Next FOOD

EDUCATING THE NEXT GENERATION OF PROFESSIONALS IN THE AGRIFOOD SYSTEM

NEWSLETTER

Issue 10 / 2021

Contents…………………………………

PROLOGUE

The NextFood educational approach – useful in very different contexts

by **Martin Melin,** *NextFOOD coordinator, SLU*

At the Rio+20 summit in 2012, a group with a broad representation among teaching professionals concluded that the "global crisis is also a crisis of education". Educational institutions have resigned from their mission to "train people capable of thinking about important political, environmental, economic and social issues of global order". The summit members called for education that trains learners to reflect on alternatives to the existing system, and then introduces issues such as social justice, equality, and food sovereignty and seeks methods to find innovative and responsible solutions.

New and promising educational programs informed by agroecology and food studies, where learning about multifaceted issues about the food system by working closely with farmers and food system stakeholders, are gaining interest with educators and students at several universities around the world. In previous issues of the newsletter, we have written about several exiting educational initiatives developed by the NextFood partners. Two more are briefly presented in this issue: at the Sekem Development Foundation and Heliopolis University in Egypt, students are trained in sustainable agricultural practices by action-oriented methods. The lived experience of plants, animals and the soil are in the center of the course. The same partner also organises the NextFood Entrepreneurship program including an incubation phase for startups and entrepreneurs in the agrifood sector. Applicants to this program are coming from different backgrounds, from university students to owners of small businesses, which contributes to a dynamic learning arena. These two examples show the versatility of the NextFood educational approach, it can be adapted to a wide variation of learners at different skill levels and fits well in both natural science and social science education.

I would also like to highlight some practical outcomes of our case studies, briefly presented in "practice abstracts", with useful hands-on recommendations for teachers. And you don't want to miss the report from the "Innovative Science & Education for Sustainable Agriculture workshop" that was organized by NextFood in connection to the Female Entrepreneurial Week in Thessaloniki, Greece. Check out the youtube video with student interviews!

I hope you will find our newsletter interesting!

NEWS FROM NEXTFOOD PROJECT

Presentation of the Greek case in the NextFOOD Legacy - Innovative Science & Education for Sustainable Agriculture workshop

*by **Anna-Maria Krooupa**, AFS*

Preliminary findings from the implementation of the NextFOOD approach with Greek students were presented at the **NextFOOD Legacy - Innovative Science & Education for Sustainable Agriculture workshop** which took place in Thessaloniki, Greece on 22nd November 2021, organized by Agronutritional Cooperation Region Central Macedonia. The American Farm School (AFS) researchers working on the project discussed the way in which action-based activities have been incorporated in the curricula of a selected number of agricultural courses taught at the International Hellenic University (IHU), and the impact of these interventions on students, university professors and agricultural professionals.

Special attention was given to the Action Learning Set (ALS) methodology that the AFS is currently using for the implementation of the NextFOOD approach. The ALS is a process of learning and reflection that happens with the support of a group or "set" of individuals working with real problems with the intention of getting things done. We have created five such groups involving students and different actors of the agri-food chain (i.e., university professors, advisors, agricultural professionals) who are working jointly to find solutions to challenges faced by agricultural professionals. Therefore, we are making use of a multi-actor approach to participatory learning in order to enable students to develop their competences and skills. Moreover, through their participation in the ALSs, students have the opportunity to apply the theoretical knowledge gained from their studies so far to "real-life" agricultural issues and problems.

Early findings both from the implementation of the ALSs and from previous action-based activities, show that the NextFOOD approach is overall perceived positively by the students, professors, and agri-food professionals who have participated in the Greek case. Participants reported a number of perceived benefits from their involvement in the project, including the development of core sustainability competences and improvements in academic performance for students, greater job satisfaction for university professors, and knowledge gains for agricultural professionals. Despite these benefits however, barriers to the adoption of the NextFOOD approach were also identified. These mostly related to the current institutional culture within Greek universities. For a shift, therefore, to action-based learning to be achieved, targeted initiatives on policy and institutional levels are needed.

Since the workshop was organised as part of the **Female Entrepreneurial Week**, we incorporated in our presentation a video of two female agricultural students who have participated in NextFOOD interventions, talking about their experiences of being young women in the agri-food sector.

