



# Proceedings Agroecology Europe Forum 2017:

# Short Summaries of Sessions and Workshops

#### First Agroecology Europe Forum

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#### **Session 1:** Agroecology and Food Sovereignty

Convenors: Janneke Bruil (Cultivate!), Sarah Schneider (Misereor), Stanka Becheva (Friends of the Earth)

#### Session talks:

- Lynne Davis (ECVC and goat farmer, England) "Building agroecology for food sovereignty: the peasant movement's perspective"
- Michel Pimbert (Coventry University, England) "What role for researchers in supporting agroecology as a path to food sovereignty?"
- Jan Douwe van der Ploeg (Wageningen University, the Netherlands) "Connecting Agroecology Europe with farmer and peasant networks"
- Paulo Petersen (AS-PTA, Brazil) "Lessons from the agroecology movement in Brazil"

The session presented the points of view of different actors in science, movement and practice regarding the co-creation of knowledge on agroecology for food sovereignty. All speakers agreed that farmers' wisdom, knowledge and experiences are not properly valued in research on agroecology. Knowledge creation on agroecology is dominated by academia. Speakers saw potential into action research that goes beyond current forms of participatory research. They recognised however that is it not an easy task to genuinely democratise knowledge creation and that some baseline requirements must be in place. For instance, the active participation of farmers must take place at all stages of project development and the individuation of problems and solutions should be the farmers' prerogative. Also, traditional ways of researching must undergo structural changes in order to reach out to self-managed knowledge creation experiences and link up with agroecological initiatives led by social movements and farmer organisations. Most current research on agroecology was said to be limited in scope due to a lack of funding and precarious employment of researchers.

In the second part of the session, the 40 years long struggle of social movements in Brazil for political recognition and better representation of agroecology at the national level was described. The main insight from this historical process of the construction of agroecology in Brazil is related to to the synergistic effect between practice, science and political action in defense of another model of rural development and agro-food systems.

## **Session 2:** Co-evolution of organic agriculture and Agroecology

Convenors: Paola Migliorini (Agroecology Europe, UNISG, IFOAM AgriBioMediterraneo, Italy), Victor Gonzálvez (SEAE, Spain)

#### Session talks:

- Eric Gall (IFOAM EU, Belgium) "The role of Agroecology for the future of the European organic movement"
- Susanne Padel (Organic Research Centre, England) "Transitions to Agroecology Systems: Agroecology in the UK"
- John Hayden (The Farm Between, Vermont, USA) "Perspective from 25 years of Practicing Agroecology"
- Paola Migliorini (Agroecology Europe, UNISG, IFOAM AgriBioMediterraneo, Italy) -"Convergence, divergence, and specificities between agroecology and organic agriculture in Italy"
- Karen Hoberg (SEAE, Spain) "Agroecology in Spain"

From a practice point of view there are similarities between the two and even though not all organic farmers practice agroecology, it is nonetheless at the heart of organic farming practices. In Italy and Spain the co-evolution of the two movements is quite old (from 1990s in Italy, and early 2000s in Spain).

Organic 3.0 was presented as going beyond just covering market demand by moving toward better practices, fostering a culture of innovation, widespread conversion (50% of EU agricultural surfaces as Organic or agroecology (not necessarily certified) by 2030) and inclusiveness through building partnerships with other movements.

Several comments were made around certification and regulations and how Organic standards have been achieved through minimum requirements, which is a limitation as they focus on things which are easy to control. However, it is important to notice that not all aspects can be or should be regulated. There was a debate about whether Organic certification is more useful when selling to people who don't know the farm or don't have the time to ask questions about how the production is done.

There seem to be a consensus that for agroecology there is no need for another label like organic agriculture. It was suggested that perhaps there is a necessity to adjust the certification processes (eg. Participatory Guarantee Systems).

While organic agriculture and agroecology should keep their own identity, there is a strong convergence between the two thus they must coexist, combined where necessary and work in synergy.

There were discussions about how farmers make the transition from conventional to agroecological practices. Susanne Padel presented the 'triggering change model' (getting started, active assessment, implementation) but pointed out that models do not explain why people change. Her research showed that there is a learning and an unlearning process during a transition and that farmers want to judge their progress for themselves through accepted indicators for resource use and sustainability. She mentioned how psychological studies showed that change is mainly triggered by what farmers saw on the farm and being introduced to new ideas as main drivers of change. Thus there is more need to help farmers go and spread the word through exchange trips and making their examples more accessible. She reminded us that the farmers are not supposed to copy, they're supposed to be inspired (same as researchers).

John Hayden shared his experience of having run an organic fruit nursery in for 25 years, how two flooding events in 2011 triggered a change of mindset, and lead to a decision to convert to agroecological practices to increase their resiliency and focus on creating a regenerative model. John described the USDA divergent evolution in terms of what organic is in the USA where 'Industrial Organic' is very distinct from 'Agroecologicaly-based Organic'. He stated that there is a need to develop better models, to educate consumers, and for Organic agriculture and agroecology to become so good as to make industrial agriculture inconsequential. He is in favor of production by the masses rather than mass production with amplification (more farms) rather than going bigger and bigger.

#### Session 3: Development of agroecological practices

Convenor: Paolo Barberi, Agroecology Europe, Scuola Superiore Sant'Anna, Italy

#### Session talks:

- Srđan Šeremešić (University of Novi Sad, Serbia) "Crop rotation nexus"
- Serena Magagnoli (University of Bologna, Italy) "Influence of cover crop management techniques on soil ecosystem services"
- Chloé Salembier (INRA/ AgroParisTech, France) "Outscaling innovative practices on farm: promising approaches to foster the design of agroecological farming systems"
- Antsa Rafenomanjato (Scuola Superiore Sant'Anna, Italy and CIRAD-SPAD, Madagascar)
  "Malagasy farmers' view on the use of *Stylosanthes guianensis* for weed management in no-till rain-fed rice cropping systems"
- F. Xavier Sans Serra (University of Barcelona, Spain) "The role of agroecology in designing sustainable food systems: the experience of the periurban rural area of Gallecs (Barcelona, Catalonia)"

The presentations showed that we need to find concrete indicators to convey the importance of crop rotations for agroecological farming. The contributions of crop rotation are diverse and not always easy to distinguish e.g. from effects that climate has. As crop rotation is closely related to the soil, a new approach is needed that relates it to soil properties. Cover crop management is equally diverse and i.a. impacts pest pressure by providing habitat to natural enemies. There are several ways by which agronomists and farmers can interact for designing agroecological systems and outscaling innovative practices of farms is a promising approach. The example from Madagascar showed that the agroecological approach in weed control with a perennial legume as living mulch is successful both in reducing weeds as well as in increasing yields. On the other side farmers are also aware of the potential services that weeds can play in agroecological systems. The provision of agroecosystem services at field scale can be influenced by the larger landscape context and upscaling agroecology to the landscape level is possible through a multi-actor approach as demonstrated by the region of Gallecs in Catalonia.

