ways of knowing for food sovereignty, agroecology and biocultural diversity, in Pimbert, M.P. (ed.) Food Sovereignty, Agroecology And Biocultural Diversity. Constructing and Contesting Knowledge. London: Routledge, pp. 259-321. https://doi.org/10.4324/9781315666396

Pimbert, M.P.; Moeller, N.I.; Singh, J.; and Anderson, C.R. (2021). Agroecology, in, *Oxford Research Encyclopedia of Anthropology*. Oxford University Press 2022. https://doi.org/10.1093/acrefore/9780190854584.013.298

Ruralization (2021). D6.1 – Typology of actions based on an analysis of current innovative actions and discussion with stakeholders. A deliverable of the Horizon 2020 project Ruralization on the opening of rural areas to renew rural generations, jobs and farms. Available at: https://ruralization.eu/wp-content/uploads/2021/05/RURALIZATION D6.1 Typology-of-actions v2.0.pdf project publication (Downloaded: 31 January 2022).

Schola Campesina (2021). Food systems and digitalization from a food sovereignty approach. Available at https://www.scholacampesina.org/wp-content/uploads/2021/07/Data-FINAL.pdf (Downloaded: 31 January 2022).

Tordjman, H. (2021). La croissance verte contre la nature, Paris: Éditions La Découverte.

The Concept of Agroecology

An overview
of the main
definitions
and approaches
to agroecology.

Agroecology is nowadays a well-spread concept. This first section provides an overview of the various recent efforts to define agroecology. This introductory part is also an opportunity for the partners in the BAG project to explain why their understanding of agroecology is based on the Nyéléni Declaration.

A clear frame of reference is indeed indispensable in a context where the idea of agroecology is highly appropriated. Today, many initiatives, led by industry and powerful private actors, explicitly claim to support agroecology while promoting apparent solutions and capturing public attention, funding and programmes for interest-driven actions that are far from grassroots agency, traditional food production, farmers' autonomy and human rights.

Although the relevant practices have existed for millennia, the concept of agroecology is a product of the 21st century. The variety of ecological practices developed by local food producers in strong connection with their specific territories is, along with social and cultural practices, well spread around the world. It's only in very recent times that these practices are acknowledged as part of agroecology in international debates (at the local level the concept is still often not known). In modern times, agroecology has become a social movement to reclaim the rights of people to grow food based on their own culture and ecosystems, to access natural resources, protect their land and territories, while centring people agency and



knowledge (Pimbert et al., 2021). It's recently that international debates include the social and governance dimensions of agroecology.

The efforts of defining agroecology and developing different sets of agroecological principles have been occurring in various contexts by different actors with different perspectives (HLPE, 2019, pp. 31-43). In this section, three important initiatives to conceptually define agroecology are presented, developed by actors of different natures:

- The 11 pillars of the Nyéléni Declaration (Nyéléni, 2015) by social movements
- The 10 elements by the Food and Agriculture Organization (FAO, 2018a)
- The 13 principles by the High Level Panel of Experts on Food Security and Nutrition (HLPE, 2019)

The Nyéléni Declaration Grassroots process

The Nyéléni Declaration has been drafted during the International Forum on Agroecology which was organized at the Nyéléni Center in Mali, from 24 to 27 February 2015. It was convened by food producers' organizations in the framework of the work of the International Planning Committee for Food Sovereignty and was planned by the following organisations: Coordination Nationale des Organisations Paysannes du Mali (CNOP Mali) as chair; La Via Campesina (LVC), Movimiento Agroecológico de América Latina y el Caribe (MAELA), Réseau des organisations paysannes et de producteurs de l'Afrique de l'Ouest (ROPPA), World Forum of Fish Harvesters and Fishworkers (WFF), World Forum of Fisher Peoples (WFFP), World Alliance of Mobile Indigenous Peoples (WAMIP), More and Better (MaB). It's based on the first international forum of Nyéléni which has led to the Food Sovereignty Declaration, in 2007.