Members of the AFS team at the NextFOOD Legacy workshop

Find a link to the video presented at the NextFOOD Legacy workshop below:

https://www.youtube.com/watch?v=84X79GVGgfo

Enjoy!

New members in the NMBU Nextfood team

*by **Kristiane Brudevoll**, NMBU*

Marie Henriksen Bogstad and Kristiane Brudevoll joined the NMBU Nextfood team in the spring of 2021.

They both work full time on the project on the NMBU-led work packages WP2 and WP3. Kristiane and Marie are former NMBU students and hold an M.Sc. in Agroecology.

Thus, they have both completed the course which is at the core of the Norwegian NextFOOD case - 'Agroecology: Action learning in farming and food systems'.

Kristiane holds a B.Sc. in International Environment and Development Studies and an M.Sc. in Agroecology from NMBU.

She worked in a consultancy company focusing on the transition to a more sustainable society before joining the NextFOOD project.

Marie holds a Bachelor's degree in Social Anthropology from the Norwegian University of Science and Technology, and an M.Sc. in Agroecology from NMBU.

Before joining the Nextfood project, she worked three years in an Animal rights NGO.
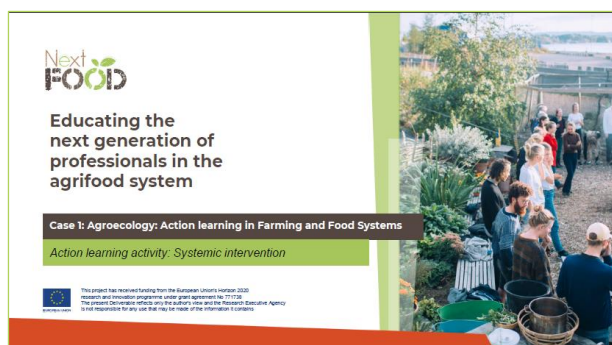
Get more information about the Case here

***Where:** Norway*

***Main stakeholders involved:** MSc students in Agroecology and faculty*

***Multi-actor approach in case:** Farmers and students solving real sustainability issues on farms.*

Agricultural Clusters and Next Generation EU

*by **Elena Kopanarova**, ACRCM*

The clustering in the agricultural sector presents many benefits, such as creating an enabling environment for interfirm cooperation, facilitating the diffusion of innovations, and acting as a means to efficiently channel public support to increase competitiveness in the agricultural sector. Farmers and small-scale firms can benefit from participating in ACs[1], as they enjoy evident joint-action advantages and agglomeration economies. The study also highlights that collective action undertaken by cluster participants is the cornerstone of ACs, and describes the complementary roles played by the government, private sector (especially farmers, industry and interprofessional associations) and academic, and research institutions in the development of agricultural clusters. It indicates that ACs tend to develop, by and large, around high-value export oriented agricultural products, while many domestic-oriented incipient clusters do not seem to have a bright future ahead of them.

Since the beginning of the pandemic, European agricultural clusters and agents demonstrated their capability to react quickly, better than in China, US, and other continents. The role of clusters is crucial in identifying the needs of European industries and where to allocate future investments. For these reasons, clusters will play a key role in how to support the recovery plan for Europe.

With the arrival of the COVID-19 crisis, agricultural clusters reaction at EU level has been forceful: a collective mobilization with the quick identification of disruptions and the creation of the European Rapid Alert Function, led by the *European Clusters Alliance* together with European Commission. It is a constant framework destined to evidence problems in regulation, coordination, and funding, and all the consequent actions, as one of the main innovations in public policy never implemented.

Agricultural clusters can respond as quickly as possible to what the industry needs; they are business generators, magnets for talents and investors. Clusters are the best tool to promote European ecosystems and to recover internationally reputation of our industries on the global markets.

During 2014-20 a variety of Cluster initiatives have been financed from COSME and Horizon 2020, such as:

- Cluster S3 Partnerships (2018) action of the COSME Framework Programme of the European Commission contribute to boost industrial competitiveness and investment within the EU.

- EU Clusters GO-International (2016-17) (2018-19) (2020-22) to intensify cluster and business network collaboration across borders and sectorial boundaries, and to support the establishment of 'European Strategic Cluster Partnerships' to lead international cluster cooperation in fields of strategic interest in non-EU countries.