#### **Session 4:** Making the transition

Convenor: Alain Peeters (Agroecology Europe, RHEA, Belgium)

#### Session talks:

- Marco Bertaglia (European Commission) "A "research-embedded-in-action" framework to foster agroecology"
- Xavier Poux (Legouvé, France) "Ten Years For Agroecology (TYFA) a scenario exercise exploring the feasibility of an agroecological Europe"
- Vincent Delobel (Fermes Novatrices, Belgium) "Farming novelties: our way forward"
- Marjolein Visser (Université Libre de Bruxelles, Belgium) "Can we avoid extractivism while doing research in agroecology? A critical view on co-optation and institutionalisation of agroecology"
- Carine Herbin (Institut Français de la Vigne et du Vin, France) "Guide for agroecology in viticulture, a tool for the sector"

This session brought together presenters from different backgrounds, from the practical to political, to speak on how we can make the transition to agroecology. Marco Bertaglia works with the European Commission's Joint Research Centre in order to help inform EU policy. As someone that works with connecting science and policy, he believes that what we need is a revolution in agriculture, not just a change in cosmetics. In order to achieve this structural change towards agroecology, we must conduct research that is in the service of action. In addition, we need to involve more people from in and outside agriculture in the process. The framework can we can use to achieve this change is a steering group that generates business plans, farmer's involvement, and legal framework, combined with a catalyst that instigates change.

Xavier Poux works with TYFA, a project that explores how Europe can shift to agroecology by 2015. By developing a radical (yet plausible, coherent, and scientifically-sound) scenario for agroecological transition, TYFA plans to trigger public debate about our current state of agriculture, and thus force a plan for agriculture onto the policy stage. The early findings of TYFA show that there needs to be a radical land use change, more diversified cropping systems and livestock-crop systems, more extensive permanent grasslands. Furthermore, there needs to be a change the EU diet, one that does limit the need of industrialized livestock production. But in order to begin this process, there needs to be a trigger, a radical policy debate for transition. For example, what if we banned pesticides? How would that shape European agriculture going forward?

Vincent Delobel works on his family's dairy farm in Belgium, and his and his family's story is a living testament to ability of agroecology to transform the land and the community. They switched from conventional to organic, and then from cows to goats. But it was only by incorporating the value-added products of cheese production, as well as opening up the farm to educational groups, that the farm was able to stay viable. The Delobels rejected the external pressure, and instead learned to listen to themselves, to their land, and to their consumers. The Delobel farm is part of the Réseau de Fermes Novatrices, a network of farms and farmers who strive towards more sustainable and responsible farming practices. This network is premised on the fact that change comes from the bottom up, and can be driven by the autonomy of the peasant movement.

Marjolein Visser is an agroecology researcher and university professor who warned that agroecology is in danger of being co-opted. If co-opted, agroecology will be institutionalized, which will suppress the creation of new ideas and instead only allow

for a subset of the original ideas, stabilize new networks and thus solidify new power relations, limit new opportunities, and give no thought to the redistribution of benefits, thus allowing the benefits to remain in the hands of a few. To fight against this, we as researchers must force ourselves to be less comfortable, and continue to ask ourselves the hard questions: Who decides on content and focus of research? Which knowledges/experiences count? Who benefits? What does the research generate/make disappear? What and where to (or to not) publish?

After the impulse talks, the room was opened up for a question and answer discussion. Some participants saw the institutionalization of agroecology not as co-optation, but a sign that agroecology is winning the battle of ideas, though still some worried that it would merely be an institutionalization of organic agriculture, and thus not the paradigm shift that many are calling for. Many agreed that agroecology will not be able to move forward without a change in political economy, and without proponents of agroecology playing a more active role in politics. Some called for radical measures, others think we should be more measured in order to stay credible. This goes for the social process as well - many agreed that the broader society must also be part of this transition. With so many perspectives and experts in different areas brought together, it was challenging to close such an important and fruitful session, but most everyone agreed that more lively discussions like this would be to the benefit of the agroecological transition.

# **Workshop 1:** Structural Change or Land grabbing: the rapid transformation of the agrarian family farm system in Europe and the role of agroecology

Convenors: Stephanie Domptail (University of Giessen, Germany) Bernd Müller (Farmer and University of Giessen, Germany), Daniel Mühlleitner (Friends of the Earth, BUND, Germany)

#### Impulse talks:

- Daniel Mühlleitner (BUND, Germany) "Key facts and figures about land restructuration in Western Germany"
- Bernd Müller (University of Giessen, Germany) "Land restructuration and its impacts on subsistence economy and the farmer-environment relationship"
- Stephanie Domptail (University of Giessen, Germany) "Land restructuration or land grabbing: Towards a working concept of land grabbing for western Germany"
- Bernd Müller (Farmer, University of Giessen, Germany) "Where agroecology comes in: the case of the Bündnis Junge Landwirtschaft e.V in Brandenburg, Germany"

During the last 20 years we have seen a dramatic decrease in the number of family farms in Germany. This trend goes along with an increasing average in the size of farmland holdings and less employment in the agricultural sector. Should we consider those consequences as normal processes within the land market or can we talk about land grabbing or land restructuration in Europe?

The many drawbacks of land grabbing for social communities, local employment and environment were generally agreed on. However, in the case of land consolidation, the impact on local ecology and communities connected to the land could also be positive. This has to be considered on a case-by-case basis and depends on the buyer's specific interest in the land.

The concepts of land grabbing and restructuration were discussed during the workshop. The terminology around land acquisition in Europe is still not well defined and includes different perspectives related to the diversity of actors dealing with the issue. Economists are more concerned with data collection on land distribution changes to describe a market trend. Other stakeholders such as civil society organizations and political parties also consider aspects such as fairness of the transaction and changes in the production systems following the land transmission to a new owner.

