



FURTHER TRAINING PROGRAMME - MODERN ECOLOGICAL AGRICULTURE



HANSE-PARLAMENT

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Istituto Tecnico Agrario
EMILIO SERENI ROMA
AGRARIA, AGROALIMENTARE E AGROINDUSTRIA

HAMK
HÄMEEN AMMATTIKORKEAKOULU
HÄME UNIVERSITY OF APPLIED SCIENCES

Landwirtschaftskammer
Hamburg

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Curriculum FURTHER TRAINING PROGRAMME - MODERN ECOLOGICAL AGRICULTURE

1. Background information

This curriculum follows the Osnabrueck declaration and is based on European Skills Agenda, which strengthens sustainable competitiveness according to the European Green Deal, ensure social fairness and lifelong learning in building resilience to react to crises. The United Nations Sustainability Goals are also included in the curriculum.

The agricultural sector needs a green and sustainable growth, climate neutral approaches and skills to constantly upskill and reskill throughout a person's working life. Work-based learning embedded in a real-life work environment do also improves employability.

2. Pedagogical approach

Farm enterprises usually lack time and are permanently overburdened, thus their owners cannot release employees from work for a longer scope of time to participate in further training.

The further training needs also to be adjusted according to employee's personal skills, interests and present qualifications. The KAIN concept, *Knowledge Acquisition according to Individual Needs*, is a structural concept that is applied in this further training. The training consists of

- one learning phases with classroom or online teaching.
- one learning phase on own workplace with one visit of the supervisor.
- one learning phase with classroom or online presentation and evaluation.

The successfully tested and implemented methodological KAIN training method

- creates a common knowledge base for participants with different backgrounds in training and consulting processes,
- takes particular account of the individual experience of participants,
- shows possibilities to change/improve the situation of the participants on site for the pursuit of project goals and change measures,
- sharpens the knowledge of possible needs for change,
- enables those involved participants to design the right measures and implement them correctly, and
- combines qualifications with the implementation of innovative development projects in companies.

KAIN describes the tasks of trainers/consultants to carry out qualifications within the framework of continuing vocational training, to accompany the implementation of company-specific development projects and to enable company employees to carry out change processes under the supervision of external consultants.

The qualification and consulting process is composed of three phases:

1. classroom teaching
2. self-study with external support
3. report and reflection.

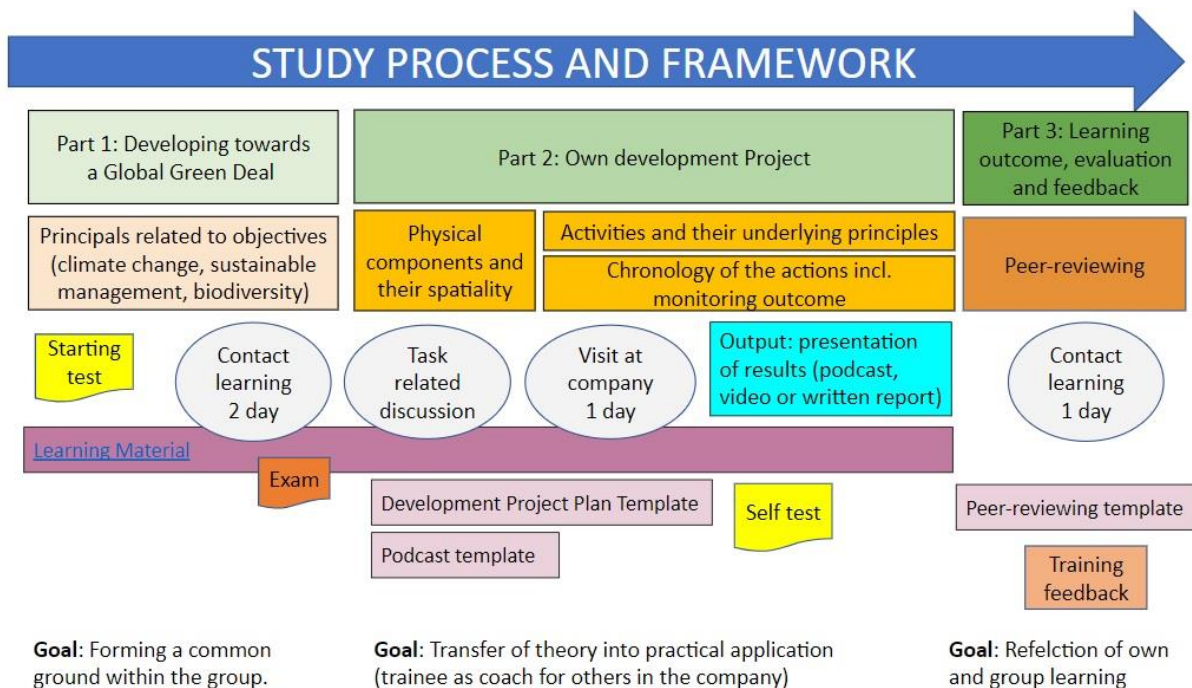
The overall aim of the training is to ensure that all participants have sufficient information and knowledge on how the basic training idea can be implemented and pursued under the individual, quite different, framework conditions on site. This curriculum method will help students to gain confidence in carrying out change processes.

3. Goals

The goal in Modern Ecological Agriculture vocational training is to learn to know the specific objectives of the United Nations sustainability goals, the European Green Deal and climate change. Participants will acquire skills on climate change resilience in agricultural production, developing sustainable management of natural resources, biodiversity and sustainable energy alternatives. The student will get to know different methods on sustainable management of natural resources such as sustainable soil management, holistic management, climate resilient management, developing farm diversity by preserving habitats and landscapes, ecosystem services and renewable energy.

4. Implementation information

The further training is designed to be 4 ECTS (European Credit Transfer and Accumulation System). The curriculum can be scaled according to the needs for the trainees. The theory part of the study can be carried out in the classroom or online (2 ECTS). There are no restrictions on the amount of students that can join the training.



The study consists of three parts.

1. The first part can be carried out face-to-face, but also online if needed. The goal of the first part is to form a common ground within the group.
2. In the second part, the student will transfer the theory into practical application. Their work is coached online and on spot at the workplace.

3. The third part is a reflection of our own and group learning. During this part students will tell about their work life related projects. Students will carry out peer-reviewing on each other's development projects.

The learning process is supported by an online learning material and templates.

5. Teaching

The teaching method is blended learning and problem based. The development project is based on needs and interests by the employer and trainee at the working place.

The course can either be carried out by using face-to-face learning sessions or adjusted to run totally online. In many countries, the travelling distances are long and enterprises small. For these, a fully online option may be more suitable. The development task is carried out at the own working place. At least one supervisor visit at the enterprise is arranged.

Designed timeframe

1. Starting up (face-to-face) 2 Days
2. Establishing a development project at own working place
3. Presentation of development project ideas and discussions (webinar)
4. Supervisor visiting the work place (face-to-face)
5. Carrying out the development project
6. Presentation of own development project and evaluation (face-to-face)

Alternative implementation methods

The module can be carried fully online:

1. Starting up week (independent online work)
2. Establishing a development project at own working place
3. Presentation of own development idea and discussion (webinar)
4. Supervisor visiting the work place (face-to-face)
5. Carrying out the development project
6. Presentation of own development project and evaluation (online)

Work placement and labour market connections

The learning is carried out at own working place according to the own entrepreneurship needs.

Exam dates and retake possibilities

Automatical Moodle tests can be carried out any time and as many times as the student want.