- EU Clusters – excellence (2018) of COSME to strengthen cluster management excellence and facilitate exchanges and strategic partnering between clusters and specialized eco-systems across Europe, including through implementing a new "ClustersXchange" pilot scheme. As high-quality cluster management and strategic connections between clusters are key elements of world-class clusters, the call aims to foster SME competitiveness and assist companies to successfully access global markets by exploiting the innovation and growth potential that clusters can offer.

---

[1] Agricultural Clusters

- The ClusterXchange pilot (2020) to facilitates transnational cooperation, peer learning, networking and innovation uptake between actors of different industrial clusters. It is implemented with support from cluster organizations that have teamed up in the European Cluster Partnerships | Excellence.

Additionally, during the period 2015-2020, INNOSUP-1 supported 2,000 SMEs directly (€ 130 million) and 30 projects were funded.

To help in the implementation of the updated industrial strategy, the European Commission will launch around *30 cross-sectoral, interdisciplinary and trans-European strategic Joint Cluster Initiatives* to be called 'Euroclusters'. The EUROCLUSTERS will contribute to the implementation of the European Commission's New Industrial Strategy for Europe, *as well as its updated Strategy that was published in May 2021 and the SME Strategy for a sustainable and digital Europe adopted in March 2020*, by building resilience and accelerating transition to green and digital economy.

Euroclusters should put forward proposals *for how to initiate, develop and maintain an EU-level long-term strategic partnership between companies of different kinds and sizes (with an emphasis on SMEs), and other organizations such as research and knowledge institutions, science and technology parks, business support organizations, financial service providers, non-profit organizations and related public bodies across different EU Member States and COSME participating countries, bringing together a critical mass of firms and societies in geographical and functional proximity, which are economically and socially interdependent*.

Examples of successful agricultural clusters in which ACRCM is partner:

AG-Cluster (**Agri-food Cluster of Central Macedonia**) offers solutions to promote innovation in local entrepreneurship (start-ups & existing) and knowledge exchange. Ag-Cluster already implements four pilot applications of intelligent agriculture in Central Macedonia, which concern the cultivation of peach and kiwi - two crops with great economic value for the markets of Greece and abroad.

The **InoFA** **(Internet of Food Alliance)** innovation cluster is an effort to connect all the links of the agri-food chain and those who provide materials and services to it under a common umbrella based on high technology and the Internet of Things. In this sense, the flow of products in the supply chain creates a parallel flow of information which is born at the point of primary production (exp. field) and is constantly enriched until its final consumption. The purpose of the cluster is to create synergies between the participants and civil society in order to develop new digital products and services that will lead to the improvement of the applied processes by all the links of the supply chain. This technological upgrade in turn will help it meet the modern challenges of the circular economy, food traceability, environmental footprint and nutritional values.

NEWS ABOUT EDUCATION & TRAINING

Entrepreneurship Program 2021 – Cycle 1 and Cycle 2 (Sekem case study, Egypt)

by *Reham Fathey Ali, Alaa Elhawwary, Adel Khaled, Karim El Mallawany*, HU

Greeting from NextFood project team at Sekem farm, from left to right, Karim El Mallawany, Reham

NextFood Entrepreneurship Program 2021 – Cycle 1 and Cycle 2 (Egypt case) has launched the incubation phase for startups and entrepreneurs in the agri-food sector. The entrepreneur case aims building capacities of 20 participants in topics related to the agriculture sector and business development.

The application call of the first and second cycle was launched in August and September 2021 respectively on the communication channels of Sekem Development Foundation and Heliopolis University for Sustainable Development.

More than 90 applicants applied for both cycles and after careful filtration, the NextFood team selected 20 participants to attend the cycles. The applicants represented a different segment of society, whether university students, housewives, recent graduates, or owners of small agricultural projects, whether the project was established or in the process of implementation.

The cycle 1 covered topics of Bio-fertilizers, Compost, IPM strategies, Organic Agriculture aspects, Bio-pesticide, Introduction to Horticulture production, and animal livestock husbandry. The cycle also covered the topics of marketing, finance, business model canvas, and feasibility study for business development, while cycle 2 focus more on business topics such as project management, leadership skills and sales in addition to other agricultural topics (Hydroponic and aquaponics) and the final pitch day was on 24th October 2021.