Agroecology was proposed during the workshop as a paradigm to charge the issue of land restructuration in Europe with social and political meaning. Farmland should not merely be considered as a tradable good that can be transferred from one actor to another. Farmland is deeply connected to human life and natural environments and thus transactions must be regulated in a way they do not impact adversely on such dimensions.

#### Workshop 2: Exploring agroecology principles

Convenor: François Delvaux (CIDSE, Belgium)

#### Impulse talks:

- Pedro Guzmán (Red Nacional de Agricultura Familiar, Colombia) "Agroecology as a way of bringing social justice"
- Lynne Davis (La Via Campesina, UK) "Agroecology's potential for women's empowerment"
- Judith Hitchman (Urgenci the international CSA network, France) "Economic viability of agroecology"
- Michel Pimbert (Coventry University, UK) "Climate resilience and agroecology"
- Krishnakar Kummari (MIJARC, Belgium) "Youth, agriculture and rural areas"

After a 4-minute impulse talk of each key speaker, five groups were formed that discussed the respective topics.

Agroecology represents a way of life as opposed to a production focused system, discussants considering its potential to strengthen relationships within and between communities. The potential of agroecology to provide sustainable livelihoods as a way of consolidating peace was identified as an important attribute in post-conflict contexts like Colombia. With its holistic view integrating the whole food system it may also connect urban populations with rural realities. While industrial agriculture has swept away traditional knowledge mostly held by women, agroecology has the potential to contribute to women's empowerment. It must be noticed that within agroecology, as compared to agricultural science in general, women are more present. However agroecology is not enough to truly break the unjust power relations in our patriarchal society.

Territorial food systems are important in agroecology and their level of dissemination determines the positive impact agroecology can have in rural and urban areas. By using local resources and providing food on local markets, agroecology has the potential to boost local economies. In order to adapt and mitigate climate change, agroecology offers a wide array of possibilities. In all cases, nature has to become our ally again rather than our enemy. Another promising ally are municipalities that may react locally adapted and faster than national governments. The general image of farming has to become more in line with its real importance for our lives. Rural life has to become more attractive and financially secure. A solution that could be worth exploring is having a basic income for the services provided by agroecological farming which is not only about the food but also about the preservation of nature.

## **Workshop 3:** How transition to agroecology questions knowledge production and learning dynamics

Convenors: Hélène Brives (ISARA-Lyon, France), Daniele Magda (INRA, France), Julien Blanc (MNHN, France)

#### Impulse talks:

- Erin Silva (University of Wisconsin, Madison, USA) "Fostering Transitioning: A Model of Facilitating Agroecological Practice Adoption in the US"
- Juliette Anglade (INRA, Mirecourt, France) "A social experiment on an experimental farm station: exchanging and sharing knowledge and experiences to support the agroecological transition toward more autonomous farming systems"
- Anne-Claire Kubala (Fédération Régionale des CUMA, France) "Innovation in groups: production and transfer of knowledge"

This workshop session explored the question of how to facilitate agroecological transition. More specifically, it looked at how to overcome the opposition between traditional scientific knowledge and empirical knowledge, with a specific focus on the role of intermediary actors as a crucial link between these two sides. The impulses presented different places and projects in which researchers and farmers are working together to produce knowledge. Erin Silva spoke of the OGRAIN project, which helps grain farmers in the midwest of the US to switch to organic farming. It provides networking, mentoring, and conferences, and is built on the premise that farmers learn best from other farmers. Juliette Anglade presented INRA's project in Mirecourt, France where a farm that is transitioning to agroecological practices hosts exchange days for a multi-factorial learning experience. Her team is specifically studying the knowledge and experience sharing among the different participants during these exchanges. Anne-Claire Kubala is involved with a CUMA in the Rhône area of France where there is a smaller innovation group within the larger cooperative that takes risks and then presents their findings to the larger group. This not only capitalizes on the different riskaversions of the farmers, but also allows them autonomy in their own learning and sharing process. All of the projects presented demonstrate that the actor-learning and knowledge-sharing process can take a variety of forms, and that there are many ways to facilitate and agroecological transition.

## **Workshop 4:** Permaculture Design vs. Design in Agroecology. Same, same but different?

Convenors: Immo Fiebrig (Coventry University, UK), Maria Vela (Ecoherencia, Spain)

The aim of this workshop was to compare permaculture and agroecology and to find out what the commonalities are on which synergies can be build. Permaculture is a design of sustainable agricultural systems, conceptualized by Bill Mollison. The convenor of the workshop collected many opinions from permaculture experts. It came out that permaculture is a multidimensional systems design concept (horizontal, vertical, temporal and relational) and that the strength of this systems design comes from its ethics and its principles, that are transdisciplinary and long-term oriented. When comparing both concepts, it was highlighted that permaculture comes more from grassroots initiatives while agroecology more from academics and their institutions. During the discussion, the question of vocabulary was essential. The participants thought that it is not useful to debate about the difference of the two concepts because both are alternatives to conventional agriculture. Thus, they do not have to be split-up but to work together. These systems have also to be adapted to the local conditions, context and goals of stakeholders. Regarding the origin of these concepts, it appeared that permaculture in the Global South is seen more as a top-down initiative, while agroecology is a bottom-up movement (e. g. Latin America). The difference between agroecology and permaculture may come from a difference in scale: permaculture in its practice is more about smaller scale farming systems while agroecology also addresses food systems as a whole. Finally, some doubts were voiced around the viability of permaculture projects: some proofs are needed to show that it can be economically viable in order to be an example and to bring more people to practice it.

## **Workshop 5:** Agrobiodiversity to support agroecology

Convenor: Anna-Camilla Moonen (Scuola Superiore Sant'Anna, Italy)

#### Impulse talks:

- Sibylle Stöckli (FiBL, Switzerland) "An innovative approach to enhance biodiversity on farmland: A credit point system"
- Constanze Buhk (University of Koblenz-Landau, Germany) "Traditional water meadows a perfect management option to combine ecological and economical values"
- Karin Pirhofer Walzl (Freie Universität Berlin, Germany) "Bacteria and fungi in agricultural landscapes: almost invisible but the engine of plant production"
- Florine Degrune (Freie Universität Berlin, Germany) "Agroecosystem diversification: Digging deeper"
- Simone Marini (Scuola Superiore Sant'Anna, Italy) "A participatory approach between researchers, farmers and beekeepers to define a common point of view about seminatural habitat and agro-ecosystem service"
- Yaron Ziv (Ben-Gurion University, Israel) "Crop diversity and rotation may increase reptile biodiversity in an agroecosystem"
- Tommaso Gaifami (University of Florence, Italy) "Weeds and field margins: the other side of the coin"

The presentations showed how changing farming practices can increase on-farm biodiversity levels. The traditional irrigation system of water-meadows via ditches was an example of how management influences biodiversity. It was also shown how crop diversity and rotation impacts reptile biodiversity through its differing physiognomy. Knowledge gaps were identified concerning the mechanisms of bacterial and fungal diversity benefiting agriculture and the role of landscape heterogeneity for microbial diversity. A general issue regarding field experiments were the advantages and disadvantages of highly-controlled field conditions compared to real-field conditions.