Students workload

120 hours or 4 ECTS

6. Learning materials

Students will get basic information about sustainability and climate change. After that they can get more information according to own interest on different subjects. The learning material covers the basics of the following topics:

Access to the learning materials

The learning material consists of videos and articles produced by different experts in the fields. These learning materials are compiled in an additional website, which the student and the teacher can access with the following link:
<https://sites.google.com/view/modern-ecological-agriculture/home>

United Nations Sustainability Goals

The Sustainable Development Goals (SDGs) aim to transform the world. They call for action to end poverty and inequality, protect the planet, and ensure that all people enjoy health, justice and prosperity.

Green Deal

The European Green Deal aims to boost the efficient use of resources by moving to a clean, circular economy and stop climate change, revert biodiversity loss and cut pollution. It outlines investments needed and financing tools available, and explains how to ensure a just and inclusive transition.

Climate change

Climate change refers to long-term shifts in temperatures and weather patterns. Such shifts can be natural or man-made.

Organic Farming

Organic farming is an agricultural system that uses fertilizers of organic origin such as compost manure, green manure, and bone meal and places emphasis on techniques such as crop rotation and companion planting. Biological pest control, mixed cropping, and the fostering of insect predators are encouraged.

Carbon Farming

Carbon farming refers to agricultural methods that enhance the uptake and storage of carbon dioxide in soil. Carbon dioxide is absorbed from the air by plants via photosynthesis. The roots and other parts then decompose and are converted into soil carbon by microbes. Carbon farming is carried out through reduced tillage, anaerobic composting, using organic fertilizers, mulching, intercropping and multi-cropping.

Regenerative Soil

Soil regeneration is the process of improving the quality of soil by adding organic matter. Farming in this way, you will return nutrients and organic matter to the soil in order to restore the soil's fertility and productivity. This helps to improve drainage, water retention and nutrition for plants. This can be done by using cover crops, green manures and composts.

Regenerative Farming

In regenerative agriculture you focus on topsoil regeneration, increasing biodiversity, improving the water cycle, enhancing ecosystem services, supporting biosequestration, increasing resilience to climate change and strengthening the health and vitality of farm soil.

No-till Farming

In no-till farming, crops or pastures are grown without disturbing the soil through tillage. No-till farming decreases the amount of soil erosion, include an increase in the amount of water that infiltrates into the soil, soil retention of organic matter and nutrient cycling. All these methods may increase the amount and variety of life in and on the soil.

Cover Crops

Cover crops absorb carbon dioxide through photosynthesis and store the carbon in the soil, helping to mitigate climate change. Cover crops do also shadow the roots of the main crop and protect in periods of droughts and high temperatures.

Mixed Crops

Mixed crop systems, in which producers have combined different crops, gives a higher resilient in a changing climate. Crops uses nutrients in a different way and can complete each other at the field, for example one can grow peas or broad beans together with oats.

Pasturing

Animals at large industrial farm units usually do not graze pastures. Pasturing often gives the most economical feed for cattle, sheep and horses during the growing season. Animal health is improved when animals can practice their natural behaviours.

Holistic

Holistic planne growing is the practice of mapping grazing movements of animals and considering the time that a plant is exposed to a grazing animal. The graing has to be planned so that the plant has time to recover. In this process we need to count with the land needs, plants, animals, and people involved in the management.

Permaculture

Permaculture utilize land, resources, people and the environment in a manner that doesn't produce any waste. It is important to use closed loop systems as seen in nature in order to not waste anything. In permaculture, the farming is designed to adapt into a flourishing natural ecosystem. Whole-systems thinking is central in permaculture.

Agro-Forestry

The amount of forest habitats in our rural landscapes has drastically been decreased during the last decades. Less habitats for wildlife combined with monoculture in farming gives a higher risk of breakouts of for example pests. In this part, the student learn about possibilities for brining back forested elements into agriculture and the benefits of it.

Increasing Diversity

There are many ways to increase diversity at a farm. Biomimicry can be of good help in both weed and pesticide management. Management by farming high nature values areas keeps a high diversity in less intensive farming areas such as mountains, forested biotopes and natural meadows. In an intensively farming area with large field plots, the establishment of a beetle bank provides necessary habitat for many predator insects that help to keep the pest pressure low. Cultivating heritage plants and old sorts increase both diversity, makes the farming system more resilient in a changing climate. Heritage grains have a longer straw and can compete better with weeds. They do also grow with fewer fertilizers. Keeping native breeds are important both for biodiversity but also in able to breed new resistant production breeds.

Promoting pollinators

Decreasing amount of pollinators is an urgent global problem. A huge amount of our food plants are dependent on wild pollinators. Intensively cultivated areas have decreased habitats for wild pollinators. European Union have made a recommendation for its member states to work out pollination strategies.

Renewable Energy: wind, bioenergy, return of biomass, biogas, solar energy.

Changing our main energy sources to clean and renewable energy is the best way to stop using fossil fuels. Renewable energy is energy derived from natural sources that constantly are renewed. Fossil fuels have to be replaced by renewable energy as they, when burned to produce energy, cause harmful greenhouse gas emissions, such as carbon dioxide. Renewable energy include technologies like solar and wind power.

Access to the learning materials

The learning material consists of videos and articles produced by different experts in the fields. These learning materials are compiled in an additional website, which the student and the teacher can access with the following link:
<https://sites.google.com/view/modern-ecological-agriculture/home>

7. Development task

Each student choose one development task. This is done by carrying out a discussion at the own working place. The development task can be chosen to target one of three main objectives:

1. Contribute to climate change mitigation and adaptation, as well as sustainable energy (specific objective 4)

- Contributing to climate change mitigation by reducing greenhouse gas emissions from agriculture
- Enhancing carbon sequestration by increasing the soil organic carbon
- Increasing sustainable energy in agriculture by production of renewable energy from agriculture and forestry
- Own suggestion

2. Foster sustainable development and efficient management of natural resources such as water, soil and air (specific objective 5)

- Reducing soil erosion
- Improving air quality by reducing ammonia emissions from agriculture
- Improving water quality by improving gross nutrient balance on agricultural land
- Reducing nutrient leakage
- Reducing pressure on water resource
- Own suggestion

3. Contribution to the protection of biodiversity, enhance ecosystem services and preserve habitats and landscapes (specific objective 6)

- Increasing farmland bird population
- Enhancing biodiversity protection
- Enhancing provision of ecosystem by increasing the share of utilised agricultural area covered with landscape features
- Own suggestion

Under each specific objective, there is also some sub-objectives that the development task can target. It is also possible to combine several sub-objectives or make an own one fit for the own working place.

The development project could be reported either as a written report, a podcast or a video. There was developed a project work template in Word (Attachment 1); a podcast manuscript template (Attachment 2) and a video manuscript template (Attachment 3).

8. Content scheduling

The course is divided into three different parts:

Part 1: Developing towards a Global Green Deal

- a. UN Sustainability goals, climate change and the EU Green Deal
- b. The basics of development process (monitoring, feedback, adjustment):
 - a. Farm enterprise - how can farm enterprises be enablers for action
 - b. Assess-Based Development - which are your farm enterprise resources
 - c. Assess your opportunities (strengths, weaknesses, threats, opportunities)
 - d. From idea to action (adapted from Canvas model for business planning)
 - e. What does it take to carry out a small farm trial - self-efficacy (personal skills and requirements)
 - f. Farm development task
- c. Examples of development processes and ideas
- d. Group work on chosen theme in classroom
- e. Brainstorming, processing the development task

Part 2: Own development project

- a. Presentation of own development idea and discussions at a webinar (development project form given, matching students in pairs)
- b. Supervisor visiting the entrepreneur and student
- c. Carrying out of development task
- d. Recording a podcast interview or video or written document with the entrepreneurship owner and student (question form given: The owner and student answer why did we choose this development task, how the development was carried out, how it went from his/her point of view and how the development work will continue to develop, own learning) A template is given for planning and reporting the development task (video, podcast or report). The report should contain a part about own learning.