Final day of NextFood Entrepreneurship Program 2021 cycle 1 after the participants gave their presentations of their projects idea and certificates time at Sekem Farm,

Final day of NextFood Entrepreneurship Program 2021 cycle 2 at Entrepreneurship Center for Social Impact, Heliopolis University, Cairo, Egypt.

EUROPEAN UNION

Cycle 3, as the final cycle of the program, will be launched in mid of December as public call after targeting 5 promising teams to start their business, which are already qualified from cycle 2 and start the monitoring process and incubation for business model. Cycle 3 will focus more to achieve the NextFood approaches of 5 main competences (observation – participation - dialoguing-Reflection Visioning) to raise the level of the participant and enhance their performance.

Pitch day of NextFood Entrepreneurship Program 2021 cycle 2 at Entrepreneurship Center for Social Impact, Heliopolis University.

Get more information about the Case here.

Where: Egypt

***Main stakeholders involved:** Farmers and young entrepreneurs in agrifood business,*

***Multi-actor approach in case:** Involving agro-food industry, public authorities, chambers of commerce, business angels, in order to get these stakeholders engaged together with young entrepreneurs and foster co-ownership for sustainability.*

Biodynamic training Fall 2021 (Sekem Case Study, Egypt)

*by **Reham Fathey Ali, Alaa Elhawwary, Salma Nour El-Deen, Karim El Mallawany**, HU*

Biodynamic training started from 17th to 28th October, 2021 at Sekem farm, Belbeis, Sharkia governorate, Egypt for two weeks targeting 61 fresh undergraduate students of Organic Agriculture, Heliopolis university. The training targets to teach the students outside the classrooms of the university to open fields where living nature and environment, dealing directly with the living organisms whether plants, animals and soil consider it as one living unit.

The students planted Chamomile seedlings to learn how they design their own mini farms by themselves.

The training focused on the principles of organic agriculture, Biodynamic concepts, and compost production. The students had great experience through field activities in designing their own mini farms by planting Chamomile seedlings and observing seeds germination and growth through the 2 weeks of training.

The training included as well multiple visits i.e. Quarry, El Adlya Farm, El-Mizan, Greenhouses of herbal and medicinal plants, domestic livestock farm, and Sekem factories such as ISIS, Naturetex, Lotus and introduced to many agricultural products and inspecting their production process. The training enhanced the students' participation, presentation skills and performance through different and effective activities to recognize many concepts related to the soil and organic agriculture.

Professors, Teaching assistants and students of Organic Agriculture, Heliopolis University in the Biodynamic training at Sekem farm, Belbeis, Sharkia governorate, Egypt.

The aim of the Biodynamic training case is to cover the main 5 core competencies of NextFood approaches (observation – participation - dialoguing- Reflection Visioning). This training was carried out by Staff members of faculty of Organic Agriculture, Heliopolis University.

Read more about the 5 main competences of
"Nextfood Toolbox for teaching practitioners" here.

Organic Agriculture students while their visit to the Quarry site as one of their activities of Biodynamic training of NextFood project, Egypt.

NEWS ABOUT CONFERENCES/EVENTS/WORKSHOPS

Online event: Sustainability matters – novel tools to transform education and businesses

*by **Katherine Flynn, ISEKI** and **Hannah Frost**, [WU](#)*
*edited by **Katherine Flynn** and **Line Lindner**, [ISEKI](#)*

Sustainability matters – novel tools to transform education and businesses is an online event by [SDGs Labs](#) and [NextFOOD](#) to share experiences from European projects with you.

Are you a teacher, vocational trainer, practitioner or business leader?

Join us in the panel discussion where we address why and how training should change to advance sustainable development. You will also experience the [NextFOOD toolbox](#) and the [SDGs Academies platform](#) first hand – tools developed to promote sustainable education and SDGs-oriented business performance. In two hours, you will hear and touch the results of 5 years of expert work! Don't miss it.

Join us for free via Zoom on

13 December from 2 to 4 pm CET / 1 – 3 pm GMT

Registration: https://us06web.zoom.us/meeting/register/tZUlduqvrD4vHdPfEsZCQyvzZs-vxpGp7knK
Please note that the event will be livestreamed and recorded.

Further info about the event and speakers: www.sdgs-labs.eu.