The organizations of small-scale food producers and consumers present in the Nyéléni forum that have contributed to identifying the 11 pillars have represented diverse populations, including peasants, indigenous peoples, communities, hunters and gatherers, family farmers, rural workers, herders and pastoralists, fisherfolk and urban people (Nyéléni, 2015).

The nature of this kind of actor is fundamentally different from other stakeholders like international organizations, public institutions, NGOs or philanthropic

organizations which seek to improve the quality of life of the very same kind of population. The Nyéléni Declaration has been drafted by the representatives of the usual beneficiaries of development programmes and government actions to fight poverty, food insecurity and malnutrition.

"Together, the diverse constituencies our organizations represent produce some 70% of the food consumed by humanity. They are the primary global investors in agriculture, as well as the primary providers of jobs and livelihoods in the world."

(First paragraph of the Nyéléni Declaration)

Common principles out of a variety of contexts

The international Nyéléni Forum brought together for the first time different population groups or constituencies who exchanged their views and in the end agreed on a common understanding of agroecology. From the exchange or dialogue of their respective knowledge and wisdom, they have developed a set of common principles, the 11 pillars.

During the forum in Nyéléni, they expressed and shared what agroecology means for their living environment, their reality and their specificities. The insights that emerged from their diversity and Collective rights and access to the commons



Feelings and love of our land and people



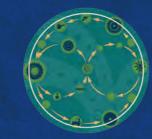




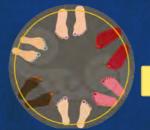
Embedded in our territories



Agroecology is a way of life and the language of Nature



Ecological practices in Production



Women are central



Knowledge is diverse



Autonomy Self-governed markets

Transform structure of power People access to resources





the common principles they shared beyond these diversities made it possible to see the pillars of agroecology that connect local practices around the world across different constituencies and realities.

Content

The Nyéléni Declaration, thanks to this unique gathering of diverse communities, has developed the power and capacity to go beyond the usual three dimensions of sustainability "economic/social/ecological" and beyond mere ecological techniques of food production, and to highlight those features that they have in common in their local food systems or that they have identified as essential for sustaining their communities.

These characteristics are, for instance, people agency in the food systems as well as the immaterial connections of communities to their territories and to nature, which find expression in the care by food producers for their land. It is in this sense (caring relationship between Humans and Nature) that territory and local culture are understood in the Nyéléni Declaration. Another important element is the recognition of the existing dimension of power in food systems and the necessity of transforming structures of power in society as part of the effort to progress towards agroecology.

THE 11 PILLARS OF AGROECOLOGY IN THE NYÉLÉNI DECLARATION ARE:



1. Agroecology is a way of life and the language of Nature, that we learn as her children. It is not a mere set of technologies or production

practices. It cannot be implemented the same way in all territories. Rather it is based on principles that, while they may be similar across the diversity of our territories, can and are practised in many different ways, with each sector contributing their own colours of their local reality and culture, while always respecting Mother Earth and our common, shared values



2. The production practices of agroecology (such as intercropping, traditional fishing and mobile pastoralism, integrating crops, trees,

livestock and fish, manuring, compost, local seeds and animal breeds, etc.) are based on ecological principles like building life in the soil, recycling nutrients, the dynamic management of biodiversity and energy conservation at all scales. Agroecology drastically reduces our use of externally-purchased inputs that must be bought from industry. There is no use of agro toxins, artificial hormones, GMOs or other dangerous new technologies in agroecology



3. Territories are a fundamental pillar of agroecology. Peoples and communities have the right to maintain their own spiritual and

material relationships to their lands. They are entitled to secure, develop, control, and reconstruct their customary social structures and to administer their lands and territories, including fishing grounds, both politically and socially. This implies the full recognition of their laws, traditions, customs, tenure systems, and institutions, and constitutes the recognition of the self-determination and autonomy of peoples



4. Collective rights and access to the commons are fundamental pillars of agroecology. We share access to territories that are the

home to many different peer groups, and we have sophisticated customary systems for regulating access and avoiding conflicts that we want to preserve and strengthen



5. The diverse knowledge and ways of knowing of our peoples are fundamental to agroecology. We develop our ways of knowing

through dialogue among them (diálogo de saberes).