Part 3: Learning outcome, evaluation and feedback

- a. Returning the podcast/video/report
- b. Listening to podcast/video or reading the report, doing peer-reviewing for your pair and preparing questions
- c. Discussion about the learning outcome, peer-reviewing questions and answers. (face-to-face or webinar)
- d. Evaluation
- e. Feedback

Storymap

Alternative method of evaluation is that each student make one ppt page describing the own enterprise trial and results. Besides this one PowerPoint page, the student do also add a short text description of the own project. These are gathered by the supervisor to a storybook. [Example](#)

9. Exam and self-test

This curriculum has three different types of student evaluation tools:

- Evaluate **own skills** by Doing a Starting Test
- **Exam** (can be done several times). It covers the topics United Nations Sustainability Goals, the European Union Green Deal and Climate Change.
- **Self-testing** of professional skills (can be done several times) cover all the subjects covered by the curriculum. There are 14 subjects to choose among: Organic Farming, Carbon Farming, Regenerative Soil, Regenerative Farming, No-till Farming, Cover Crops, Mixed Crops, Pasturing, Holistic Grazing, Permaculture, AgroForestry, Increasing Diversity, Promoting Pollinators and Renewable Energy.

The student has to carry out the exam and one self-testing on professional skills.

10. Further information for students

The module contains contact or online learning and supervisor visiting the farm enterprise. The target for grading is your performance in the exam (best results count), one self-test on chosen subject and your on-farm development task. Training organizations' own feedback system is used at the end of the module.

11. Assessment

The development task is described in the project work template. The development task can also be reported by doing a podcast or a video. There are attached templates for those respective realization possibilities also. The development task is evaluated by peer-reviewing, own learning evaluation and evaluation by the supervisor. If the task is carried out in a team, then there will also be team evaluation. The following templates are attached to the curriculum:

1. Project work template (Attachment 1)
2. Podcast manuscript template (Attachment 2)
3. Video manuscript template (Attachment 3)
4. Peer-reviewing template (Attachment 4)
5. Evaluation of own learning template (Attachment 5)
6. Team evaluation template (Attachment 6).

Assessment	criteria
Self-tests and a development project at an enterprise has been carried out.	
Assessment scale Passed – not passed or grade 1-5.	
Fail	(0)
Not done the tests and/or the development task	
Satisfactory	(1-2)
The student recognizes basics of using different greening methods in agriculture.	
Good	(3-4)
The student is able to analyse changes when turning from conventional methods into the usage of more green methods.	

Excellent

(5)

The student is able to draw conclusions about the effects of using more green methods in the production at national and international level.

12. Testing the curriculum

The module was built ready in Moodle environment, where students carry out all their studies. The learning material was compiled reday. Before summer 2023 the exams were not ready yet. Three students voluntared to try out the module and were all willing to do some development work at their farms. All students were working at either own farm or on own family farms. All farms had crop cultivation as main production direction.

During the period 1.4.-31.12.2023 the module Modern Ecological Farming was tested with three students, but only two students carried out the whole testing. Each student carried out different development tests in own farm conditions during the growing period. After that they listened to the learning material and did the tests. In the spring we agreed that the supervisors will visit their farm at the end of the summer to talk about the results of the devlopment activities carried out at the farms.

The students started the study by listening to the video presenting the module. After that they carried out the test "Evaluate own skills" test. Some had listened to part of the videos in the learning materials before they decided what development task to carry out at own farm. The 4th to 6th of September senior lecturers Outi Vahtila and Annika Michelson visited the farms to talk about the restults of the trials with the students. Only two farms were visited as the third had already harvested her trial and there was nothing to see of it anymore.

2.1 Development task on-farm – Examples from Finlanf

Students discussed and decided on the development task with their family members. In one case three generations were living at the farm. One of the three students had already taken over the family farm and made individual decisions, even though he did discuss the matter with his old father before making a decision. Two of the students planned to take over the farm as they had finished their studies. It depended on the age of their parents. All students farms were located in Eastern Finland. Two students were male and one female.

Figure 1. Farms where development project was carried out are marked with blue. The HAMK Mustiala campus is marked with red.

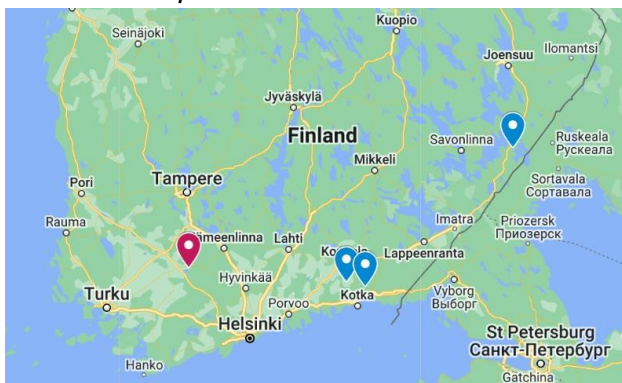
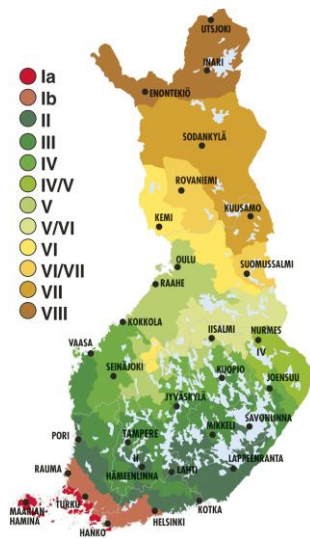


Figure 2. Climate zones in Finland (Source: Puutarha.net: Kasivivvyöhykkeet)

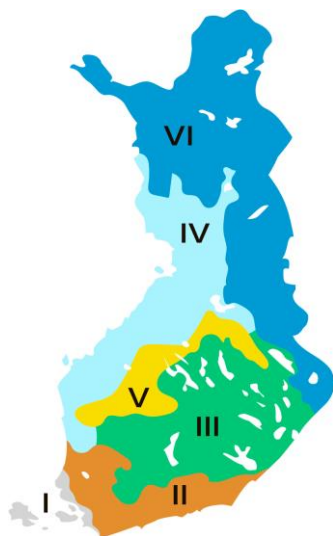


It is not possible to talk about even conditions for farmers, not in Finland, nor in the EU. The climatic and soil conditions are very different. Farming in Finland is among the northernmost areas globally and in EU. Most of the Swedish farming is south of Stockholm whereas the Finnish farming starts at the same level and reach northwards. Also most of the Norwegian farming is at souther levels and the sea with the Gulf stream has a huge benefitting impact in Norway on farming.

Finland's farming is covered by nine climate belts, see Figure 2. Micro climate is even more variated, for example can a nearby lake, esker or mountain make large changes in the local micro climate and growing conditions at the farm.

Soil types vary also a lot. At Mustiala educational and research farm we have all the main soil types in Finland. This means that we can demonstrate different approaches on the different soil types at the farm for our students.

Figure 3. Finnish soil types. (Source: Puutarha.net: Maaperä)



I Archipelago of Southwest Finland

About a third is bare rock. Clay and play a little.

II The coastal area of Southern Finland

Extensive clay plains, peat bogs, rocks and moraine.

III Lake area

The most common type of soil is moraine.

IV Ostrobothnia's coastal region

There are plenty of shallow bogs. The soil in the river areas is often clay and there is moraine between them. Due to land elevation, coarse soil types have spread over large areas.

