THE AGROECOLOGY WAY

NEWSLETTER

An annual publication of the Curriculum Development in Agroecology Project

Nov2020- Nov2021
Issue No. 2

ABOUT THE COVER

Over the millennia, food growers have focused on cultivating food only for production. It is undeniable that the intensive agriculture activities and the demand towards food security has generated climate crisis, health risks, continuing poverty, and inequality.

For this reason, agroecology has shed the green light in the 1st Food Systems Summit that the United Nation has recently launched. It is pointed as the foundation for transforming, strengthening the food systems, and achieving sustainability.

The 10 elements can be a game-changer and new way forward to our farmers, professionals in agriculture, producers, and consumers towards a healthier, more sustainable, and more equitable food systems.

CONTENTS

CONSORTIUM

Hue University • Vietnam National University of Agriculture • Benguet State University• Central Luzon State University • Rajarata University of Sri Lanka • University of Peradeniya • Polytechnic of Coimbra • Mendel University • Novel Group Sarl

WE WANT TO HEAR FROM YOU !

The consortium encourages readers to photocopy and circulate articles in this publication with proper acknowledgment. Everyone is also invited to contribute articles related to Agroecology or refer individuals or organizations who are engaged in Agroecology practices whose stories are worth featuring. Please email cdae.project@gmail.com or send us a message on our official Facebook page Curriculum Development in Agroecology.

To give your comments or suggestions regarding this material, scan the QR code on the first page.

agroecologyproject.eu

Curriculum Development in Agroecology
facebook.com/cdae.project

cdae.project@gmail.com

Experience Mendel University from home: A Virtual Study Tour

On March 9-12, 2021, it's the time of year in the project timeframe that the nine-member consortium of Curriculum Development in Agroecology (CDAE) of Erasmus+ funded project will travel to Europe, particularly in Mendel University (Mendelu) situated in Brno, Czech Republic. Sadly, they are unable to visit, considering the virus outbreak worldwide.

Fortunately, Mendelu, a member of the CDAE consortium and the host of this virtual tour, has an alternative solution. They organized a four-day virtual study visit for the study program on Agroecology. They ensured a workshop on the curricula development while allowing the participants to experience and witness the century-old institution. This tour is an indication that the pandemic is not a hindrance to accommodate the six Asian partners with two tertiary school representatives from Vietnam, the Philippines, and Sri Lanka in their zeal to offer the Masters of Science in Agroecology in their own country.

Further, Mendelu is one of the numerous universities globally that offer Agroecology, an approach to sustainable agriculture. To record, they have been offering the program of both the Bachelors and Masters of Science in Agroecology in Europe.

Going back to the virtual tour, the itinerary of the consortium on the first day was focused on the informative video about Mendelu, its city sceneries, meeting the Czech students, teachers, and its people. After a brief introduction to the city, the tour proceeds to the main itinerary on general discussions on institutional structures and differences among institutions in partner countries.

Mendelu mentioned that Asia and Europe might have different perspectives on the concept of Agroecology; however, they emphasized that both can learn from each other.

During the general discussion, the Asian partners presented their perspectives on Agroecology in their country, their existing equipment, and natural and human resources that are beneficial for the CDAE project.

The second day was the introduction to the Faculty of Agriculture and its study program along with informative, practical teaching of Agroecology at Mendel University Farm and a glimpse of their facilities and equipment. Then, they went to the Arboretum University Forest and wandered to the campus-themed gardens, specifically the: garden silver; English flower garden; irises and peonies; garden penumbra; grass and paint; water and kitchen garden; white garden and the rose garden. The gardens are the results of experimental research of the Mendelu, Faculty of Horticulture.

Moreover, a comparison to the curriculum standards of Europe was discussed on the third-day agenda for the curriculum specifics for individual partner countries wherein Asian partners presented their viewpoints on the proposed curriculum and syllabus.

Milada Stastna, the project coordinator of Mendelu, stated that it is important to

read the guide for European credits to have a clarification to the Europe Credit Transfer and Accumulation System in order to have a harmonized curriculum for both Asia and Europe.

Meanwhile, the Sri Lanka partners suggested that there should be entry and exit points, including alternatives for the enrollees in MSc in Agroecology program.

Manuela Abelho, the project coordinator of Polytechnic of Coimbra, a European partner, agreed to the suggestion of Sri Lanka partners since they have similar options in their university. Specifically, if the student completes the program, the student will be entitled to the postgraduate degree; however, if the student fails, s/he will be given eligibility based on the credits s/he earned.

After the discussion, Stastna expressed her gratitude to the partners for the productive discussion on curriculum development. She noted that they will review the proposed curriculum of the Asian partners for the near finalization of Work Package 2 (Curricula Development in Agroecology).

The last day of the tour highlighted the teaching of Agroecology in Mendelu. They presented examples of laboratories and how some equipment is utilized in specific areas such as water resource management, sandbox experimental hands for landscape management, and fishery management.

"The possibility to witness to Mendelu in this time of pandemic is online. This is the feasible way to do it due to travel restrictions," said Do Thi Xuan Dung, overall coordinator of the CDAE project from Hue University, Vietnam.

She also stressed that despite all the technical difficulties, she was thankful for everyone for bringing things together.

The six Asian partners and two European partners left Mendelu acquainted with their campus, students, teachers, school businesses, and their experimental gardens.

In this virtual study tour are the nine-member consortium from Asia and Europe. Specifically, Asian partners from Vietnam are Hue University (overall project coordinator) and the Vietnam National University of Agriculture; from Sri Lanka are University of Peradeniya and Rajarata University of Sri Lanka, and from the Philippines are Central Luzon State University and Benguet State University. The European partners are Mendel University, Polytechnic of Coimbra, and Novel Group Sarl. •MU

Polytechnic of Coimbra integrates international project in Agroecology in Southeast Asia

The project intends to contribute for a more sustainable agriculture in partner countries.

The Polytechnic of Coimbra participates in an international project for the development of master programs' curricula in three Southeastern Asian countries. The project, Curriculum Development in Agroecology – CDAE, is financed by the European Union under Action 2 of the Erasmus+ programme: Capacity Building for Higher Education, and is carried out by a consortium of nine partners in six countries: Vietnam, the Philippines, and Sri Lanka in Southeast Asia and the Czech Republic, Portugal and Luxembourg in the European Union. The project has the objectives to train Southeastern Asian students to become agriculture specialists, increasing their competencies in sustainable agriculture. The project also aims to increase the skills of teaching and administrative staff of the Asian Higher Education Institutions by providing formation to upgrade their skills according to the 21st century needs.