Another aspect reflected in the presentations was the request for developing quantitative methods to assess biodiversity measures. For instance, the result-oriented credit point system is a suitable tool for fast and efficient assessment of farm-scale biodiversity that shows farmers how they can substantially increase biodiversity (e.g with habitat management). In addition, a conceptual model was presented to help quantify ecosystem services by weeds and spontaneous plants in field margins.

Last but not least, the importance of participatory research and communication between stakeholders was repeatedly highlighted, in particular between beekeepers, farmers and researchers about each other's common interest in semi-natural habitats and agroecosystem services.

## **Workshop 6:** Participatory Action Research for Agroecology Territories

Convenors: Claire Heinisch, Jean-François Vian, Perrine Vandenbroucke, Joséphine Peigné (ISARA-Lyon, France)

#### Impulse talks:

- Perrine Vandenbroucke, Hélène Brives, Marion Casagrande, Camille Clément, Claire Heinisch, Joséphine Peigné, Jean-François Vian (ISARA-Lyon) "Towards agroecology territory: the challenge of enrolling multiple stakeholders in participatory action research (TERRAE project)"
- <u>Mary Guillaume</u> (Gembloux, Belgium) "Co-designing a decision-support tool with farmers as the basis for collective action and participatory approach"
- Marzia Ranaldo, Paolo Bàrberi & <u>Stefano Carlesi</u> (Scuola Superiore Sant'Anna, Italy) –
  "Agroecological Innovations for Resilience and Sustainability of Alpine Livestock Farming Systems (INVERSION)"

In this workshop, three examples of Participatory Action Research (PAR) were exposed, from France, Belgium and Italy. The example from France is a PAR that aims at studying and supporting transitions to agroecology territories and answering the needs of soil fertility, food system organization and governance, and inhabitants' involvement. This is a long-term research project based in three regions around Lyon. The second impulse dealt with an economic assessment of organic farms research in the Walloon region that ends by the co-development of a user-friendly farm management tool named "TresoGest". This tool benefits to farmers, and also to the researcher than can collect data easily. Finally, the Italian PAR is just starting and answered the need of dairy farmers of the Adige valley facing identity loss and economic issues in their job. The research aims for more agroecological practices in animal farming and for improved market opportunities.

The collective discussion pointed out that an important challenge of PAR is to break down the barriers between "experts" and "non-experts", thus, it is crucial to have a posture of shared knowledge. There is a need to be experienced and trained to conduct good PAR and to master the different levels of participation. It was also highlighted that using user-friendly tools and teaching farmers to be "scientists" can be very useful in PAR.

The workshop raised the questions of funding and evaluation processes of research: PAR projects require flexibility from the donors (to adjust methods and objectives) and the valorization of all different outcomes (not only scientific papers but also shared knowledge with farmers, tools designed, etc.). In that respect, the evaluation criteria of researchers should be adapted in order to better take into account involvement in PAR, in producing tools, in building shared knowledge, in popularizing science and results etc. Finally, the involvement of multiple stakeholders in PAR projects raised the question of the ownership of data, results, tools, etc. that are built collectively.

### **Workshop 7:** Public policies for agroecology and the CAP

Convenors: Stanka Becheva (Friends of the Earth Europe), Stéphane Parmentier (Oxfam Europe)

#### Impulse talks:

- Hanny Van Geel (European Coordination La Via Campesina, UK) "Social movements assessment of public policies needed to support agroecology"
- Paolo Petersen (AS-PTA, Brazil) "Lessons learned to overcome key obstacles for political change"
- Pedro Guzman (Red Nacional de Agricultura Familiar, Colombia) and Melinda Kassai (Pro-Cserehat Association, Hungary) - "Reactions"

Currently, European subsidies for agriculture (mainly CAP subsidies) create a very unequal situation, by favoring large farms, which results in a dramatic land concentration. The situation is no longer socially acceptable and causes the marginalization of waged workers, migrants, women and youth. Policies are too rigid (lock-in) and lack a more holistic approach and a truly and more direct democratic process, integrating solidarity and agriculture policies. From the situation in Brazil, we learn the importance to recognize family farming in policies: there, it was not recognized in public policies for a long time. It has been weakened (through productivity policies in the 90s), de-activated (by forcing family farmers to leave the land) and finally also strengthened (by recent policies on agroecology). In general, even though public funds start to promote it, family farming is still a niche of innovation in a hostile institutional environment. Different social movements (feminists, peasants, etc.) join their force to change the system. From the situation in Colombia, we learn that policies on paper are not enough when governments don't commit to support practical application on the field. There, even if organic agriculture is promoted, it is manly exported to the European market and doesn't supply the local market. Some very controversial regulation prohibits farmers to exchange seeds and so far, all regional processes developed to support AE were not given any attention by the federal government. From Hungary, we learn that eastern countries are still not represented enough in the AE movement, which remains marginal. There, NGOs try to work with local decision makers and to reinforce the « movement » aspects of AE, hoping this will impact national policies on the longer term to move towards more holistic approach and supporting agroecology.

# **Workshop 8:** Digital and technological revolution in the agricultural sector: Fitting in the Agroecological approach?

Convenor: Vassileios Gkisakis (Agroecologiki SP, Greece)

#### Impulse talks:

- Nicolas Sinoir (Pôle InPACT National, France) « De la souveraineté technologique des paysans : réflexions et perspectives »
- Mariateresa Lazzaro (Scuola Superiore Sant'Anna, Pisa, Italy) "Digitalized soil health self-assessment: a SPADE-TEST app from the collaboration with farmers from Italy and Greece"
- Livia Ortolani (Rete Semi Rurali, Italy) "Managing Crop varieties data: an app for on farm data collection"

The goal of this workshop was to discuss if digital solutions have a place in agroecology, and if so, what role do they play? Recently there has been an influx of new tech into agriculture, in the form of cloud computing, drones, precision farming, and more. But many of these new farming technology companies own the data that is collected, which can leave farmers vulnerable to exploitation by Big Ag. Are the above mentioned compatible with agroecology, which is regarded to emphasise independent experimentation rather than dependence on high-tech equipment from external suppliers with a high degree of dependency on support services? Is this an innovation in agriculture, or is it the same regressive "solution", only under the guise of new technology? What about alternative innovation, where farmers take back the autonomy of their solutions? In this workshop, three people from along the spectrum of this debate presented their perspectives.