V The watershed area, i.e. Suomenselkä

Moraine is the most dominant soil type in the region. There are also plenty of bogs in the area.

VI Frontier Karelia and Lapland

The soil in the area is mainly moraine. There are also many marshes in the area. Source. Puutarha.net: Maaperäkarta

There was developed a project work template (Attachment I)

2.2 Student 1

Student one did three different trials at his family owned farm. At the farm worked two generations and the third generation was also living at the farm. The farm had ca. 300 ha in cultivation. The farm produced organic grain.

The development project goal: How can we grow so that the soil is covered most of the time with plants in organic farming?

The goal was tried to be solved by carrying out 3 different activities:

1. Lower the weed pressure in grassland. Grass binds carbon until the spring and tillaging can be done in the spring. It is better to grow autumn rape and decide in the spring how to carry on. If the rape is looking good it can continue to grow, if it is bad grain can be sown in the spring. The risks in the first trial is that one will lost a little in yield as there was less grass cover.

2. Green manure and soil improvement plants support. Usually it is plowed in the autumn but if it is plowed in the spring the soil would be covered the whole winter. The risk in the second trial is if there are a lot of fungi in the soil there will come less field milk thistle. Less tillage and plant cover will give less field milk thistle. Or you have to plow the soil early in the autumn. If the field is slammed. There was a field where there was established winter rsepe that dis not go well. The field was lietetty dueing the winter and plowed and sown grain the next spring and the yield from this field was very good. Why? There may be many reasons.

3. Light tillage of grassland in spring and then sowing new grain and grass seeds. The risk in the third trial is that quality of the yield may be affected. Difficult to say what it would have been if it would have been harvested eaelier.

We met at the farm dryer as the harvesting was on-going. Three persons work at the farm, both parents and the son. The dryer was running on wooden chips and was built in a natural slope. It had been the common dryer for all farms in the village but others had built their own or stoped farming so there was only two farms left owning the dryer. There were 8 silos at the dryer and two places to empty the wagon coming in from the field. The dryer was old but had been modernized and there had been made alternations among other things in how to re-direct the air and distribute it into several ways. We visited two of the three trials. The third had already been harvested and was located 25 km from the farm center.



Photo 1. At the end of this plot (to the left on the photo) was tried to lower the weed pressure in grassland with different mechanical treatment. The least to the left and further to the right more treatment. The aim was to find out the most suitable mechanical treatment. Not surprisingly, the more you treat the soil the less weeds there are.



Photo 2. Weeds were discussed and we looked at different machineries in the farm machinery park used to get rid of weeds. In the background the green manure trial field plot. The student was satisfied with the outcome of the green manure field.

2.3 Student 2

Student number two carried out a development task but did no reporting nor evaluation on it.

2.4 Student 3

Student 3 did one development project at his own farm. The farm production direction is berry production and grain. There is ca. 140 ha at the farm.

The development project goal: Is growing heritage grain Sisu oat is suitable for organic farming?

Growing heritage grains are one way to develop resilience towards climate change and extreme weathers. Sisu has a long straw and larger root system that may make it better to manage if there is a drought. Sisu oat seeds was brought from an other organic farm and sown. There was not that large extra costs for carrying out the test. The seed was 100 euro + VAT for 500kg. The student had to drive to Kangasala and also put the seeds himself in bags. The biggest risk is that it will not be ready on time and harvested in time. There is a risk with the grain will lodge as it is long. Pests and plant diseases may also be a risk. This development activity came from a fruitful discussion between the two generations at the farm. The older generation had been growing this heritage variety for seed production in 1960-1970-ies. He did support this kind of a trial and had knowledge not only on this plant varieties benefits for organic farming, but also on how to cultivate it on this farm soils.



Photo 3. Sisu heritage oat with the farmer growing it.

Sisu heritage oat was developed in 1949 and we managed to find an organic farm that had been growing this oat on-farm all the time. In this way we managed to jump over years of propagation activities in order to get large enough of seeds for field cultivation. The aim of the young farmer is to register this variety as a conservation variety and start seed production of it again.

This student was very concerned with the depopulation of his village and local municipality. Many former fields were overgrown with forest today, many fields are not cared for in a good way. Also this farmer had cooperation with several other persons. Another problem that is faced besides that there are a lot of empty farms and houses in the region, is that older people do not want to sell or rent their land for younger farmers. They do just let the fields be uncultivated with the lowest amount of input. This student was to start cooperation with a larger farm and rent it in order to cultivate its soils.

The region is the second largest strawberry producing region in Finland. The workers in the picking industry are mainly from Thailand nowadays. The local berry producers cooperate in giving work for the pickers. When strawberry season is over the same workers continue to pick black and red currant at other farms. They have also been cultivating different sorts, in order to have a longer picking season for the workers. This student has cultivated a lot of buckwheat at his fields as a middle crop between the berries.



Photo 4. Supervisor with student in the buckwheat field. Buckwheat is used in the crop rotation as the pollinators have also something to eat those years where there is no berries in the cultivation at the fields.

2.5 Evaluation

Due to long distances between the students farms in Finland it will be too expensive to carry out supervisors farm visits. However, the trial showed that it is very beneficial, at least for the supervisors, to get to know the conditions students have to work in. Students living and working at own family farms have been doing so for a long time. At farms children start to contribute with simple work tasks from an early age. When they at the age of 20 arrive to our university for studies many have already a lot of practical experience in farming. The majority of farms are inherited family farms in Finland where several generations are living and working on the farm. In these conditions it may be challenging to undertake a change. The older generation has practical experience and it may be difficult to accept change suggestions in farm practices, when the suggestion comes from a younger generation.

Student one made a shift in ownership of his family farm spring 2024. Today he is the main shareholder in the family farm, but also his parents still own a smaller part of the farm. Spring 2024 he decided to buy a new used harvester from Estonia and visited an Estonian farm. On the trip he had an older experienced farm entrepreneur that could evaluate the possible investment. This farm relay on a strong local entrepreneur network and cooperation.

Student three rented more land and farm buildings. He decided to start producing seeds of Sisu oats heritage variety and started to develop his own evolutionary rye from more than 20 local heritage rye varieties in 2024. This entrepreneur is alone in working as his living area is very sparsely populated. He gets peer support from his father and the farmer that he rents land from.

A good relationship in the family and among the village enterprenerus quarantees a developing farm enterprise.

Attachment 1: Project work template

Name of your development project:

Project report

Modern Ecological Agriculture

Date:

Authors:

Appendices

Appendix 1 Name

Appendix 2 Name

1 Introduction

Write a short introduction to your enterprise

2 Trends in own production area

Where are we now and how should we develop?

What kind of trends, development directions and changes can be seen already now?

3 Development possibilities for own enterprise

Analyse development possibilities in a chosen rural enterprise.

4 Describe step-wise your planned development project

What is developed?

How is it developed?

When is the development carried out?

At what costs is the development done?

Who will carry out the development activities?

What risks are there related to carrying out the development project?

What kind of UN SDG goals / Green Deal goals do your development project concern. Consider also other possible sustainability aspects that your development project will have.

Attachment 2: Podcast manuscript template

Theme 1: Name of theme

Interviewer: Name of person

Interviewed: Name of person/persons

Date: 00.00.2023 at time 00.000.8 klo 10.00-10.30

Place: For example at field or in production place

Duration: For example 1 minute

Main message

Write here what is your main message about your theme

Implementation

Starting up, introduction to subject

Question 1:

Answer 1:

Introduction to next subject

Question 1:

Answer 1:

etc.