Our learning processes are horizontal and peer-topeer, based on popular education. They take place in
our own training centres and territories (farmers teach

farmers, fishers teach fishers, etc.), and are also intergenerational, with exchange of knowledge between youth and elders. Agroecology is developed through our own innovation, research, and crop and livestock selection and breeding



6. The core of our cosmovision is the necessary equilibrium between nature, the cosmos and human beings. We recognize that as

humans we are but a part of nature and the cosmos. We share a spiritual connection with our lands and with the web of life. We love our lands and our peoples, and without that, we cannot defend our agroecology, fight for our rights, or feed the world. We reject the commodification of all forms of life.



7. Families, communities, collectives, organizations and movements are the fertile soil in which agroecology flourishes. Collective

self-organization and action are what make it possible to scale-up agroecology, build local food systems, and challenge corporate control of our food system.

Solidarity between peoples, between rural and urban populations, is a critical ingredient.



8. The autonomy of agroecology displaces the control of global markets and generates self-governance by communities. It means we

minimize the use of purchased inputs that come from outside. It requires the re-shaping of markets so that they are based on the principles of solidarity economy and the ethics of responsible production and consumption. It promotes direct and fair short distribution chains. It implies a transparent relationship between producers and consumers, and is based on the solidarity of shared risks and benefits



9. Agroecology is political; it requires us to challenge and transform structures of power in society. We need to put the

control of seeds, biodiversity, land and territories, waters, knowledge, culture and the commons in the hands of the peoples who feed the world.



10. Women and their knowledge, values, vision and leadership are critical for moving forward. Migration and globalization mean that women's

work is increasing, yet women have far less access to resources than men. All too often, their work is neither recognized nor valued. For agroecology to achieve its full potential, there must be equal distribution of power, tasks, decision-making and remuneration.



11. Youth, together with women, provide one of the two principal social bases for the evolution of agroecology. Agroecology can

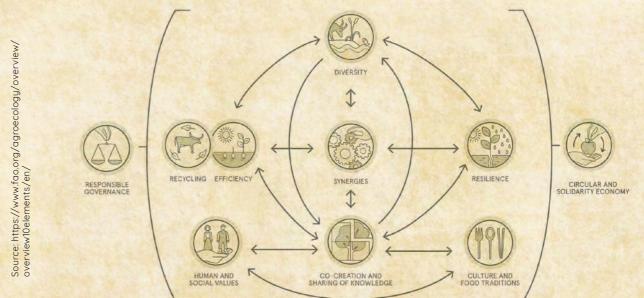
provide a radical space for young people to contribute to the social and ecological transformation that is underway in many of our societies. Youth bear the responsibility to carry forward the collective knowledge learned from their parents, elders and ancestors into the future. They are the stewards of agroecology for future generations. Agroecology must create a territorial and social dynamic that creates opportunities for rural youth and values women's leadership.

The full text of the Nyéléni Declaration is available via the link in the reference list.



Photo: xxxxxx

The 10 Elements of Agroecology by the FAO



The 10 Elements of Agroecology by the FAO (2018).

From 2014 to 2018, the FAO held international and regional consultative seminars on agroecology. The regional meetings allowed to identify different understandings of the concept and, at the end of this process, agroecology has been defined through 10 elements.

The 10 elements include 5 elements more related to the production side of agroecology (Diversity, Resilience, Synergies, Efficiency, Recycling); and 5 others more related to the social and governance environment (cocreation and sharing of knowledge, circular and solidarity economy, culture and food traditions, human and social values, responsible governance).



Diversity: diversification is key to agroecological transitions to ensure food security and nutrition while conserving, protecting and enhancing natural resources.



Recycling: more recycling means agricultural production with lower economic and environmental costs.



Co-creation and sharing of knowledge: agricultural innovations respond better to local challenges when they are co-created through participatory processes.