Nicolas Sinoir is a coordinator for L'Atelier Paysan, which is a collective for and by farmers that facilitates the development of farmer-driven technology, and then publishes the plans and tools in open source on the web. In this way, L'Atelier Paysan broadens the "genetic diversity pool" of technology solutions, and allows farmers to evolve and adapt their technology and thus enables the autonomy of farmers in crafting their own solutions to their specific problems. Mariateresa Lazarro and Livia Ortolani come from the other end of the spectrum, as both work with organizations that develop technology to assist farmers, while also providing data for researchers. The app Capsella walks farmers through a spade test to understand their soil health, and allows the farmers to choose if this data is also made publicly available for research. Capsella was created through participatory development, with the farmers at the centre. Rete Semi Rurali similarly believes that, provided the technology is created and disseminated with an agroecological approach, it can help support farmers with their agroecological practices.

The workshop discussion made clear that there are strong feelings on all sides of this debate. Some insist that shunning technology that makes farmers lives easier will only make agroecology unpopular among farmers—the very people that need to embrace it most. Others insist that technology too often imprisons farmers within a system. But everyone agreed that taking careful consideration with the data infrastructure is paramount to ensure farmers autonomy.

# **Workshop 9:** Agroecological issues of organic cropping systems: importance of long term field experiments

Convenors: Marion Casagrande (ITAB, France), Daniele Antichi (University of Pisa, Italy), Cesare Pacini (University of Firenze, Italy), Stefano Canali (CREA, Italy)

#### Impulse talks:

- Paola Migliorini (Agroecology Europe, UNISG, IFOAM AgriBioMediterraneo, Italy) "Coevolution of agroecology and organic agriculture through long term experiment design and development"
- Marion Casagrande (ITAB, France) "Stakeholder inclusion in long term experiments"
- Daniele Antichi (University of Pisa, Italy) "Decision making rules and system redesign in long term experiments"
- Stefano Canali (CREA, Italy) "Fundraising, project opportunities and network for long term experiments"
  - Cesare Pacini (University of Florence, Italy) "What are the characteristics of a LTE to be designed according to agroecological principles"

The convenors are part of RetiBio (Italy) and RotAB (France) networks which both work on long term experiments (LTEs) testing cropping systems in organic farming. They have been sharing experiences on management, fund raising and stakeholder involvement.

It was proposed that LTEs should try to include and provide solutions to food system related issues that are crucial to get societal answers and a holistic view, through exchange with farmer and other stakeholders as they share the same problems/dissatisfaction.

The importance of improved communication was stressed as academic papers do not always reach stakeholders, thus there is a need to share the same language, final objectives and to involve farmers as it can help disseminate information.

It was proposed to combine LTEs with trials on satellite farms as it is an opportunity to have locally-tailored systems with tests and demonstrations, though that represents additional costs.

There is no fixed rule with regards to LTEs timeframe as it differs with context. Two approaches (albeit with various degrees of variation between the two) in defining factors, treatments and management of the experiment were discussed: 'Fixed' (when the experimenter fixes everything, applying same factors each year no matter which changes occur in the system) and 'Iterative' (can be redesigned periodically to get closer to the final objective of the experiment). The iterative method allows for fine tuning and offers the opportunity for system optimization, self-learning, economic viability and flexibility. However, it can be difficult to publish and interpret results. It was noted that there is not a unique way of thinking and that both approaches are valuable depending on the context and, above all, on the objective of the trial. With regards to funding, funds originate mainly from public sources, but also private companies/ organizations. Research projects needing long-term outcomes, university/research institutions running LTEs have to cover funding gaps. LTEs can foster funding attraction capacities

by being included in research project consortias. National and international funding agencies should focus on filling the funding gaps, identifying emerging needs, supporting innovative LTE experiences, and promoting networking among ongoing experiments. There was a discussion regarding the tools to design the main characteristics of LTEs and how they should be taking into account diversity (different components and processes present in the system), coherence (numbers and strengths of the connections and flows among components and processes within the system) and connectedness (connections with components outside the agroecosystem).

# **Workshop 10:** Becoming an agroecologist through phenomenon based and action oriented education: Making the transition

Convenor: Geir Lieblein (Norwegian University of Life Sciences)

Geir Lieblein presented a new approach in education that shifts the focus from teachers to students and from teaching to supporting the learning process. It is based on the assumption that the farm is greater than its theoretical representations and that therefore, an ontological re-reversal is needed to get back to the world as we experience it as the starting point for the learning process. However this transition also entails challenges for both teachers and students. These challenges were discussed in groups of 5-6 participants who reflected on how they can be dealt with. Major concerns expressed from a student's perspective were the necessity to shift from a passive to an active role, to accept uncertainty and/or incomplete knowledge and, linked to that, trusting one's own competence and taking responsibility of the learning process. From a teacher's perspective, major challenges identified were the loss of control on the content and shifting from a lecturing role toward a facilitation role that requires particular skills. A general challenge is related to tradition and beliefs at universities regarding knowledge and learning. Expanding peer-learning and creating spaces for exchange between teachers and/ or students as well as encouraging learning and practicing facilitation at conferences were suggested in order to deal with these challenges.