Theme 2: Name of theme

Interviewer: Name of person

Interviewed: Name of person/persons

Date: 00.00.2023 at time 00.000.8 klo 10.00-10.30

Place: For example at field or in production place

Duration: For example 1 minute

Main message

Write here what is your main message about your theme

Implementation

Starting up, introduction to subject

Question 1:

Answer 1:

Introduction to next subject

Question 1:

Answer 1:

etc.

Repeat as many themes will be discussed.

Attachment 3: Video manuscript template

Video name: *Short and content descriptive*

Video short description: *The video show, tells about...*

Target group and aim for use: *Who is the video done for, where can it be used?*

Main message: *What is the main aim, message or story in this video? What should stay in the mind for the person watching the video?*

Length (recommendation max. 5-15 minutes)

Issue that is shown /theme	Video / picture	Text or speech	Effects
Part I: Name of part, for example start	What is shown first in the video? For ex a drone picture	Texts related to the photo or voice or other sound tells about it. Put information who is speaking. For example development project name and music but no speach	Photo on video, can be close up photo on video of the project area.
Part II:			
Part III:			
Part IV:			
Part V: Ending of video	Author, logos	Texts at video, no speach	Picture is mowing

Attachment 4: Peer-reviewing template

In this form, you evaluate another persons' development project. You send the form tho the peer evaluation person when it is filled in.

Further Training Name: Modern Ecological Agriculture

The development project that is being evaluated: *Write the name of development project and student name here*

The student carrying out the evaluation: *Write your own name here*

Suggestion for grading number: *Write a suggested grade here*

Mark levels with 1 and results are calculated. Writing a comment is important!

Peer Evaluation for another development project					
Can describe an enterprise and knows trends in own enterprise production area	Good	Partly	Weak	Not at all	Comment
A short introduction of the own enterprise is done	0	0	0	0	
Impacting trends and development directions of own production area are described.	0	0	0	0	
Development possibilities in own enterprise is analysed	0	0	0	0	
Together	0	0	0	0	
Can the processes of carrying out a development project. Can do a project plan	Good	Partly	Weak	Not at all	Comment
The project planning process is described and divided in phases.	0	0	0	0	
The main project management questions are defined.	0	0	0	0	
The project goals are described.	0	0	0	0	
Project activities and methods of implementation are planned.	0	0	0	0	
The project resources are planned.	0	0	0	0	
The project financial plan is done.	0	0	0	0	
Project risks are identified.	0	0	0	0	
Together	0	0	0	0	
Can report and present farm trial reports	Good	Partly	Weak	Not at all	Comment
The voice is clear and can be heard in the outcome	0	0	0	0	
The main development issues are described in the outcome	0	0	0	0	
The main results are described in the outcome	0	0	0	0	
The results are presented in an illustrative, interesting and consistent manner	0	0	0	0	
Together	0	0	0	0	
Points together	0	0	0	0	

Attachment 5: Evaluation of own learning template

- Summarize what you have learned. How much did you invest in studying?
- What did you learn, how can you apply what you have learnt?
- What things do you think you should delve further into?
- Evaluate whether you would be the leader of the project, justify your conclusions.
- Section length 0.5 page.

Attachment 6: Team evaluation template

In this form, you evaluate your own team project work. Issued that you mention here should be described in the team own project work. How was the team work divided among members and who did what.

Further Training Name: Modern Ecological Agriculture

Team: Write team number / name and members names here

Suggestion for grade: Write a suggested grade here

Mark levels with 1 and results are calculated. Writing a comment is important!

Own team self evaluation					
Know sustainability related goals and climate change related phenomena	Good	Partly	Weak	Not at all	Comment
Know United Nations sustainability goals	0	0	0	0	
Know the European Green Deal goals	0	0	0	0	
Can mention the basic principles of sustainability in agricultural production	0	0	0	0	
Basic climate change related aspects are known	0	0	0	0	
<i>You can write an own evaluation target here</i>	0	0	0	0	
Together	0	0	0	0	
Can describe an enterprise and knows trends in own enterprise production area	Good	Partly	Weak	Not at all	Comment
A short introduction of the own enterprise is done	0	0	0	0	
Impacting trends and development directions of own production area are described.	0	0	0	0	
Development possibilities in own enterprise is analysed	0	0	0	0	
<i>You can write an own evaluation target here</i>	0	0	0	0	
Together	0	0	0	0	
Can the processes of carrying out and managing a development project. Can do a project plan, carry out a trial in own enterprise, monitor and report it.	Good	Partly	Weak	Not at all	Comment
The project planning process is described and divided in phases.	0	0	0	0	
The main project management questions are defined.	0	0	0	0	
The project idea fulfils the work enterprise development needs.	0	0	0	0	
The project plan is as an entity executable.	0	0	0	0	

The project development goals are described.	0	0	0	0	
Project activities and methods of implementation are planned.	0	0	0	0	
The project resources are planned.	0	0	0	0	
The project resource needs are done.	0	0	0	0	
Project risks are identified.	0	0	0	0	
<i>You can write an own evaluation target here</i>	0	0	0	0	
Together	0	0	0	0	
Can present a development project and its results.	Good	Partly	Weak	Not at all	Comment
Project communication and information is planned.	0	0	0	0	
The results are presented in an illustrative, interesting and consistent manner	0	0	0	0	
Together	0	0	0	0	
Type a skill goal here	Good	Partly	Weak	Not at all	Comment
<i>You can write an own skill here</i>	0	0	0	0	
<i>You can write an own skill here</i>	0	0	0	0	
<i>You can write an own skill here</i>	0	0	0	0	
Together	0	0	0	0	
Points together	0	0	0	0	
Evaluation of the process, team work	Good / a lot	Partly	Weak / little	Not at all	Comment
How much effort did your team put into the module work?	0	0	0	0	
How did you agree upon the goals together?	0	0	0	0	
How was the distribution of work tasks go?	0	0	0	0	
How did the carrying out of the tasks go?	0	0	0	0	
Did your team participate in the coaching?	0	0	0	0	
How much did you use the module written materials?	0	0	0	0	
How much did you use the module video material?	0	0	0	0	
How well did you reach the module learning goals?	0	0	0	0	
Together	0	0	0	0	
Members Self Evaluation	Good / a lot	Partly	Weak / little	Not at all	Comment
Team member name:	Write team member name here				Grade suggestion



Participated in the team work					
What did I do in the team work? Own role					
I put an effort in individual study					
Evaluate your own use of time. Who much time was used for studies					
-- less than x h/week					
-- about x h/week					
-- more than x h/week					

Copy the **Member Self Evaluation** part as many times as you have members in the group. Fill in the team self-evaluation with the whole team present, discussing the team learning.



Implementation of the KAIN Method



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Istituto Tecnico Agrario
EMILIO SERENI ROMA
AGRARIA, AGROALIMENTARE E AGROINDUSTRIA

HAMK
HÄMEEN AMMATTIKORKEAKOULU
HÄME UNIVERSITY OF APPLIED SCIENCES

Landwirtschaftskammer
Hamburg

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Knowledge Acquisition according to Individual Needs – KAIN

A striking obstacle faced by SME is lack of time and permanent overburdening of their owners as well as their impossibility to release employees from work for a longer scope of time to engage them in advanced trainings. There is also particular interest in ensuring that, as far as possible, qualifications offered should match individual skills needs of the employees and, at the same time, address specific SME issues. In response to such demands, a structural concept will be applied in the project, consisting of the following items:

- 2-3 learning phases with classroom teaching, delivered on two days per week, possibly Fridays and Saturdays. Half-teaching days are also possible and especially for online courses recommended (e.g. 4x4h).
- In between, longer on-the-job teaching periods at the trainees' workplace with simultaneous realisation of innovative development projects in SMEs, covering six to eight weeks.
- Proposal for teaching periods at the trainee's workplace:
 - a. coaching by same trainers that are also delivering classroom teaching,
 - b. optional and customised e-learning options,
 - c. implementation of a specific development project within the company, in the topic area of the respective advanced training, involving as many employees as possible, thus, ensuring joint team learning.