Resilience: enhanced resilience of people, communities and ecosystems is key to sustainable food and agricultural systems.



Synergies: building synergies enhances key functions across food systems, supporting production and multiple ecosystem services.





Efficiency: innovative agroecological practices produce more using less external resources.



Human and social values: protecting and

improving rural livelihoods, equity and social well-being is essential for sustainable food and agricultural systems.

Culture and food traditions:

by supporting healthy, diversified and culturally appropriate diets, agroecology contributes to food security and nutrition while maintaining the health of ecosystems.



Responsible governance: sustainable food and agriculture requires responsible and effective governance mechanisms at different scales - from local to national to global.



Circular and solidarity economy: circular and solidarity economies that reconnect producers and consumers provide innovative solutions for living within our planetary boundaries while ensuring the social foundation for inclusive and sustainable development.

"Fortunately, thousands of small traditional farms still exist in most rural landscapes of the third world. The productivity and sustainability of such agroecosystems can be optimized with agroecological approaches and thus they can form the basis of food sovereignty, defined as the right of each nation or region to maintain and develop their capacity to produce basic food crops with the corresponding productive and cultural diversity."

(Altieri, 2009)

Source: https://www.fao.org/agroecology/overview/overview10elements/en/

The 13 Principles by the HLPE

Since the identification and adoption of the 10 elements by the FAO Council of Agriculture in 2019, agroecology has been recognized – among other approaches – as relevant to achieving the Sustainable Development Goals. In parallel, the Scaling up Agroeco-logy initiative (FAO, 2018b) has been launched at the occasion of the Second International Symposium on Agroecology in 2018. Putting in relation different dimensions such as food production, culture and governance; this framework -internationally adopted- represents an important step for approaching today's challenges, according to FAO.

After this significant progress toward the recognition of agroecology as a valid process to address the

Sustainable Development Goals; civil society groups and academia have observed a decreasing interest from FAO to agroecology in recent years and more specifically at the arrival of the new Directorate-General in 2019. More specifically, the social and political dimensions of agroecology are left aside and the concept is reduced to its environmental dimension related to production practices.

Nevertheless, the work achieved so far within FAO and particularly the identification of the 10 elements of agroecology is of high importance. Indeed, it represents a unique tool, agreed by governments, that recognizes the legitimacy and credibility of agroecology, largely implemented by small-scale food producers around the world (Altieri, 2009).

The 13 Principles by the HLPE (2019)

The HLPE is a group of experts that produces scientific reports after extensive consultation processes to provide a scientific basis for the discussions and negotiations of the Committee on World Food Security (CFS). At its annual meeting, the CFS adopts the HLPE report which is then considered an international reference. In 2019, the HLPE published a report called "Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition" (HLPE, 2019), in which it presented 13 principles. These 13 principles have been identified from 3 main sources: FAO 10 elements, rearrangement of the Nyéléni Declaration for communication purposes by CIDSE (Coopération Internationale pour le Développement et la Solidarité, 2018) and past work from academia (Nicholls, Altieri and Vazquez, 2016).

The HLPE report highlights the importance of the agency of people as a pillar of food security and nutrition, along with the other commonly recognised pillars: availability (of food), access (to food), utilization (of food) and stability (in time of the previous pillars). Human rights as well as people's skills, power and control are seen in this scientific report as key to achieving food security and nutrition for all.