The IPC team, composed of Cristina Galhano, Dulce Caetano, Manuela Abelho, Maria João Cardoso, Pedro Mendes-Moreira and Rui Amaro, is mainly responsible for monitoring and guarantee the quality of the project and its´ outcomes. It also has the responsibility to identify similar curricula and best practices in Europe and develop a teaching guide for the future professors of the master curricula. According to Manuela Abelho, the development of the project is being affected by the COVID-19 pandemics. "Despite the delays due to the pandemics and the impossibility to travel to the partner countries, the tasks are being carried out even if with adaptations." For instance, the study visits to Mendel (Brno, Czech Republic), when partners would observe good practices and establish the curricula to apply in each country, were replaced by a virtual visit. After this step, during 2021 the several curricula will be developed, and the modules for upgrading the staff skills of the Asian Higher Education Institutions will be delivered.

According to Manuela Abelho, this type of project brings added value to the partner countries (outside the European Union) because they provide material means and specialized formation in Higher Education. "In this particular case, given the subject in Agroecology, these master's degrees will also contribute to a more sustainable agriculture in the partner countries."

The project CDAE runs until November 2022 and has the following partners: Hue University (project coordinator); Vietnam National University of Agriculture; Benguet State University; Central Luzon State University; Rajarata University of Sri Lanka; University of Peradeniya; Mendel University; Polytechnic of Coimbra; Novel Group Sarl. • IPC

CDAE project: Agroecological training to meet social needs

The development of a master's program in Agroecology, under the Erasmus+ program funded by the European Union, aims to improve the capacity of higher education institutions. The project is coordinated by Hue University. The partners include Vietnam National University of Agriculture (Vietnam), Benguet State University (Philippines), Central Luzon State University (Philippines), Rajarata University (Sri Lanka), University of Peradeniya (Sri Lanka), Mendel University (Czech Republic), Polytechnic of Coimbra (Portugal), Novel Group Sarl (Luxembourg). The process of researching social needs for an agroecology training program in partner countries is chaired by Professor Hoang Thi Thai Hoa, Dean of the Faculty of Agronomy, University of Agriculture and Forestry, Hue University, on the basis of coordination, interviews, and surveys of stakeholders.

Through the research results, can you tell about the needs of the partner countries for an agroecology training program?

Prof. Hoang Thi Thai Hoa explains that the growth of several economies in the Asia-Pacific region over the past four decades has shown significant poverty reduction. However, the issue of food security and nutrition has not been fully resolved despite the increase in production and the decrease in food prices. Knowledge has emerged as a central factor in ensuring food and nutrition security for the Asia-Pacific region. Therefore, it is necessary to build links to bring about diverse knowledge about food security and nutrition. Ecological approaches can contribute to this problem.

In recent years, the number of courses and majors related to organic, sustainable, and environmental agriculture has increased in Asian countries. However, there is still a shortage of Master's programs that link all these fields to train professionals with the right knowledge and skills in sustainable development and organic agriculture from production to food chain. Besides, the shortage of equipment and high-quality skills of administrative staff is also noticed. The status of higher education in Vietnam, the Philippines, and Sri Lanka has not yet met the task of addressing environmental, economic, and social issues associated with formal approaches to agriculture. Most agricultural universities today still teach unsustainable traditional agricultural methods and technologies related to crop and livestock production, such as crop monoculture and heavy use of chemical inputs. Therefore, this study was carried out with the following objectives: (1) to identify programs that are relevant to the project partner countries, that can be extended to a larger region; (2) identify gaps and better assess the academic needs that the project needs to meet; and (3) analyze and report on the appropriate legal framework and program accreditation steps for partner countries and/or universities.

How did the research team conduct the survey?

Prof. Hoang Thi Thai Hoa leads the survey of master's programs similar to Agroecology in Asia focusing on systematizing existing master's programs in the field of sustainable, organic-environmental agriculture universities of partner countries in Asia and Europe. This was composed of the 8 universities in Vietnam, 1 in the Philippines, 8 in Sri Lanka, 3 in Thailand, 3 in India, 3 in Bangladesh.

From the systematization of study programs with outputs; compulsory subjects or elective subjects, the units have identified the missing points in the program, the content has not been taught and evaluated; unnecessary content. Thereby, it was determined that the learning outcomes and competencies provided by those courses; number of credits, class schedule, student assessment, teaching methods, and quality standards.

The data was collected from experts, educators, and managers in the agricultural labor market field in Vietnam, the Philippines, Sri Lanka, India, Bangladesh, and Thailand.

The results can be summarized as there are more than 1000 public and private universities in Asia. However, about 100 universities were found out to offer programs in agriculture especially related to agronomy. In Vietnam, there are many agricultural universities that provide training in agronomy and related fields, but there is no training program in Agroecology. Overall, no higher education institution in Asia offers a master's program in Agroecology.

If the program will be offere, it will aim to produce professionals with appropriate methodological and interdisciplinary competencies to meet needs in related disciplines such as agriculture, agroforestry, ecology, and

environmental science, schools, and sustainable development. The duration of the program is from one or more years for an application-oriented program, or two- three years for a research program. Additionally, there is still a lack of internationalization program framework; lack of interdisciplinary curriculum; lack of interdisciplinary topics related to food security, safe and sustainable agriculture, and limited practical training programs for students, facilities and research materials. Meanwhile, the agricultural sector in Sri Lanka survey shows that 55% of the performing sectors are related to the field of agroecology. Of the total surveyed industries, 70% do not have staff trained in subjects related to agroecology.

In addition, the study also shows that common key skills has limited provisions in graduate programs including English, scientific writing, counseling, motivational skills, communication, and teamwork. Independently, understand theories and concepts of agroecology and sustainable development; knowledge and skills in the design, management, and evaluation of diverse and complex agroecosystems; Strong background in quantitative methods to assess agro-ecosystem characteristics and analyze and interpret scientific data.

Is it clear that a master's program in agroecology is really necessary in Vietnam in particular and Asian countries in the study area in general?

Feedback from universities, academies, and the labor market shows that a master's program in Agroecology in Vietnam is necessary in the present conditions.

The demand for human resources in the agricultural sector in the future is very high. Therefore, the renovation of subject content, teaching methods, and training processes to improve the quality of the Master's degree is considered essential. At the same time, strengthening the training of lecturers and educational administrators, science and technology development, and improving the knowledge, skills, and attitudes of graduates.

It is expected that in the coming time, the project partners will succeed in building credit conversion programs, exchange of resources, laboratories, etc. From there, adjustment and improving the program is crucial to suit the needs of the project. In line with the requirements of each country vis-à-vis to the European standards. • HU

BSU CDAE task force critique MSc in Agroecology curriculum and syllabus

To structure the curriculum and syllabus of the proposed Master of Science in Agroecology, the Benguet State University- Curriculum Development in Agroecology (BSU-CDAE) Academic task force convened for a meeting workshop on March 3, 2021 at the College of Agriculture.