The successfully tested and implemented methodological framework (training method) KAIN

- creates a common knowledge base for participants with different backgrounds in training and consulting processes,
- takes particular account of the individual experience of participants,
- shows possibilities to change/improve the situation of the participants on site for the pursuit of project goals and change measures,
- sharpens the knowledge of possible needs for change,
- enables those involved participants to design the right measures and implement them correctly, and
- combines qualifications with the implementation of innovative development projects in companies.

KAIN describes the tasks of trainers / consultants to carry out qualifications within the framework of continuing vocational training, to accompany the implementation of company-specific development

projects and to enable company employees to carry out change processes under the supervision of external consultants.

The qualification and consulting process is composed of three phases:

1. classroom teaching
2. self-study with external support
3. report and reflection.

The overall aim of the training is to ensure that all participants have sufficient information and knowledge on how the basic training idea can be implemented and pursued under the individual (quite different) framework conditions on site. Hopefully they will gain confidence in the feasibility of change processes.

Part 1: Classroom Teaching (approx. 2 days)

Key objective: imparting knowledge - forming a common ground within the group.

This training module basically consists of a 2-day workshop / 4 half-days' workshop, during which participants learn about (usually science-based) models and (conceptually) apply instruments of project-related research for structuring and solving problems. This is intended to form a common conceptual ground for further training steps. The presented models and instruments (recommended for practical application) ideally form a common framework, mainly to better integrate existing experience of course participants in pursuing their training goals. The participants' experience may complement or modify the research proposals on structuring and solving problems. Such approach enables a desired (conceptual) adaptation of the proposed models and instruments to the individual participants' needs and specificities (given the diversity of their situations) at an early stage of the training.

Observance of the participants' individual needs and specificities in classroom training requires a high degree of expertise and experience by trainers, including their ability to use interactive and participant-oriented didactic methods.

Another addressed focus in the first part of the training is communicating to the trainees' relevant issues with regard to planning, implementation as well as to (critical) assessment of their own projects that are processed in the second part of the training. Thus, another key objective of this part of the training is to equip the trainee with critical impulses for processing the presented models and instruments in his individual project. In a sense, application and implementation of the presented models and instruments by trainees at their work constitutes the primary focus of the second part of the training concept.

Tasks of the trainers/trainers /consultants:

This consideration of the individual needs and particularities of the participants on site in a face-to face training requires a high degree of knowledge and experience with the use of interactive and participant-centred didactic methods on the part of the trainers.

A further focus of the first part of the training is to introduce the participants with the planning, implementation and also (critical) evaluation of their own project, which is to be dealt with in the

second part of the training. Thus, another central goal of this part of the training is to give the participants important impulses for the implementation of the presented models and instruments in their own project. The application and implementation of the presented models and instruments by the participants "at home" is, so to speak, the focus of the second part of the training concept.

Part 2: Self-study in own company/organization with the support of trainers (approx. 6 – 8 weeks)

Key objective: transfer and practical application of acquired knowledge in the trainees` individual job practice; special role of the trainer as consultant and coach.

In the second part of the training, trainees are tasked to apply skills and knowledge acquired in the first part of the training with respect to their individual job practice at their company/organization, in line with the training idea. For a sustainable learning effect, it is crucial that trainees plan, implement, evaluate, document and critically reflect on their own project or their own activities with regard to improving their individual situation, basically under their respective "here-and-now" conditions.

This course phase is accompanied and assisted by trainers and their technical advice and support. Basically, trainees are on their own with respect to applying and implementing knowledge acquired in Part 1. As a rule, however, advice and support are usually required in order to properly enjoy the benefits of adaptive process of newly acquired knowledge from the training Part 1, now under real-life conditions, and to turn the project into success. Support by trainers may vary, from a rather simple general advice in the sense of passing on relevant information up to an in-depth assistance-like coaching. Normally, it is advisable to decide on case-by-case basis which type of support is best suited to enable each trainee achieving individual project goals.

At this stage, it is certainly possible, if not uncommon, that in processing the models and tools presented in Phase 1, the trainees` projects may differ from their initial concepts and plans. In such case, trainers may lend a helping hand in bringing back on track "real" project goals.

The second part of the training has a particularly welcome didactic attribute, allowing for fine-tuning improvements on the job / in one`s own company, thus, ensuring high learning motivation. As a rule, this type of learning, embedded in real job conditions, involves committed personal involvement of company management and other employees, and, by joint team learning, delivers expressive multiplier training effects.

Further advantages are straight implementation of the acquired new knowledge in daily job operations; project-related innovations are in the interest of corporate management; they become quickly tangible, and managers feel encouraged to continue with advanced trainings for their employees, turning them into a strategic instrument of corporate management. Apart from this, this training approach meets particular needs of SMEs, which biggest barrier to good training is their lack of time. **Under KAIN training method, lost working hours and work absences are almost entirely avoided.**

In the second part, the participants have the task of applying the knowledge acquired in the first part and the knowledge of how to shape their own practice in the sense of the training idea in their companies/organizations. For a sustainable (learning) effect it is necessary that they plan, implement, evaluate, critically reflect and document their own project or activities to improve a situation on site under their individual framework conditions in the "here and now".

This phase with the duration of approx. 6 – 8 weeks is accompanied and supported by professional advice and support from the trainers/consultants.

Tasks of the trainers/consultants:

At the beginning of the longer phase of learning on the job, the innovative development project to be realized is defined and prepared in the company. The trainer accompanies the work to realize the development project in the company and involves other consultants and experts as needed. The support of the trainers can range from a rather simple general consultation in the sense of passing on relevant information to an intensive accompaniment in the sense of coaching. In individual cases, it is usually necessary to consider what kind of support is needed to enable the individual participant to pursue his or her individual project goals.

In this phase it is quite possible and not uncommon that when applying the models and instruments presented in phase 1 in practice, the individual project proceeds differently than initially thought and planned by the participant. Even in such situations, the trainers of the project team can provide valuable support in pursuing the "actual" project goals.

This second part of the training enables in particular the very welcome didactic aspect of working on concrete improvements in one's own company / at one's own workplace, which is associated with a high motivation to learn. In this learning process, the company management and other employees are usually intensively involved in what is actually done at the workplace, thus achieving joint learning and strong multiplication effects in the training.

Further advantages are that what has been learnt is directly implemented in everyday business life, that the innovations associated with project work are in the interest of company's management, quickly become visible and motivate managers to promote further training for the workforce and to use it as a strategic instrument of company management. It also responds to the particular needs of small and medium-sized enterprises, which are constantly suffering from a lack of time as the biggest obstacle to training. The KAIN Training Method generally almost completely eliminates absenteeism.

Part 3: Individual project presentation and reflection (approx. 1 day)

In the third part of the training, experience and insight gained will be presented and exchanged at a joint event, in emphasis on presentation of individual participants' projects. Both, the trainees and the trainers, will be tasked to review and reflect on projects presented by the participants and to analyse answers with respect to a possible contribution to sustainable training target tracking. Moreover, a further key goal may help identifying major barriers to "not-yet-a-success" and fix them in the future.

The exchange of information amongst participants may provide valuable information on how to improve their own projects to be even more successful.