#### **Workshop 11:** Agroforestry and agroecology

Convenors: María Rosa Mosquera-Losada (University of Santiago de Compostela), Anastasia Pantera (TEI Stereas Elladas, Greece), Nuria Ferreiro-Dominguez (University of Santiago de Compostela)

#### Impulse talks:

- María Rosa Mosquera-Losada (University of Santiago de Compostela, Spain) "Agroforestry as a tool for ecointensification" -
- Antoine Marzio (Divaporc, France) "The future of agro-forestry local breeds pig farming in Region Auvergne Rhône-Alpes"
- Pierre Costet (Valrhona, France) "Cacao Forest: Innovating together for the sustainable cocoa of the future"
- Sara Burbi (Coventry University, UK)- "Transition to agroforestry: current challenges and opportunities for the adoption of agroforestry as a carbon sequestration strategy"
- Anastasia Pantera (TEI Stereas Elladas, Greece) "High Value Tree Agroforestry Systems in Europe: from tradition to modern environmental and socio-economic needs"
- Rodrigo Olave (Agri-Food and Biosciences Institute, UK) "The potential of agroecology and silvopasture to enhance the resilience of grassland systems in the island of Ireland"

Several researchers shared their experience on agroforestry in different talks. The meeting was initiated with an explanation of what agroforestry is and the potential it has across Europe. A French project (DIVAPORC) showed how traditional robust pig breeds are adapted to be used for the re-allocation of profitable livestock on rural areas, along with trees. This creates new local economic activities and premium quality meat. In the Dominican Republic, the Cacao Forest project is designing edible forest containing a high diversity of local fruits (for the local market) and cocoa trees (to market highquality chocolate). In Ireland, a 25 years long research project showed how silvopasture was enhancing the resilience of grassland systems, and policies are currently being adapted to support agroforestry. Many examples were shown from Mediterranean regions where livestock or crops could be added to orange, walnut or olive-tree crops in order to diversify the production and to increase revenues. Agroforestry has been shown to improve Carbon sequestration and field-biomass and to decrease soil erosion and nutrient leaching. The challenges of agroforestry are the need for long-term data and for more integration of traditional knowledge. More evidence about the economic and environmental benefits is needed to support policy change at local scale, and on the European level, a lot more strategies are needed to foster further education and implementation of agroforestry. There is a need of developing a European Agroforestry Strategy tackling policy promotion (CAP), education (integrating agricultural and forestry knowledge), innovation (i.e. EIP-Agri activities) and research (think globally and act locally). The EURAF was created in 2010 for that purpose.

## **Workshop 12:** Transdisciplinary approaches to sustainable agrifood systems

Convenor: Claire Lamine (INRA, France) and Pedro Lopez-Merino (INRA, France)

#### Impulse talks:

- Martina Tuscano (INRA, France) "Urban community gardens to achieve social justice"
- Terena Peres (UNB Brazil INRA France) "Food and agroecology policies in Brazil"
- Louis Renier (University of Lyon, France) "Permaculture in urban garden in Lyon"
- Pedro Lopez-Merino (INRA, France) "An exploratory assessment tool to evaluate the environmental, health, social and territorial impact of our plate"
- Dounia Besson (City of Lyon, France) "The local committee for sustainable food in Lyon"

The workshop wants to foster a reflection on the complexity of the agri-food system by analyzing the different interactions among the actors that take part in it. Two examples of urban gardening experiences in Bordeaux and Lyon were presented considering the context from different angles. In Bordeaux, family gardens have been instituted to seek for more social inclusion and food self-sufficiency in an area where most people are economically disadvantaged and unemployed. In Lyon, all 150 urban gardening experiences are united under a federation called "Le Passe Jardin". In 2016, a study was conducted to evaluate the state of the art of those gardens and their potential for relocalizing food production within the urban area.

Both cases analyzed led to controversial consequences. The Bordeaux experience provided indeed more food security for disadvantaged people of the district, however did not foster social inclusion and on the contrary contributed to widen the gap between social classes. In Lyon, 70 members of the community gardens were interviewed which stated that the main scope of the gardens is recreational and educational, but rarely oriented toward food production.

The role of municipalities and governance in supporting the development of sustainable food systems was also touched upon. The deputy mayor Donua Besson provided some info on the initiatives and programmes on the municipality agenda to sustain local production and consumption within the city area of Lyon.

The history of the development of the Brazilian National School Feeding Programme was also presented, which gave some insight on the tremendous impact governments can have to promote changes within the food system.

During the discussion participants agreed on the need to carry out participatory research projects that involve all the actors of the food system in order to understand the complex inter-dependencies among them and foresee changes in the system. The support of governments and policy makers was also seen as fundamental for fostering the development of agroecology and sustainable agriculture that can serve citizens living in the city area. Social justice was considered as an important dimension to be considered to achieve a fairer food system and agroecology with its multidisciplinary approach is able to address this aspect.

## **Workshop 13:** Building the narrative and making the case for Agroecology

Convenor: Janneke Bruil (Cultivate!, the Netherlands)

#### Impulse talks:

- Stanka Becheva (Friends of the Earth Europe, Belgium) "Elements for a narrative on agroecology discussed at the 2016 European Forum on Food Sovereignty and Agroecology"
- Margriet Goris (University of Viçosa, Brazil and Wageningen University, The Netherlands) – "Building an agroecological peasant identity through the use of video in Brazil"

To counter the mainstream narrative of conventional/industrial agriculture, building the narrative of agroecology was highlighted as a priority by the 2016 Nyeleni Europe Forum on Food Sovereignty and Agroecology. The challenge is to "enter" people's houses, to go to the street, and to diffuse another narrative. To develop this narrative, artists can be used to broadcast this message on a wider scale. In Brazil, these strategies are already in use: educational practices to support repeasantisation, movement building practices using pastors and sports events and community art practices based on short movies, to make the case for agroecology.

The question of the goal of agroecology was discussed in this workshop: is it about fixing the current system or creating other systems? The answer shapes the communication strategies. A list of key audiences was created by the participants and the main ones were families and kids, politicians and farmers and consumers who are currently far from agroecological practises and consumption habits. Participants performed short drama scenes which highlighted that it is important to use concrete terms that people can relate to and to connect to elements that matter to them. A new narrative should provide these elements, but words and emphasis depend on the specifics of your audience.

## **Workshop 14:** Development of small scale agroecological entrepreneurship

Convenor: Vasileios Gkisakis (Agroecologiki SP, Greece)

#### Impulse talks:

- Katalin Rethy (Hungary) "Food startups with an agroecological twist in Hungary"
- Cori Keene and Cristina Gil Ruiz (IAEAN) "Consultancy of the International Agroecology Action Network"

The aim of this workshop was to provide information and stimulation on the development of small-scale entrepreneurship, private social/cooperative, apply and present the agroecology approach to entrepreneurship. A startup founder from Hungary and two co-founders of the International Agroecology Action Network were present and shared their experiences.

Katalin spoke about agroecology in Hungary were startups supports small-scale, diversified agricultural systems, shortens food supply chains and environmental/social issue. In Hungary, it is still largely a niche around Budapest and is not well represented in rural areas.