The aim of the meeting workshop is to: have a more interactive and collaborative discussion; scrutinize the proposed study subjects; and verify if these subjects are offered in their colleges and field of instruction or has an equivalent subject.

The meeting workshop commence with a reminder to the task force about the project aims and objectives and the role of BSU as the leader of the Work Package 6 (Dissemination and Exploitation).

During the workshop, the task force had a focus group discussion, they were divided into two groups: first group consists of College of Agriculture and Graduate School; and second group are College of Arts and Sciences and College of Forestry.

Dr. Janet P. Pablo, Project Manager and Dean of the College of Agriculture emphasized that the curriculum should be harmonized and aligned with Europe and the university.

"We cluster into two groups and provide critique to the proposed curriculum and syllabus from the Mendel University then we highlight our existing courses and determine which descriptive title of subjects can be adapted in proposed MSc program in the university," instructed Pablo.

The draft study plan must be reviewed by the partner Asian countries particularly Philippine representatives, BSU and Central Luzon State University (CLSU) to modify the proposed curriculum and syllabus specifically the titles of study subjects and suggested number of credits. The review must be grounded from the policies, standards, and guidelines for graduate programs of Commission on Higher Education. The study plan is developed by the Mendel University, consortium partner of the CDAE project, leader of the Work Package 2 (Curricula Development).

Meanwhile, each group has pointed out similarities on study subjects in their field of instruction based on the provided study plan for Agroecology program while concerns on the subject differences where appropriately deliberated and had a consensus that it will be modified.

"We will submit our review to the Mendel University based from the outcome of this workshop and while expecting for their response, we will assess and go through over the proposed study plan again," ended Pablo.

The workshop was attended by the College of Agriculture, College of Arts and Sciences, College of Forestry, and Graduate School, the group is considering to join other colleges and for holistic collaboration. This is the third workshop of the task force for the curricula development since the creation of the curricula on September 25, 2020 and project inception and orientation held on October 14, 2020. • BSU

CDAE Consortium tackles updates on the project

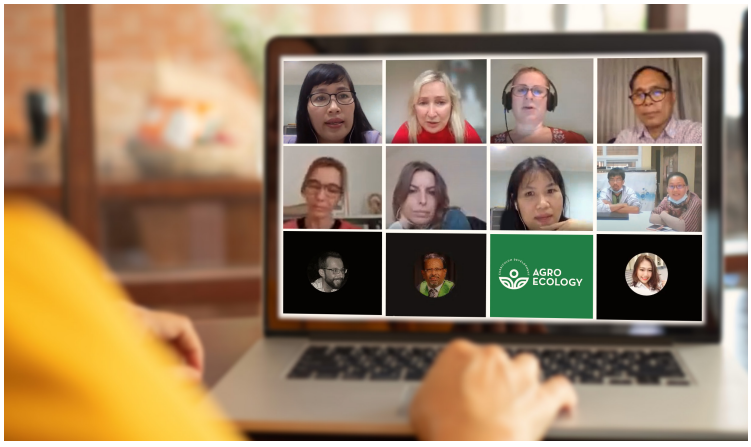
4th Consortium Meeting

The consortium was gathered on November 11, 2020, via Google Meet to have an update on the project's overall progress. In the session, the Hue University, refreshes the project partners to have more active cooperation and involvement. In response, the partners shared their actions and anticipated tasks that need to be accomplished and delivered the soonest.

5th Consortium Meeting

A virtual meeting with Asian and European partners on February 26, 2021, for the Erasmus+ funded CDAE project was conducted to update the deliverables and the progress of each partner's work packages.

Hue University, presented the three agendas of the meeting; first of which was the presentation of the work packages (update for complete tasks and plan for the upcoming tasks) by the representatives of Polytechnic of Coimbra; Mendel University; Novel Group; Benguet State University (BSU); and Hue University. The second agendum focused on the election of the overall project quality leader.The final agendum focused on the discussion on some matters on results of the uncomplete and overdue tasks in the work packages presented; upcoming virtual study tour of Mendel University; and enforcing a new deadline for the deliverables as well as uploading in the Google Drive the contingency plan along with the project road map.



The first agendum shows that some of the deliverables in each work packages were behind schedule; thus, Hue University emphasized that the project cannot afford further delay.

A suggestion was given by an external evaluator that to address synergy, coordination, and preparation for the "new normal," a map of processes or activities must be designed to show interrelations and or identify "critical paths" and other encompassing matters. The evaluator gave emphasis that to improve the collection and processing of information: the use of Google documents and forms for collecting data is recommended since most of the CDAE project materials were uploaded in Google Drive; and for collaborative work, there should be contingencies for technical aspects of virtual meetings like detailed procedures to address emergency situations.

In line with this, Hue University asked the consortium to vote for an overall quality leader that will help in the project; as a result, Ms. Manuela Abelho from Polytechnic of Coimbra was voted by the majority.

The final agendum is the virtual study tour of Mendel University, the enforcement of the new deadline for the deliverables, and the contingency plan.

Mendel University highly encouraged everyone to participate in the study tour, a four-day event in Brno, Czech Republic. Based on the invitation sent to the consortium, each day has different topics and discussions. The first day will focus on a general discussion about the institutional structure and differences among institutions in partner countries. The second day will be the introduction of the faculty of agriculture, including its study programs and practical teaching of Agroecology at their university farm, university forest, and gardens. The third day centers on the teaching of Agroecology and the journey to their laboratories. The final day will be a discussion about curriculum specifics for individual country groups and universities.

In addition, the coordinator gave a new schedule for the virtual tours of the project partners in BSU, Hue University, and the University of Peradeniya.

Meanwhile, the project contingency plan is promised to be developed and uploaded in Google Drive since this has not been carried out yet.

6th Consortium Meeting

The sixth project meeting of the consortium was held on March 25, 2021, where project partners presented significant advancements and performed tasks. Aside from those, internal concerns were also discussed on the matters of financial, project logistics, and synergy.

7th Consortium Meeting

In the seventh consortium meeting of the project on July 12, 2021, Hue University, informed the partners regarding the official request to the funding agency for a project extension. After, Hue reminded the partners to prepare the necessary documents needed for the interim and technical reports. Then, leaders and representative of each work package discussed their list of tasks completed and other deliverables to be carried out.

8th Consortium Meeting

On September 30, 2021, the CDAE project partners from Vietnam, Sri Lanka, Portugal, Luxembourg, the Czech Republic, and the Philippines had their 8th project meeting online. During the meeting, the project coordinator presented an overview of the project activities, results, and the upcoming tasks in the seven work packages. One of the important matters raised in the assemblage is the project's eligibility to extend until November 23, 2022, which the funding agency, Erasmus+, granted.