Tasks of the trainers/consultants:

- enable constructive exchange between the participants,
- focus on the common basis for the pursuit of (general) training objectives, and
- moderate an instructional discussion on the identification of supportive,
- ideas on struggle-free implementation solutions for trainees` projects, and
- obstructive conditions of change processes and present contributions for a possible reduction of resistance in the tracking of individual projects.

Of course, upon completing the third part, subsequent longer self-study phase may follow, combined with on-the-job implementation, followed again by classroom-teaching in form of a third workshop, etc.

At the end of the training, all participants should have sufficient information and idea on how to implement and pursue the basic training idea, mostly under different real-life conditions.

Time-organisational setup and competencies of participants

For sure, a truism that in a large-scale transnational project, participants from different countries would never be able to match their time frames to enjoy joint meetings and events. Yet, planning and delivery of training to a specified target group and their participants, requires that

- participants of Part 1 are in, any case, also participating in training Part 3. Where appropriate, couples or small teams should be made available as representatives of a project team with respect to these training parts,
- participants are experienced in presenting content or in using interactive training design methods, or they are trained to meet required demands,
- participants are to a certain degree involved in decision-making or co-determination in their company/organisation with respect to pushing through their projects and receiving appropriate support from senior management.

Instructions for trainers/consultants on planning and using KAIN

The selection of companies/persons for the training and consultations depends on the interests of the companies. In an active approach, a pre-selection can be made on the basis of individual criteria, e.g. sector, company size, state of technology use, quality of personnel policy, innovation orientation, ..., i.e./with other words the maturity level of the organization.

The size of the group should not exceed more than twelve and not be less than three or four different companies. Enterprises may be allowed to send more than one person (project group).

The persons from the companies should have the right to make decisions or have a say in their organizations in order to be able to decisively advance the pursuit of their individual projects.

The participants should decide at the end of part 1 to carry on with parts 2 and 3. Otherwise resources will be wasted. If there is a fear that problems will arise in part 2, it will be better to do a small project for testing rather than too many or too large projects. And: Even from failed projects something can be learned.

The companies can exchange their ideas and experiences during the development phase, e.g. develop measures together.

The trainers should encourage connecting the participants through e.g. a WhatsApp group or Facebook chat from the beginning of the course. The trainer should be part of this group chat as well. Questions regarding contents from Part 1 or difficulties arising in Part 2 can be clarified openly in this group chat, so that all participants benefit equally.

Requirements for trainers/consultants

At various points in the brief description of the training method it became clear that the trainers have a special role to play in the use of this method, which is underlined here again.

In general, the trainers/consultants should have experience in presenting content and using interactive methods to design training.

Against the background of an overview knowledge covering all relevant subject areas the trainers are not only representatives for a variety of project topics and contents, but also –from a didactic-methodical point of view – moderators, learning (process) facilitators, coaches, sometimes co-managers, consultants, and even learners.

In individual cases, they must also decide in what form the involvement of experts and specialists on a (detailed) topic is necessary for highly specialized topics. This requires a good network.

A special challenge for the trainers is when they are in the role of a coach, who may also have to provide individual support for the learning processes of individual participants in the pursuit of a project on site.

Within the framework of a Train the Trainer program for teachers to conduct further training, teachers are familiarized with the KAIN method and taught skills for its application.



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Evaluation Concept for the Further Education Program: „Modern ecological agriculture“



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HÄMEEN AMMATTIKORKEAKOULU
HÄME UNIVERSITY OF APPLIED SCIENCES

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1. The Aim of the Evaluation

The overall objective of the evaluation is to assess the effectiveness of the training „modern ecological agriculture“ provided under the "Promoting and Upgrading Green Skills in Agriculture (ProGreen)" project. The conclusions of the evaluation research will contribute to improve the quality, and especially the effectiveness of training, show the limitations of the training model and indicate the direction for further activities.

A training management cycle can be divided into three major steps: *planning, implementation and evaluation*. The evaluation is the final step of the training management cycle. Evaluation of training is one of the main components of a training. The results of the training evaluation are reflected in the next phase of training planning to improve future training programs. It does not only provide the trainer with useful information in order to further improve the training course, but also creates an impression of completeness.

What is an Evaluation?

Several definitions of evaluation have been offered, and the following are some of those most commonly used: An evaluation is the systematic and objective assessment of an ongoing or completed project, program or policy, its design, implementation and results. The aim is to determine the relevance and fulfillment of objectives, development efficiency, effectiveness, impact and sustainability. (*Source: Glossary of Key Terms in Evaluation and Results Based Management*).

A **program evaluation** is the systematic collection of information about the activities, characteristics, and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future programming. (*Source: Patton, M.Q. (1997). Utilization-focused Evaluation: The New Century Text (3rd ed.). Thousand Oaks, CA: Sage.*)

There are many different types of evaluations depending on the object being evaluated and the purpose of the evaluation.

Perhaps the most important basic distinction in evaluation types is that between *formative* and *summative* evaluation. **Formative evaluations** strengthen or improve the object being evaluated - they help form it by examining the delivery of the program or technology, the quality of its implementation, and the assessment of the organizational context, personnel, procedures, inputs, and so on. **Summative evaluations**, in contrast, examine the effects or outcomes of some object - they summarize it by describing what happens subsequent to delivery of the program or technology; assessing whether the object can be said to have caused the outcome; determining the overall impact of the causal factor beyond only the immediate target outcomes; and estimating the relative costs associated with the object.

Formative evaluation includes several evaluation types:

- *needs assessment* determines who needs the program, how great the need is, and what might work to meet the need
- *evaluability assessment* determines whether an evaluation is feasible and how stakeholders can help shape its usefulness

- *structured conceptualization* helps stakeholders define the program or technology, the target population, and the possible outcomes
- *implementation evaluation* monitors the fidelity of the program or technology delivery
- *process evaluation* investigates the process of delivering the program or technology, including alternative delivery procedures

Summative evaluation can also be subdivided:

- *outcome evaluations investigate whether the program or technology caused demonstrable effects on specifically defined target outcomes*
- *impact evaluation is broader and assesses the overall or net effects -- intended or unintended -- of the program or technology as a whole*
- *cost-effectiveness and cost-benefit analysis address questions of efficiency by standardizing outcomes in terms of their dollar costs and values secondary analysis reexamines existing data to address new questions or use methods not previously employed*
- *meta-analysis integrates the outcome estimates from multiple studies to arrive at an overall or summary judgement on an evaluation question (Source: Patton, M.Q. (1997). Utilization-focused Evaluation: The New Century Text (3rd ed.). (Thousand Oaks, CA: Sage.)*

2. Five Steps of Training Evaluation

The processes of training evaluation can be divided into five steps: identify purposes of evaluation; select evaluation methods; design evaluation tools, collect data; and analyze and report results.

Step 1: Identify Purposes of Evaluation

Before developing evaluation systems, the purposes of evaluation must be determined. These will affect the types of data and the data collection methods. The most common reason for evaluating training programs may be to determine the effectiveness of training programs in order to improve future programs. Evaluation can help us learn from experience of past training programs. For example, we may want to know which parts of the training were successful and which not, or whether the approach to the training should be changed. We can use these lessons learned to improve plans for future training programs:

The following 8 purposes of evaluating training programs are:

1. To determine whether the objectives of the training were achieved.
2. To see how the knowledge and skills learned in the training are put into practice.
3. To assess the results and impacts of the training programs.
4. To assess the effectiveness of the training programs.
5. To assess whether the training programs were properly implemented.
6. To identify the strengths and weaknesses of the training programs.
7. To assess whether the training programs were suitable in terms of the training contents, timing, participants and other aspects.
8. To find problems of the training programs and solutions for improvement.