She gave the examples of three startups, the first ('Haziko') a bistro and catering company that began to source from nearby farms and implemented their own quality control. The second ('Magosvolgy Farm') a CSA style operation with a diversified production that contributes to local job creation. The third ('Szezon Kert') which is a small-scale vegetables, edible flowers and herbs farm. They deliver to homes work in close partnerships with chefs and restaurants who understand the trial and error of development. She discussed the significant economic potential of these initiatives and concluded by stating that it is perfectly acceptable to take ideas from other places but it always has to be applied in the context of one's own national reality.

Cori and Cristina presented the International Agroecology Action Network (IAEAN) which they helped co-found. Starting with a simple website, they received several requests for projects and created an online course for Colorado State University ('Agroecology for sustainable communities and community-based food systems'). They described how they had to work through the challenges of working remotely with people, how to do consulting as agroecologists, finding funding, appropriate legal status and time. They found opportunities in participatory engagement and capacity-building.

The following discussion revolved around two main questions: First, how can small-scale agroecology entrepreneurship support global change and transition? Second, how can small-scale agroecology support global change and transitions?

The need to clarify what agroecological entrepreneurship means was discussed as well the tendency for agroecology to only be linked to production while there is a need to include the food processors and consumers.

The three main problems for a farmer who wants to start a small scale farm are access to land, tools and markets. To this end incubators were mentioned as a potential way to access land and funds.

The question of how to find the latest opportunities if one cannot attend a conference like the Agroecology Forum was raised. Internet platforms could be an avenue to explore for this.

Combating isolation and creating networks were mentioned as key aspects of the transition, as well demonstrating that there is another way, to grow and inspire, allowing others to see what it could be—sharing understanding and sowing awareness.

#### Workshop 15: Perennial Grains

Convenors: Erik Steen Jensen (SLU, Sweden), Christophe David (ISARA-Lyon, France)

#### Impulse talks:

- Christophe David (ISARA-Lyon, France) "Perennial grains: A good alternative for Agroecology?"
- Linda-Maria Mårtensson (SLU, Sweden) "The ecology of perennial grains: First results with intermediate wheatgrass (Kernza) in sole and intercrop"
- Valentine Debray "Perspectives on perennial grain crop differ between organic and conventional farmers" (Les Jardins de Lucie, France)
- Olivier Duchêne (ISARA-Lyon, France) "The Perennial Grain Project"

Perennial crops may provide many potential ecosystem services, among which are the reduction of tillage, C sequestration, the increase in soil quality, in biodiversity, a decrease in fertilizer use, all-year round vegetation cover and a diversified crop rotation. Very little research has been done so far about perennial grains, and several researchers came to share their knowledge about the first research projects developed on the topic. In Sweden, an experiment on Kernza (intermediate wheatgrass) has been run and the first results are promising. Kernza can be used for beer, pancake and bread. The Perennial Grain Project was recently launched in France and Belgium to study on field experiments and assess the growth, the target services and the influence of management practices of perennial grains. An online survey with 407 farmers from France and the US showed that 58% of them were interested in the potential of perennial crops, but 39% needed more information.. The main motivations are to increase the farm's productivity, to enhance the soil health and to decrease the fertilizer use. The perceived limitations are economic (decrease in yields, seed prices) and related to the pest issue. The perceived opportunities are the possibility to value crops and to restore degraded land. Finally, the audience was split into seven groups and all participants could talk about the potential and the relevance of perennial grains. Most participants were positive about perennial cereals as an agroecological practice, but especially to restore and value marginal land rather than to compete with annuals. A lot of research topics for the future were identified.

#### **Workshop 16:** Making the transition

Convenor: Paola Migliorini (Agroecology Europe, UNISG, IFOAM AgriBioMediterraneo, Italy)

#### Impulse talks:

- Jacques Faux (Wasmes-Audemetz-Briffoeil, Belgium) "Feed autonomy enables the transition of mixed farms to agroecology: economic impact and associated ecosystemic services in a Limousin cattle and poultry farm in Belgium"
- Les Levidow (Open University, Milton Keynes) (UK) "Sustainable Intensification: Agroecological appropriation or contestation?"
- Jens Dauber (Thünen Institute of Biodiversity, Braunschweig, Germany) "Can combined food/non-food cropping systems facilitate transitions to agroecological systems in Europe?"
- Rose Hogan (Trocaire, Ireland) "Greater diversity and higher incomes found on study of agroecological farms in Western Guatemala"
- Anshuman Das (Welthungerhilfe, India) "Involving farmers in measuring impact of agroecological farming systems"

This workshop was a follow-up to Session 4: Making the Transition, which held an array of presenters with varying perspectives on how to make the transition to agroecology. Jacques Faux is a cattle farmer in Belgium who, after changing the feed practices in his operation, inadvertently discovered that he was practicing agroecology. Increasing feed autonomy was not only beneficial to his animals, but also added ecosystem services to his farm. Through this process, he found that it was possible to produce feed ratios that performed both technically and economically well on his farm. Rose Hogan and her team addressed the data gap of agroecological studies by studying the effect of agroecology on nutrition and resilience in western Guatemala. They showed that agroecological farming families consumed less junk food, had yields that were about the same, had better socialization among the community, and allowed for better opportunities for schooling for the children. All in all, this study indicates that agroecology can indeed make rural farms more resilient, and hopefully will inspire more data and research to aid in the transition to agroecology.

On the policy debate end of the spectrum, Les Levidow discussed the tensions between sustainable intensification and agroecology, in particular how this tension plays out in policy agendas in Europe. He spoke of how agroecological methods have often been decoupled from their broader social context subordinated to the different political and economic agendas of sustainable intensification. Because sustainable intensification does not account for ecosystem services the way that agroecology does, it can simply relegitimize the agroindustrial complex. A truly transformative agroecological agenda will have to distinguish among alternate trajectories in order not to get co-opted into the service of business-as-usual. Jens Dauber spoke on about land-use for food and non-food crops. Different types of land are suitable for different purposes, and these should be taken into account during agroecological transition. Within this framework of land-use, there is room to be strategic in incorporating non-food crops in a way that does not threaten food production. Perhaps these food/non-food cropping systems can increase biodiversity, and create synergies between the two, thus improving food production.