9th Consortium Meeting

CDAE consortium holds its ninth project meeting on October 29, 2021, which aims to present the latest updates of each work package and seek the partner countries' progress in the delivery of the Master of Science in Agroecology (MSAE). In the meeting, representatives from Sri Lanka, Vietnam, and the Philippines shared their efforts in offering the MSAE program in their institutions and the curriculum processes in their universities. Keep on following us on social media and to our project website for more updates.

Agroecology: The farmer at the center of decision-making processes

Biodiversity loss, carbon emissions, health impacts and the unfair economy are just some of the negative manifestations of intensive agricultural practices. According to the European Commission and the Food and Agriculture Organization of the United Nations (FAO), Agroecology should play a key role in transforming the agricultural landscape from erosion and drought and in the transition to a more sustainable and fairer food production and distribution system. We rarely come across this concept in our country, although it is taught as a field of study at several domestic universities. So what does it mean, what are the starting points and how can it enrich current agricultural practices?

"Agroecology is the study of the interrelationships between organisms and their environment, including organisms and the environment of the agricultural landscape," Milada Šťastná, professor at the Institute of Applied and Landscape Ecology of Mendel University in Brno, defines the term at the beginning of our online meeting. "It is above all a holistic approach that seeks to strike agriculture on the balance between the three pillars of sustainable development - environmental, economic and social. The economic pillar has dominated here for many years, the ecological one is now beginning to balance it," explains the professor of Agroecology for over twenty years.

"Many colleagues initially called us 'eco-terrorists.' They thought that such a direction did not belong to the university and that we should only explain to the students what and how to cultivate. However, we did not want to take agricultural practices out of context, we wanted to show the effects on the landscape, how the processes in the soil work, and offer those interested the opportunity to manage in a balanced way. And the field has attracted considerable interest from applicants right after its opening in 1997, "explains Professor Šťastná, who now helps with the development of university studies in Agroecology at six universities in Vietnam, the Philippines and Sri Lanka within the international project Curriculum Development in Agroecology. The aim of the project is to integrate ecological principles into the study of agriculture and to unify the content and forms of teaching Agroecology according to European standards.

SUSTAINABLE AND FAIR FOOD SYSTEM

According to Tomáš Uhnák, a member of the Agroecology Europe Association and the Association of Local Food Initiatives (AMPI), the term agroecology in the Czech Republic became more widespread in the 1990s to take into account the ecosystem services of the agricultural landscape and as an extension of agronomy. However, unlike many other countries, it has not become the center of social or academic debate on sustainable and sustainable forms of agriculture. "Although a number of Czech farmers can also be described as agroecological, the concept itself has come to the margins and we are currently encountering it more in departmental concepts that draw on European research and recommendations," explains Uhnák.

It is different in a world where the term Agroecology resonates more and more strongly, even with its political ethos. In many countries, rhetoric about the need for a comprehensive social and political transformation of the current food system, represented by agro-ecological thinking, is heard from social movements.

One of the most widely accepted concepts offer document FAO and called Ten members of Agroecology (The 10 Elements of Agroecology). Although based on the definition in the introduction to the article, it places more emphasis on the social level: "Agroecology optimizes the relationship between plants, animals, humans and the environment, taking into account the social aspects necessary for a sustainable and fair food system."

Although there is no generally accepted definition of Agroecology, the FAO document is considered an acceptable compromise between the political concept of Agroecology and the pragmatic view of the international community. It was

created in 2018 on the basis of scientific literature, regional workshops that helped to incorporate the values of civil society into the document, and reviews by international experts. The result is a handbook for policy makers, practitioners and other key actors to guide in planning, managing and evaluating the agro-ecological transition.

THE FARMER AT THE CENTER OF DECISION-MAKING PROCESSES

Agroecology differs fundamentally from other approaches to sustainable development in that it is based on bottom-up processes. Thanks to this, it can solve local problems and adapt to different cultural environments and climatic conditions. "Agroecology is an attitude of life and a set of holistic practices based on a deep understanding of soil, natural processes and relationships between plants, humans and soil," explains Tomáš Uhnák, adding that in Latin America and the global South in general, agroecology takes the form of a movement or a political and emancipatory instrument, while in Europe this charge is not so strong and farmers are united by a desire for a truly sustainable, friendly and fair food system.

To get acquainted with other dimensions of agroecology, we are arranging an interview with Elena Shatberashvili from the Georgian movement Elkana and Raluca Dan from the Romanian movement Eco Ruralis. Both movements are part of La Via Campesina, along with 180 other organizations from 81 countries. La Via Campesina is an international peasant movement defending the interests of small and medium-sized farmers and producers, as well as indigenous communities across continents. This movement was the first to come up with the concept of food sovereignty and also participated in the FAO's concept of agroecology.

In 2015, La Via Campesina, together with other social movements in Mali, organized the International Agroecological Forum, which resulted in a declaration setting out eleven principles and nine strategies for integrating agroecology into the concept of food sovereignty. In the declaration, agroecology is seen as a key form of resistance to the economic system, for which profit is more important than the lives of farmers and people, and which causes a cumulative crisis, whether environmental, economic or health. At the same time, the declaration points out that agroecology must not be framed only as a set of organic farming tools, but should lead to a change in the current food production system and the creation of new, alternative local systems based on small producers.

"While sustainable agriculture focuses primarily on production methods, agroecology also has a political dimension. It places the farmer at the heart of decision-making processes, whose vision should be respected. Agroecology brings a social aspect and solidarity to organic farming, "explains Elene Satberashvili. "Agroecology is an overarching concept for various agricultural practices that respect local heritage, traditions, natural conditions and the economy."

The Elkan movement in Georgia has been working since 1994 to develop sustainable organic farming and increase the self-sufficiency of the rural population. "Our organization was originally set up to support farmers interested in organic farming, who had no other representation at the time. Since then, our mandate has expanded. Our vision is for politicians to perceive agroecology as a way to fight poverty," Satberashvili continues.

Raluca Dan perceives the mission of his organization in a similar way: "Currently, we are focusing more on the rights of peasants, ensuring access to information, the rights of women and young people. I perceive agroecology as a way of life in harmony with nature, not against it. It is a combination of the wisdom of the peasants with modern agricultural approaches. "

SYMBIOSIS OF THREE PILLARS

Agroecology is based on three pillars, it is a so-called triad connecting agricultural practice, social aspects, and research.

The practice itself is not so new. Although the term agroecology is rarely used in our country, many farmers identify with its principles and procedures. These include drought-resistant varieties, no-till agriculture, community-supported agriculture or public catering based on connecting local producers with canteens in schools or hospitals.