Improve	1.	Recycling. Preferentially use local renewable resources and close as far as possible resource
resource		cycles of nutrients and biomass.
efficiency	2.	Input reduction. Reduce or eliminate dependency on purchased inputs and increase self-sufficiency
	3.	Soil health. Secure and enhance soil health and functioning for improved plant growth,
		particularly by managing organic matter and enhancing soil biological activity.
	4.	Animal health. Ensure animal health and welfare.
	5.	Biodiversity. Maintain and enhance the diversity of species, functional diversity and genetic
		resources and thereby maintain overall agroecosystem biodiversity in time and space at field,
Strengthen		farm and landscape scales.
resilience	6.	Synergy. Enhance positive ecological interaction, synergy, integration and complementarity
		among the elements of agroecosystems (animals, crops, trees, soil and water).
	7.	Economic diversification. Diversify on-farm incomes by ensuring that small-scale farmers have
		greater financial independence and value addition opportunities while enabling them to respond
Section 2		to demand from consumers.
	8.	Co-creation of knowledge. Enhance co-creation and horizontal sharing of knowledge including
		local and scientific innovation, especially through a farmer-to-farmer exchange.
	9.	Social values and diets. Build food systems based on the culture, identity, tradition, social and
		gender equity of local communities that provide healthy, diversified, seasonally and culturally
		appropriate diets.
	10.	Fairness. Support dignified and robust livelihoods for all actors engaged in food systems,
Secure		especially small-scale food producers, based on fair trade, fair employment and fair treatment
social		of intellectual property rights.
	11.	Connectivity. Ensure proximity and confidence between producers and consumers through
/responsibility		promotion of fair and short distribution networks and by re-embedding food systems into local
		economies.
	12.	Land and natural resource governance. Strengthen institutional arrangements to improve,
		including the recognition and support of family farmers, smallholders and peasant food
		producers as sustainable managers of natural and genetic resources.
	13.	Participation. Encourage social organization and greater participation in decision-making
		by food producers and consumers to support decentralized governance and local adaptive
STATE OF THE PARTY		management of agricultural and food systems.
The 13 HLPE pr	rinci	ples (adapted from HLPE, 2019)

comparison/summary

The main differences between the conceptual frameworks

The Nyéléni definition of agro-ecology was shaped by the different aspects that characterise territorial food systems operated by communities around the world. These aspects were reported by grassroots organisations. It is a bottom-up process aimed at defending **human rights** in the face of unequal power relations that threaten communities' lifestyles, livelihoods and territories.

The definitions from FAO and HLPE, based on extensive consultations, are institutional processes that aim to capture the key elements of **food system** sustainability. It is a process, led by international institutions and experts with the general idea of overcoming the existing climate, environmental and social crisis.

The different nature of these processes naturally leads to differences in the content of the definitions. These differences can be summarized as follows:

● In general, the FAO and HLPE definitions refer more to the ecological character of the production system, while the Nyéléni Declaration focuses more on culture, social, rights and governance issues. In fact, 5 of the 10 FAO elements (1, 3, 4, 5, 6) concern the production side at farm level, while this is only the case for the second pillar "Ecological Principles" of the Nyeleni Declaration.

- The relation of food producers with Mother Nature and the feelings and care aspects of farming (Pillar 1: Way of life and language of Nature and 6: Equilibrium and cosmovision), and often expressed through the concept of territory, are absent from FAO elements and HLPE principles.
- The agency of the populations is fundamental in the Nyéléni definition of agroecology and is poorly represented in HLPE and FAO definitions.
- The need to transform the food system, with an approach that names the existing power relations is also only addressed in Nyéléni's definition. Responsible governance (FAO) and Participation (HLPE) are the respective responses of these institutional processes to address inequalities and poor involvement of rural communities in decision--making processes.
- FAO and HLPE processes don't recognize the central role of organizations and collectives to make progress toward agroecology.