Sustainability matters – novel tools to transform education and businesses is part of a series of events, if you are interested in the topic, find more about them here: www.sdgs-labs.eu.

With the support of the Erasmus+ and the Horizon 2020 programmes of the European Union

PRACTICE ABSTRACT

Visionary thinking as a core competence in the NextFood approach

*by **Marie Henriksen Bogstad**, NMBU*
*edited by **Katherine Flynn** and **Line Lindner**, ISEKI*

In the NextFood educational approach, visionary thinking is a competence whereby the learners imagine a desired future within specific agrifood and forestry systems. Students practice visionary thinking together with farmers and other stakeholders in the field. Such a shared activity can bring people of different backgrounds, values, and assumptions together and open up for co-creation of future oriented knowledge. When a shared vision is created, the room for transformative change increases as the vision provides direction for action plans and decisions along the way. Having a shared vision based on what is meaningful for a group collectively also creates ownership and individual responsibility.

Visionary thinking is a holistic and pro-active approach to the future, different from problem solving which puts the problem at the centre of attention. Visionary thinking encourages sole focus on thinking about the desired future focussing not on what stakeholders want to get away from, but rather what they want to create. Visionary thinking can be developed only through practice and when training visionary thinking, keep in mind that it is a very versatile approach that can be utilized in many ways, scales, and situations.

Before starting a visioning exercise:

1) create the right environment and thoroughly inform participants about the process;

2) ask questions that allow for the imagination to 'run free'. In many cases the use of guided imagery to 'travel to the future', can serve as a fruitful way to observe and visualize what the desired future state is all about. In any case, it is important to create a relaxing atmosphere that allows for suspension of judgement.

Download the Practice Abstract Here.

You can also find more interesting

Practice Abstracts like this one **here**.

How to use time efficiently in action-learning courses

*by **Papadopoulou Elisavet, Zafeiriou Georgia**, AFS*
*edited by **Katherine Flynn** and **Line Lindner**, ISEKI*

In action- learning, besides knowledge content, it is essential that facilitators allocate time efficiently for learners to develop a close relationship with the subject matter and their teammates; communication and other interpersonal skills; and to deal with difficulties and learn from mistakes.

To that end, it is recommended that facilitators:

(1) Ensure that students possess the necessary specific knowledge required.

(2) Allocate time generously for action-learning techniques and allow students to develop their experience with minimal intervention. Intervene only if students are going in an unwanted direction or need help.

(3) Make sure that students know how much time they have for a given tasks.

(4) Give time warnings when activities come close to an end.

(5) Take notes on how much time an activity has taken and the point that the activity has reached. This will help you with future activity planning.

(6) Aim for smaller groups.

(7) Allow time for student reflection at the end of each action-learning activity. Much of the learning will happen during reflection.

(8) Be aware that each group has its own dynamics and that they may be distracted due to the "free" setting. Try to keep such distractions in mind and redirect attention to the subject matter.

(9) Be clear about the outcomes you are expecting from each activity. When appropriate, share these expectations with the parties involved.

(10) Are aware that action- learning can be either topbottom or bottom-up meaning that students are either given the context of the experience (experience to knowledge) or they are practicing knowledge that they already have (knowledge to experience). The first takes much more time and needs more time for reflection.

Download the Practice Abstract Here.

You can also find more interesting

Practice Abstracts like this one **here**.

CONTRIBUTING AUTHORS AND TERMS

Contributing authors

Brudevoll Kristiane, NMBU

Elhawwary Alaa, HU

El Mallawany Karim, HU

Flynn Katherine, ISEKI

Frost Hannah, WU

Henriksen Bogstad Marie, NMBU

Khaled Adel, HU

Kopanarova Elena, ACRCM

Krooupa Anna-Maria, AFS

Lindner Line, ISEKI

Melin Martin, SLU

Nour El-Deen Salma, HU

Papadopoulou Elisavet, AFS

Reham Fathey Ali, HU

Zafeiriou Georgia, AFS

Terms

Issue 10/2021 published: December 2021

For the next newsletters:

Issue 11/2022 will be published in March 2022

Deadline for contributions: 25. 2. 2022

Address for sending your contributions

apopelka@post.cz (Alena Popelková, Bioinstitut)

To contact editorial board use this email address:

apopelka@post.cz (Alena Popelková, Bioinstitut)