The situation is similar in Romania. "Romania's agricultural culture is still alive and well, with the ecological practices and heritage of past generations still being passed on in local communities. We are creating a concept that would bring together all small producers. We are not discovering anything new. We try to make governments appreciate what they already have," explains Raluca Dan.

An important source of all innovations should be the farmers themselves, who exchange and share their knowledge in the spirit of the term "campesino and campesino" (peasant farmer). It is intergenerational knowledge and experience that are key in agroecology. "Some knowledge cannot be obtained institutionally. Agroecology opens up space and tools for sharing experiences and helps peasants to anchor themselves in the given environment and understand not only the possibilities but also the needs of the place," says Tomáš Uhnák and emphasizes that the agroecological triad in the Czech Republic lacks a movement and research component. According to him, the Konipas incubation farm founded by the Rosenbaus is pioneering in this respect, where new organic, biodynamic and, in fact, agroecological farmers are educated and supported.

"When it comes to science, farmers often feel marginalized. Science today is too formal, it should be more solidary and participatory. At the moment, it is mainly scientists who decide on the topic and design of research, only asking supplementary questions to farmers. There is a need to invest more in agricultural research, we need daily observations that show that agroecology is the solution to the current problems in the landscape," Raluca Dan answers when asked in which area should be invested the most in agriculture.

"We need to improve the quality of life of farmers, make their work easier, find out their real needs, not the needs of the identified policy in their offices. We need small changes for everyone, not big changes for a few actors. What can help is the greater involvement of farmers in research and their cooperation with scientists," adds Elene Satberashvili.

CAN THEY BE AGROECOLOGICAL AS WELL AS LARGE CORPORATIONS?

One of the problematic aspects of the term agroecology is that it can mean virtually anything. In our country and in other countries, this term, unlike organic farming, is not yet legally defined, and can therefore be used by anyone. "Because we do not have a clear definition of what agroecology is and is not, even large industrial producers have used this term. That is why we ourselves talk more often about peasant agroecology," Raluca Dan shares his experience from Romania.

Tomáš Uhnák describes a similar approach of large industrial companies: "Although the concept of agroecology is brought into the political debate by social movements, such as the Landworkers Alliance in Great Britain or AMAP in France, political conflict over what this concept expresses and who is its bearer, and therefore by whom and how it can be fulfilled."

However, according to Uhnák, even the creation of a legislative definition may not be an ideal solution. "Once a radical or progressive concept based on non-hierarchical practice enters legislation, it is gradually eroded and its original content disappears, leaving a set of rules that can have a positive impact on the environment, but mostly without the integration of the social dimension. In the case of a legislative grasp of agroecology, there is a risk that it could lose its participatory principles. Nevertheless, a number of movements are trying to do so," he outlines a possible problem and cites organic farming as an example. "Organic farming practices are part of agroecology, but agroecology goes much further. In organic farming, for example, a farmer can use banal sowing practices or grow organic wheat on a 30-hectare field. Agroecology better understands the symbiotic, interspecies relationships, can capture relationships between plants, respond to broader social aspects of inequality. Rather than defining agroecology legislatively, we should try to integrate its principles into the already established organic farming and expand them with other elements," thinks Uhnák.

According to Milada Šťastná it is not necessary to limit agroecological practices to small farmers, the main thing is to get closer to the balance between the ecological, social and economic pillars. "Agroecology has a future, it can be applied to the already set intensive way of farming. We are not able to draw a line and start again, we need to proceed in such a way that it is acceptable to farmers. Although some will not want to switch to organic farming, they will approach its standards. The priority is to raise awareness, to show farmers what their impacts are, what will remain here for future generations," he explains.

Similarly, Tomáš Uhnák addresses the question: "We need the diversity of evenly represented systems of agricultural practice. Certified organic farming already has a strong place and it is necessary to further strengthen and spread it, especially on arable land. At the same time, however, there is an increase, especially in small farmers, who do not have certification of organic farming, but still manage sparingly, often above the mandatory and legally defined standards of organic farming. Such farmers can be described as agroecological and some are actively identified. So far, the environment of the Czech Republic lacks the framework of a movement that would unite these agroecological farmers and that would also define the political agenda, which is an integral part of foreign agroecological movements. The aim is for the principles of agroecology to be gradually integrated into conventional agriculture.

Elena Shetberashvili, on the other hand, doubts the possibility of involving large corporations, because although they accept some of the elements of agroecology, their strategy is based on large monocultural fields, which she says is incompatible with

sustainability. "Although they are trying to be greener, they can never be successful. Changing the system will be a long and demanding process, it will depend on our strength, consistency, openness, innovation. We will have to understand the history of rural life and, on that basis, decide what news and innovation he will be able to embrace. If we want prosperous rural areas, we need many smaller producers with different approaches."

FINDING A SUSTAINABLE WAY

The key debate on agroecology is now taking place both in a number of countries in the global South and on European soil. According to Tomáš Uhnák, the European Commission opted for this concept also because it resonates in many countries for a long time and social movements are making great efforts to recognize and integrate agroecology into public and political discourse. The European Commission uses the concept of agroecology in its Farmer-to-Consumer Strategy for Fair, Healthy and Organic Food Systems , which is an integral part of the Green Agreement for Europe.

The strategy is a key document that outlines the direction of European agriculture in the coming decades and stimulates debate on the transformation of food systems in individual member states. It reads, for example, that "the new eco-regimes will offer large amounts of funding to support sustainable practices such as precision agriculture, agroecology (including organic farming), low-carbon agriculture and agroforestry." The European Commission also intends to promote partnerships in "agro-ecological living laboratories" and international cooperation on, inter alia, agro-ecology.

According to Shatberashvili, it is crucial that member states invest mainly in improving people's access to land. "The most important thing is to create opportunities and dynamism in rural areas. Then young people will come here and bring with them the necessary positive change."

Raluca Dan also emphasizes the role of young farmers. "With access to land and no financial barriers, young people will be interested in agroecology. Half of European farmers come from Romania. Everyone here knows someone who works in agriculture. The problem is that they fall into illegality and are increasingly forced to operate within the gray economy. Local shops become supermarkets, and small farmers trade within communities, sell food to neighbors, and seeds from traditional crops cannot legally enter the market. Public money then goes mainly to support industrial agriculture," Raluca Dan explains the current challenges.

He also draws attention to some problematic aspects of the European Commission's proposal: "Precision agriculture offers a new, specific solution, but only heals superficial injuries, it does not address the problem of agriculture in depth. It expresses our desire to better control the food system. Technology is a good tool, but it must be available to everyone, not just large companies."

HOW TO DEAL WITH AGROECOLOGY?