NYELENI 11 PILLARS	HLPE 13 PRINCIPLES	FAO 10 ELEMENTS
1. Agroecology is a way of life and the language		
of Nature		7. Human and social
10. Women knowledge, values, vision and leadership	9. So ralues and	values
11. Youth, together with women, provide one of the two	diets (culture and	8. Culture and
principal social bases for the evolution of agroecology	gender equity)	food traditions
	1. Recycling.	
	2. Input reduction.	1. Diversity
2. The production practices of agroecology	3. Soil health.	3. Synergies
are based	4. Animal health.	4. Efficiency
on ecological principles.	5. Biodiversity	5. Recycling
	6. Synergy	6. Resilience
4. Collective rights and access to the commons	12. Land and natural	9. Responsible
are fundamental pillars of agroecology.	resource governance	governance
5 The diverse knowledge and ways of knowing of our	8. Co-creation	2. Co-creation
peoples are fundamental to agroecology.	of knowledge.	of knowledge
	7. Economic	
8. The autonomy of agroecology displaces the control	diversification	10. Circular
of global markets and generates self-governance	10. Fairness.	and solidarity
by communities.	11. Connectivity	economy
9. Agroecology is political; it requires us to challenge		
and transform structures of power in society.	13. Participation	
3. Territories	This table s	seeks to show the higher
6. The core of our cosmovisions is the necessary equilibrium	inclusivity	of Nyéléni conceptual
between nature, the cosmos and human beings.	principles of	regarding HLPE 13 and FAO 10 elements;
7. Families, communities, collectives, organizations		e by side similar (this explains the
and movements are the fertile soil in which		the numbers of pillars /

agroecology flourishes.

25

principles / elements)

References

26

Altieri, M. (2009). Agroecology, Small Farms, and Food Sovereignty, in Monthly Review, 61 (3) Retrieved from https://monthlyreview. org/2009/07/01/agroecology-small-farms-and-food-sovereignty/ (Accessed: 31 January 2022).

CIDSE (Coopération Internationale pour le Développement et la Solidarité) (2018). The principles of Agroeoclogy, Available at https://www.cidse. org/wp-content/uploads/2018/04/EN_The_Principles_of_Agroecology_CIDSE_2018.pdf (Downloaded: 31 January 2022).

FAO (Food and Agriculture Organization of the United Nations) (2018a). The 10 elements of agroecology. Guiding the transition to sustainable food and agricultural systems. Rome: FAO. Available at https://www.fao.org/documents/card/en/c/19037EN/ (Downloaded: 31 January 2022).

FAO (Food and Agriculture Organization of the United Nations) (2018b). Scaling Up Agroecology Initiative. Transforming Food and Agricultural Systems in Support of the SDGs. A proposal pre-pared for the international symposium on agroecology 3-5 April 2018. Retrieved from https://www.fao. org/3/19049EN/i9049en.pdf (Downloaded: 31 January 2022).

HLPE (High Level Panel of Experts on Food Security and Nutrition) (2019). Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition. HLPE Reports series #14, Rome. https://www.fao.org/3/ca5602en

Nicholls CI, Altieri MA, Vazquez L (2016). Agroecology: Principles for the Conversion and Redesign of Farming Systems. Journal of Ecosystem and Ecography S5:010. doi:10.4172/2157-7625.S5-010

Nyéléni (2015). International Forum for Agroecology. Nyéléni Center, Sélingué, Mali. 24-27 February 2015. Available at https://ag-transition.org/ /wp-content/uploads/2015/10/NYELENI-2015-ENGLISH-FINAL-WEB.pdf (Downloaded: 31 January 2022).

Pimbert, M.P.; Moeller, N.I.; Singh, J.; and Anderson, C.R. (2021). Agroecology, in, Oxford Re-search Encyclopedia of Anthropology. Oxford University Press 2022. https://doi.org/10.1093/acrefore/9780190854584.013.298





THE VELUX FOUNDATIONS VILLUM FONDEN X VELUX FONDEN

27

The creation of these resources has been (partially) funded by the ERASMUS+ grant program of the European Union under grant no. 2020-1-PL01-KA204-082080. Neither the European Commission nor the project's national funding agency NA are responsible for the content or liable for any losses or damage resulting from the use of these resources.



This publication has been prepared and published within the project Bridging Generations in Agroecology (BAG)



Project coordination: Stowarzyszenie Ekologiczno-Kulturalne ZIARNO Grzybów 1/2, 09-533 Słubice (Poland) www.ziarno.eu

Authors: Caroline Ledant, Isabelle Hagel

Published: March 2022



This work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) License. To view a copy of the license, visit http://creativecommons.org/licenses/by/4.0/