Anshuman Das focused on indicators that can be used to measure an agroecological transition. These measures should not just serve the researcher, but the farmer as well,

in order to foster a participatory approach to evaluation. Examples of indicators are: number of subsystems, the number and type of biodigestors, the diversity of crop and crop sequences, the participation in farmer field schools, the amount of food that must be purchased at the market, the number of external farm inputs, and the income from selling products. While these measures are useful for farmers and researchers alike, he found that the discussion afterwards that these diagrams encouraged was even more important. The question going forward is how can we best bring this paradigm shift into judging, assessing, understanding an agroecological farm?

After the impulse talks, the floor was opened up for a question and answer session. One participant wanted to know why, if agroecology systems work so well, they are not adopted more broadly? The presenters cited that the dominant paradigm holds powerful sway, and is accompanied by advertising being pushed by multinational companies. Anshuman believes there is too much jargon in agroecology already. Some farmers may already be implementing these practices, but they are not using academic language to describe it. There was a lively debate regarding the question of land use for biofuels and livestock that had no place in agroecology, as it reinforces the current commodity-driven paradigm of industrial agriculture. The presenters responded that some land is only suitable for livestock production, and encouraging more agroecological production like Jacques' cattle is beneficial to consumers and producers alike. Others stressed that we should keep our options open and understand how to approach the question strategically. It is clear that it's important to keep asking these questions, and to have a variety of examples of how farms can make the transition to agroecology.

## **Workshop 17:** Legumes in European cropping systems for climate change adaptation

Convenor: Ralf Bloch (Leibniz Centre for Agricultural Landscape Research, ZALF, Germany)

#### Impulse talks:

- Johann Bachinger (Leibniz Centre for Agricultural Landscape Research, ZALF, Germany) "Novel Approaches for Legume Cropping Systems under Climate Change"
- Ralf Bloch (Leibniz Centre for Agricultural Landscape Research, ZALF, Germany) "Exploring Soybean Cropping Systems as a Climate Change Adaptation Strategy"
- Fernando Pellegrini (Scuola Superiore Sant'Anna, Pisa, Italy) "The use of Participatory Learning and Action methodologies for Agroecology: conducting research on living mulches in central Italy"

The workshop was introduced by presenting the main advantages (range of ecosystem services and high potential to improve agroecological resilience) and weaknesses (yield instability and lack of knowledge on production) of legumes. There was a demonstration of ROTOR 3.0, an organic crop rotation planner tool developed by the Leibniz Centre for Agricultural Landscape Research (ZALF).

Ralf presented some of the most important measures for climate adaptation from farmers' point of view (reducing tillage, using cover crops and new crops) from an survey within the EU project climate CAFE. He detailed some characteristics of one of the proposal from farmers (soybean cultivation) and described how winter rye with early sowing date rolled during flowering before no-till seeding of the soybean can be used for weed suppression.

Fernando presented his research on living mulches (clover on wheat crop) in central Italy through the use of participatory learning and action methodologies for Agroecology.

He described the trials that were set up according to farmers preference. They ran wheat experiential evaluation during field days for two years in a row and compared to the results to lab analysis on samples taken which showed that there could be a mismatch between what farmers were able to experientially evaluate and what was actually there.

Fernando discussed the concept of 'adaptive management' (to manage a system by adapting to changes and shocks) which farmers do in their everyday lives. He stated that complexity reduces adaptive management. He described how socio-political conditions can prevent techniques to spread and stop risk taking for innovation.

#### Workshop 18: Rural-Urban linkages in Agroecology

Convenor: Stanka Becheva (Friends of the Earth Europe, Belgium)

#### Impulse talks:

- Judith Hitchman (Urgenci: the international network for community supported agriculture, France) "Consumers as co-producers: The role of urban citizens in advancing agroecology through collaboration with farmers"
- Mamen Cuéllar-Padilla (University of Cordoba, Department of Social Sciences and Humanities) "The role of cities to ensure better rural-urban linkages"
- Janneke Bruil (Cultivate!, the Netherlands) "The experience of Ecuador: 250.000 families who want to eat healthy agroecological food"

In agroecology, bringing consumers and producers closer together is a major goal to achieve. Community Supported Agriculture can create linkages between urban and rural areas. Their goal is to ensure food sovereignty and to create solidarity economies, based on a participatory and democratic approach to farming and food consumption. To make them feel more involved, consumers are often called "co-producers" in such a system. On a more political side, The Milan Pact 2015 (MUFPP) developed a list of actions to implement better strategies in food systems, such as food aid programs, education & sensibilisation, and urban agriculture. The main challenges for these goals are limitations due to local policies and the difficult dialogue between urban and rural areas. Indeed, the question "Are cities going to decide how rural regions will produce?" has to be answered.

In Ecuador a grassroots movement led to the creation of an initiative to engage urban people in agroecology. By using sensorial activities and creative workshops, they attract people in cities to healthy, local and agroecological food. This is followed by political awareness raising and farm visits. The political context of these self-organised grassroots initiatives remains important, especially in the light of possible co-optation by others.

## **Workshop 19:** Young agroecologists: trajectories and professionalisation

Organizer: International Agroecology Action Network (IAEAN)

#### Impulse talks:

- Carlo Bettineli (comun'Orto, Italy)
- Maaike Happel (Technical University of Denmark, Kgs Lyngby, Denmark)
- Sébastien Roumegous (Collectif Agroécologie, France)
- Raphael Paut (INRA, France)
- Florian Delespesse (Froidefontaine / Réseau des GASAP, Belgium)

In this workshop the experiences of young graduates from agroecology study degrees were presented. Some of them decided to become researchers and joined universities and institutes to focus on different projects. One young graduate was working on a Scandinavian project dealing with the issue of sustainable reutilization of organic waste from industries. Another was conducting a PhD study on agroforestry systems in France. Many other graduates however, decided to work closer to farmers and are now involved in consultancy agencies or projects which provide space and farmland to support agricultural entrepreneurs with developing their businesses.

All graduates were quite satisfied with the set of skills and holistic mindset developed thanks to their previous studies on agroecology. Nevertheless, it was questioned whether the agroecology curriculum provide all the useful skills to establish themselves as young entrepreneurs. Many abilities related to logistic, budgeting and accounting were not part of the study curriculum and this lead to insecurities and difficulties when entering the job market and setting up their businesses.

Another difficulty mentioned by one PhD student working in Brazil was the issue of access to land for implementing agroecological projects, which was said to be a common struggle in both the European and Latin American context.

The workshop concluded with the proposition of creating an online platform to map agroecology projects around the world that also serves as a network for sharing experiences which could support young agroecologists finding new cooperation and jobs opportunities.