"The wording of the definition of agroecology will be essential in policy concepts and in the public debate for further developments in this agricultural and social framework. The definition of support programs and policies will depend on its definition. In the Czech environment, the exact definition is lacking, so there is room to open a discussion on how to fulfill it," describes the current challenges Tomáš Uhnák, noting that the term agroecology is increasingly used in our country, but there is currently no working group at the Ministry of Agriculture. which would deal with agroecology.

Accordingly, it will be more important than grafting the concept of agroecology into the Czech environment to recognize already existing viable currents and work with them so that agroecology does not remain just an empty concept. However, the problem is the absence of a broader social agroecological movement in the Czech Republic.

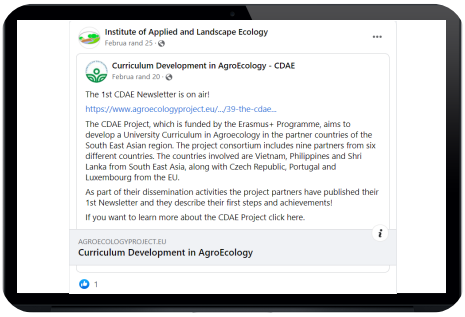
Milada Šťastná perceives this in a similar way: "There are a number of associations and movements abroad that use the interconnection of the agroecological concept with social agriculture, such as the farmers' association. Society then more easily adopts the principles of agroecology and, in addition, incorporates into them what is important to it. Farmers, for example, set up nurseries that have an educational and community function."

According to the professor, it is necessary to make the concepts of short supply chains and community-supported agriculture also known to the public. Awareness will be key. "We academics have a relatively limited space in this sense, we present the results of research mainly in scientific journals and at scientific conferences. However, the topic must also reach the general public in the form of enlightenment in popular media or events that the public naturally attends, such as markets. It is also important to set the rules correctly for the upcoming programming period. The evaluation criteria for the project must be clearly defined, what is its transcendence into practice, what priorities it fulfills. Public awareness will then be key so that people know why we want to meet these specific priorities." • MU

Partners Digital Footprints

► MENDEL UNIVERSITY

In September 2021, the first students will join the newly accredited follow-up study program in Agroecology. A team of academics from the Institute of Landscape and Applied Ecology AF MENDELU, who actively participated in the preparation of accreditation, now uses the gained experience and intensively assists colleagues from Vietnam, the Philippines, and Sri Lanka with Agroecology master's accreditation in their home countries within the Erasmus + KA 2 CDAE Project.

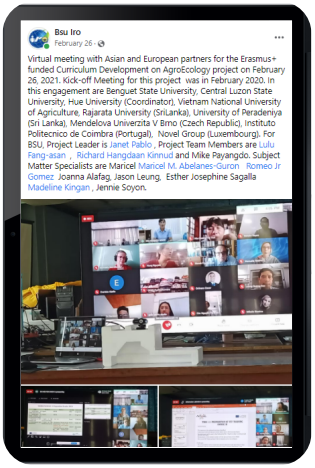


► MENDEL UNIVERSITY

The CDAE project, which is funded by the Erasmus+ Programme, aims to develop a University Curriculum in Agroecology in the partner countries of the South East Asian region. The project consortium includes nine partners from six different countries. The countries involved are Vietnam, the Philippines, and Sri Lanka from South East Asia, along with the Czech Republic, Portugal, and Luxembourg from the EU. As part of their dissemination activities, the project partners have published their first Newsletter, and they describe their first steps and achievements!

▶ BENGUET STATE UNIVERSITY

Virtual meeting with Asian and European partners for the CDAE project on February 26, 2021. The kick-off meeting for this project was in February 2020. In this engagement are Benguet State University, Central Luzon State University, Hue University (Coordinator), Vietnam National University of Agriculture, Rajarata University (SriLanka), University of Peradeniya (Sri Lanka), Mendel University (Czech Republic), Polytechnic of Coimbra (Portugal), Novel Group (Luxembourg). For BSU, Project Leader is Janet Pablo, and Project Team Members are Maria Luz Fang-asan, Richard Hangdaan Kinnud, and Mike Payangdo. Subject Matter Specialists are Maricel M. Abelanes-Guron, Romeo Gomez Jr., Joanna Alafag, Jason Leung, Esther Josephine Sagalla, Madeline Kingan, and Gennie Soyon.



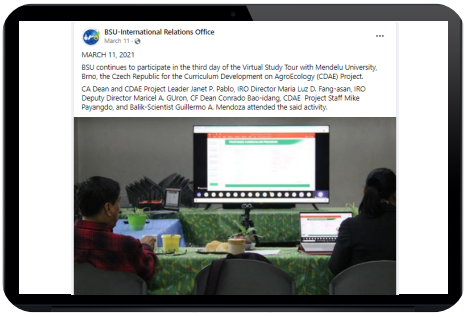
▶ BENGUET STATE UNIVERSITY

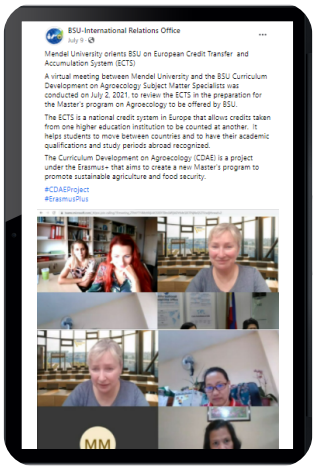
CDAE Taskforce from different colleges attended the curriculum review and workshop led by Dr. Janet Pablo, dean of the College of Agriculture, held at CA Building. The workshop aims for the optimization and development of the curriculum.
During the workshop, the participants shared their comments and inputs on the current and suggested MSc Agroecology program and courses to be added to the proposed syllabus and curriculum.

▶ BENGUET STATE UNIVERSITY

On March 9-12, 2021, a virtual study tour at Mendel University in Brno, Czech Republic was conducted for the CDAE project.

BSU continues to participate until the last day- March 12, 2021. Present in the online tour are College of Agriculture Dean and CDAE Project Board Representative Janet P. Pablo, International Relations Office (IRO) Director Maria Luz D. Fang-asan, IRO Deputy Director Maricel A. Guron, College of Forestry Dean Conrado Bao-idang, CDAE Project Staff Mike Payangdo, and Balik-Scientist Guillermo A. Mendoza and the BSU Subject Matter Specialists.

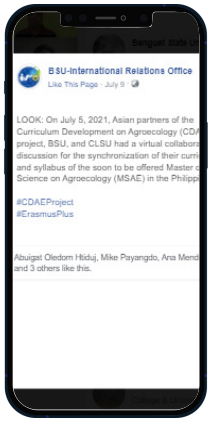




▶ BENGUET STATE UNIVERSITY

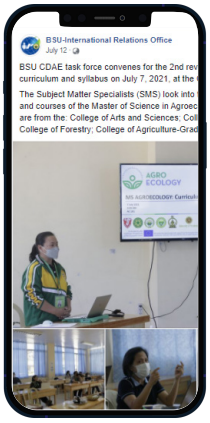
Mendel University orients BSU on European Credit Transfer and Accumulation System (ECTS)
A virtual meeting between Mendel University and the BSU CDAE Subject Matter Specialists was conducted on July 2, 2021, to review the ECTS in preparation for the Master's program on Agroecology to be offered by BSU.

The ECTS is a national credit system in Europe that allows credits taken from one higher education institution to be counted at another. It helps students to move between countries and to have their academic qualifications and study periods abroad recognized.
The CDAE project under the Erasmus+ aims to create a new Master's program to promote sustainable agriculture and food security.



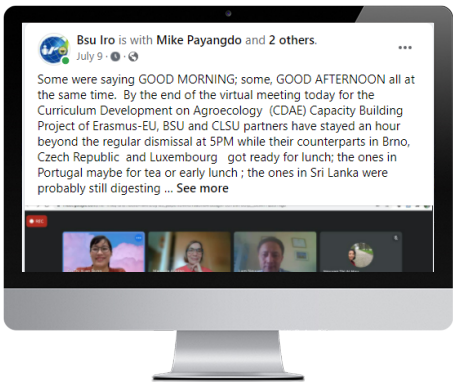
▶ BENGUET STATE UNIVERSITY

On July 5, 2021, Asian partners of the CDAE project, BSU, and CLSU had a virtual collaborative discussion to synchronize their curriculum and syllabus of the soon to be offered Master of Science on Agroecology (MSAE) in the Philippines.



▶ BENGUET STATE UNIVERSITY

BSU CDAE task force convenes for the 2nd review of the MSAE curriculum and syllabus on July 7, 2021, at the College of Agriculture. The Subject Matter Specialists look into the proposed subjects and courses of the Master of Science in Agroecology. The specialists are from the: College of Arts and Sciences; College of Agriculture; College of Forestry; and the College of Agriculture-Graduate School.



▶ BENGUET STATE UNIVERSITY

Some were saying, Good morning! Good afternoon! All at the same time. By the end of the virtual meeting for the CDAE Capacity Building Project of Erasmus+, BSU, and CLSU partners had stayed an hour beyond the regular dismissal at 5 PM while their counterparts in Brno, Czech Republic, and Luxembourg got ready for lunch; the ones in Portugal maybe for tea or early lunch; the ones in Sri Lanka were probably still digesting their lunch; and those in Vietnam, maybe having afternoon tea.

It is a far cry from the kick-off meeting (KOM) in February 2020 at the City of Hue in Vietnam, where all partners had tea breaks, lunches and sometimes dinner together in one place, everyone savoring the Vietnamese soup called pho (pronounced "fa") along with a variety of authentic "VietFood."

Four months after KOM, it should have been a study tour at the Czech Republic, then to the Philippines, Sri Lanka, and then back to Vietnam. Mobility limitations caused by the pandemic have substantially changed CDAE activities. Meetings are now virtual. Study tours are now virtual study tours. Attendance check is now the photo ops at the end of each meeting. No more shared tea breaks or meals as the partners had to make do with whatever was available within their reach as they focused their attention on their computer monitors.

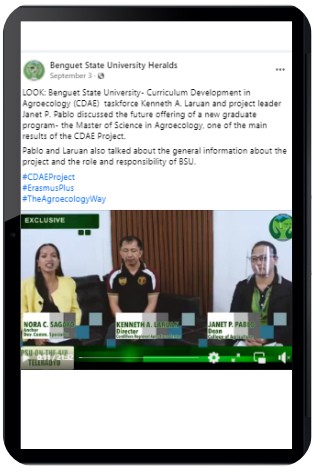
Communication between and among the partners is already being challenged by unstable internet signals and different varieties of English. The project must go on, and here we are, all together working towards that synergy that will propel our efforts to produce the deliverables.

Indeed these activities and all the adjustments that all partners had to do in order to communicate well with each other are building capacities, among them, the capacity to work in an international setting. Here's to Capacity Building projects and what they aim to achieve!

▶ BENGUET STATE UNIVERSITY

BSU CDAE project leader Janet P. Pablo and taskforce Kenneth A. Laruan discussed the future offering of a new graduate program- the Master of Science in Agroecology, one of the main results of the CDAE Project on BSU Schoo-l-on-the-Air and DZWT 540 Radyo Totoo . The former is univeristy based while the latter is a local radio station broadcasting from Benguet to La Union in Luzon. Pablo and Laruan also talked about the general information about the project and the role and responsibility of BSU and the importance of Agroecology in the Benguet and Cordillera.

Pablo narrated how BSU became part of the international project and how it started that led to the creation of the BSU task force specific for CDAE. The task force involves the financial department and Subject Matter Specialists (SMS) from colleges which are: College of Arts Sciences; College of Agriculture; College of Forestry; College of Engineering; and Graduate School. This was aired on May and September of 2021.



▶ CENTRAL LUZON STATE UNIVERSITY

CLSU, a consortium member of the CDAE project from the Philippines had a live radio interview on April 18, 2021 aired on the DWFA 107.3 FM (Radyo CLSU) headed by Renato G. Reyes, project manager. The interview aims to inform its university and the community regarding the CDAE Project, its aims, objectives, and the future offering of the MSAE program in their university.

Reyes said that the pandemic challenged them to carry out things physically but this paved way for them to evolve and keep pace in the information age. It also aided them to expand their linkages towards internationalization. He cited the recently concluded virtual study tour by Mendel University which was supposed to be a physical experience but the European partner chose to do it virtually.

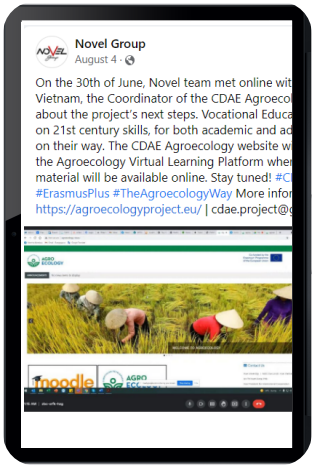
Further, the MSAE is an innovative and specific multi-disciplinary program. The concept is that the man-made ecosystem needs to be protected and nurtured. Agroecology is the first to be offered in the Philippines. It is a hybrid program that would benefit and engage the academic community, students and staff said Reyes.

▶ CENTRAL LUZON STATE UNIVERSITY

We would also like to invite everyone to be part of our endeavor by staying connected with us by subscribing to our project e-newsletter. This international project is in partnership with Central Luzon State University, Benguet State University, Hue University Vietnam National University of Agriculture, Rajarata University of Sri Lanka, University of Peradeniya, Polytechnic of Coimbra, Mendel University, and Novel Group Sarl.

▶ CENTRAL LUZON STATE UNIVERSITY

CLSU participated in the 8th virtual meeting of the CDAE project last September 30, 2021. This project is an international collaboration from universities in Vietnam, Sri Lanka, Portugal, Luxembourg, the Czech Republic, and the Philippines.

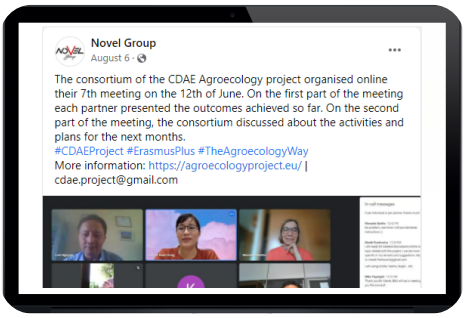


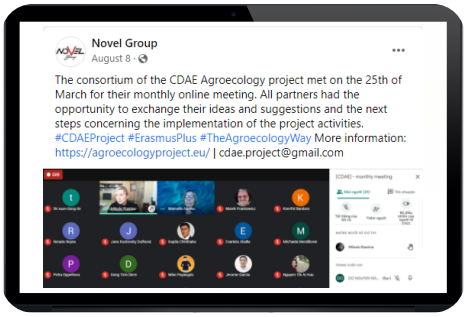
▶ NOVEL GROUP SARL

On the 30th of June, the Novel team met online with Hue University of Vietnam, the coordinator of the CDAE project to discuss about the project's next steps. Vocational Education Training courses on 21st century skills, for both academic and administrative staff, are on their way. The Agroecology website will give direct access to the Agroecology Virtual Learning Platform where courses' training material will be available online.

NOVEL GROUP SARL

The consortium of the CDAE project organized online their 7th meeting on the 12th of June. On the first part of the meeting, each partner presented the outcomes achieved so far. On the second part of the meeting, the consortium discussed about the activities and plans for the next months.



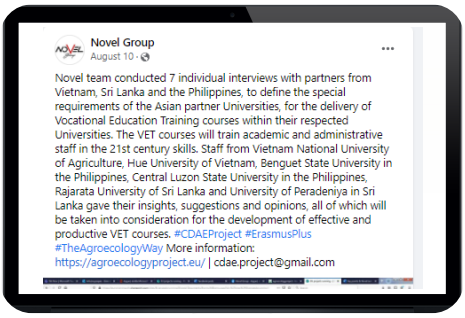


NOVEL GROUP SARL

The consortium of the CDAE project met on the 25th of March for their monthly online meeting. All partners had the opportunity to exchange their ideas and suggestions and the next steps concerning the implementation of the project activities.

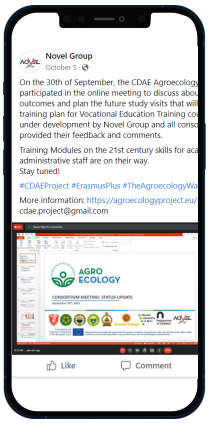
NOVEL GROUP SARL

Novel team conducted seven individual interviews with partners from Vietnam, Sri Lanka, and the Philippines, to define the special requirements of the Asian partner Universities, for the delivery of Vocational Education Training courses within their respected Universities. The VET courses will train academic and administrative staff in the 21st century skills. Staff from Vietnam National University of Agriculture, Hue University of Vietnam, Benguet State University and Central Luzon State University in the Philippines, Rajarata University of Sri Lanka and University of Peradeniya in Sri Lanka gave their insights, suggestions and opinions, all of which will be taken into consideration for the development of effective and productive VET courses.



NOVEL GROUP SARL

The newsletter of the CDAE project funded by the Erasmus+ delivers information about the project's activities to its partners, and internal and external clients.



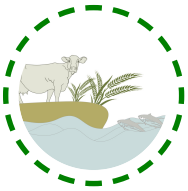
NOVEL GROUP SARL

On the 30th of September, the CDAE project team participated in the online meeting to discuss about the project outcomes and plan the future study visits that will take place soon. A training plan for Vocational Education Training courses is currently under development by Novel Group and all consortium members have provided their feedback and comments.

Did you know?

Agroecology is the global response and approach for sustainable agricultural and food systems. It is based on bottom-up and territorial processes, helping to deliver contextualized solutions to local problems. Additionally, it seeks to optimize the interactions between plants, animals, humans, and the environment while considering the social aspects that need to be addressed for a sustainable and fair food system.
There are 10 elements of agroecology that are interlinked and interdependent which are useful in identifying important properties of agroecological systems and approaches and key considerations in developing an enabling environment for agroecology.

In light of this response and approach, the Asian HEIs aims to develop a Master of Science in Agroecology, particularly in the Philippines, Vietnam, and Sri Lanka through a knowledge exchange from European HEIs.



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

2 **CO-CREATION AND SHARING OF KNOWLEDGE:** agricultural innovations respond better to local challenges when they are co-created through participatory processes.

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

4 **EFFICIENCY:** innovative agroecological practices produce more using less external resources.

5 **RECYCLING:** more recycling means agricultural production with lower economic and environmental costs.

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

7 **HUMAN AND SOCIAL VALUES:** protecting and improving rural livelihoods, equity, and social well-being is essential for sustainable food and agricultural systems.

8 **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.

9 **RESPONSIBLE GOVERNANCE:** sustainable food and agriculture requires responsible and effective governance mechanisms at different scales – from local to national to global.

10 **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.

Source: FAO-UN

CURRICULUM DEVELOPMENT

AGRO ECOLOGY

PROJECT PARTNERS

Partners in the Philippines

Central Luzon State University
Science City of Muñoz, Nueva Ecija
https://clsu.edu.ph/

Benguet State University
La Trinidad, Benguet
http://www.bsu.edu.ph/

Partner in Portugal

Polytechnic of Coimbra
Coimbra, Portugal
https://www.ipc.pt/ipc/

Partners in Vietnam

Hue University
Lê Loi, Hue, Vietnam
https://hueuni.edu.vn/portal/en/

Vietnam National University of Agriculture
Hanoi, Vietnam
https://eng.vnua.edu.vn/

Partners in Sri Lanka

Rajarata University of Sri Lanka
Mihintale, Sri Lanka
http://www.rjt.ac.lk/

University of Peradeniya
Peradeniya, Sri Lanka
https://www.pdn.ac.lk/

Partner in Luxembourg

Novel Group Sarl
Rue de Bastone, Luxembourg
http://www.novelgroup.lu/

Partner in the Czech Republic

Mendel University in Brno
Brno, Czech Republic
https://mendelu.cz/en/

Co-funded by the Erasmus+ Programme of the European Union