Step 2: Select Evaluation Method

One of the most commonly used methods for evaluating training programs is the four levels of evaluation by D. L. Kirkpatrick. According to his concept, capacity development is realized by the four sequential steps:

1. **Reaction** - evaluation on this level measures how participants react to the training program. It is important to get a positive reaction.

Although a positive reaction may not ensure learning, if participants do not react favorably, they probably will not be motivated to learn.

2. **Learning** - evaluation on this level measures the extent to which participants change attitudes, improve knowledge, and/or increase skills as a result of attending the training program. One or more of these changes must take place if a change in behavior is to happen.
3. **Behavior** - evaluation on this level measures the extent to which change in participants' behavior has occurred because of attending the training program. In order for change to take place, four conditions are necessary:
 - The person must have a desire to change.
 - The person must know what to do and how to do it.
 - The person must work in the right climate.
 - The person must be rewarded for changing.
4. **Results** - evaluation on this level measures the results that occurred because the participants attended the training program. Examples of the results include increased production, improved quality and decreased costs. It is important to recognize that these results are the reason for having some training programs. (Source: *Kirkpatrick (2006) Evaluating Training Programs*)

Step 3: Design Evaluation Tools

Various evaluation tools can be selected depending on the purposes and methods of evaluation:

- Questionnaires
- Surveys
- Tests
- Interviews
- Focus group discussions
- Observations
- Performance records

For the Train the Trainer in SMEs training evaluation the written questionnaire and the interview are used.

The questionnaire is probably the most common form of evaluating training programs to evaluate the reactions of training participants. Questionnaires can be developed through five steps:

Step 3.1: Determine what you want to find out

The following are some common types of information we may want to ask participants.

Contents: Was the content appropriate?

Materials: Were the materials useful?

Teaching method: Was the teaching method appropriate?

Trainer/Facilitator: Was the trainer/facilitator effective?

Motivation to learn: Were you motivated to learn the contents?

Program relevance: Was the program relevant to your needs?

Level of understanding: Did you understand the contents? **Time:** Was the time and length of program appropriate?

Length: Was the program length appropriate?

Facilities: Were the training facilities appropriate?

Overall evaluation: What is your overall rating of the program?

Planned improvements: How will you apply what you have learned?

Questions are developed later, but it might be useful to develop this information in outline form so that related questions can be grouped together.

Step 3.2: Select the types of questions

Questions that might be asked in a questionnaire can be classified into **two major categories:** open-ended and close-ended.

Open-ended questions have an unlimited answer. The question is followed by a blank space for response. Open-ended questions give participants the opportunity to express their own thoughts. They produce varieties of answers and more difficult to analyze. The following are some examples of open-ended questions: Which part of the contents of the training program interests you more than others? How do you think we can improve the contents of the training program?

Close-ended questions ask respondents to select one or multiple responses from the list.

Below are several types of close-ended questions.

Two-option response: Respondents are asked to choose one out of two options, such as yes-no, true-false, disagree-agree.

Rating scale: Respondents are asked to choose the most appropriate answer to reflect their opinion from the complete range of possible answers. The range can be presented in numbers (e.g., 1 to 5), or in words (e.g., strongly agree to strongly disagree).

Checklist: It is a list of items. Respondents are asked to check those that apply to the situation

Multiple choice questions: Respondents are requested to choose appropriate answers from multiple choices.

Open-ended short-answer questions: Respondents are requested to explain their answers in short sentences.

Step 3.3: Design the questionnaire

The third step in questionnaire design is to develop the questions based on the types of questions planned and the types of information needed.

Step 3.4: Pretest the questionnaire

The fourth step in questionnaire design is to test the questions. It is ideal if the prepared questions can be tested on a sample group of participants. If this is not feasible, they can be tested on a group of people at approximately the same job level as the participants.

Step 3.5: Finalize the questionnaire

Based on the result of pretest in Step 4, the questionnaire forms will be finalized.

The most common data-collection method for the impact survey might be the follow-up questionnaire.

Interviews can be used especially when qualitative information is needed about the impact of the training program.

Interviews have the following advantages and disadvantages that should be considered when selecting them as the data collection method.

Advantages of interviews:

- Good for uncovering feelings and hidden causes.
- Non-verbal signals can indicate key issues.
- Spontaneity – follow the unexpected issues.

Disadvantages of interviews:

- Time-consuming.
- An unrepresentative sample can skew the results.
- Can be difficult to quantify.
- Very dependent on the skills of the interviewer.

Interviews have three types from which a suitable one was selected for each survey.

1. **Structured interview:** the questions was set in advance.
2. **Semi-structured interview:** the general content was predetermined but additional exploration was allowed. This form of interview is particularly useful in situations where there are key issues to be investigated, but there is less certainty about the range of respondents' reactions to them.
3. **Unstructured interview:** free-flowing conversation rather than a specific set of questions.

Step 4: Collect Data

To improve the effectiveness of questionnaire data collection were recommended following:

- *Keep responses anonymous* -If there is no specific reason why you would like to identify each participant's questionnaire, it is recommended to keep responses anonymous. It allows the participants to feel open and comfortable to give comments that can help improve future programs
- *Distribute questionnaire forms in advance* - For lengthy evaluations for training programs that span several days, or if you want the participants to evaluate each individual session, it is helpful to distribute questionnaire forms early in the program. This will allow the participants to familiarize themselves with the questions, and to answer specific questions as they are covered in the program. Please note, however, that the participants should wait until the end of the program to reach a final conclusion on general issues. For this reason, questionnaire forms for general questions could be distributed at the end of the program. Explain the purpose of the questionnaire and how the information will be used
- *Explain the purpose of the questionnaire and how the information will be used.* This will help improve the response rate and encourage them to make comments that can be useful to improve future programs.
- *Allow enough time for completing the questionnaire* - If we ask the participants to fill in the questionnaire forms at the end of the program, they may be in a hurry to leave and may provide incomplete information. It is recommended to set aside enough time to fill in the questionnaire forms as a scheduled session before the end of the program.

Step 5: Analyze and Report Results

Before summarizing and analyzing the questionnaire, the data need to be entered into a computer. Many statistical software programs are available for such data. There are many ways to analyze data, but the analysis should be as simple as possible and

limited to what is necessary to draw the required conclusions from the data. After knowing what kind of information will be relevant and useful to the primary users, the last step in evaluation process is to develop an evaluation report.

Use figures to present statistical and complex data fairly quickly and easily. *Pie charts* and *bar charts* are among commonly used figures. Bar charts work better when many categories are compared, and relative magnitude is to be shown.

Evaluation report outline

After knowing what kind of information will be relevant and useful to the primary users, you can develop an evaluation report outline.

Summary

- Purpose of evaluation
- Evaluation audiences
- Major findings and recommendations

Program Description

- Program background
- Program goals/objectives
- Program participants Program activities

Evaluation Design and Methods

- Purpose of the evaluation
- Evaluation designs
- Data collection methods

Findings and Results

- Description of how the findings is organized (e.g., by evaluation questions, themes/issues)
- Results of analyses of quantitative and/or qualitative data collected

Recommendations

- Recommendations for action based on these conclusions

Appendices

- Questionnaires pre/post tests
- Program expenditure summary

(Source: Manual on Training Evaluation. Project on Improvement of Local Administration in Cambodia)

3. Data Sources

The conclusions of the evaluation research will contribute to improve the quality, and especially the effectiveness of training, show the limitations of the training model and indicate the direction for further activities.

In the training courses will take part each at least with 10-15 participants.

The further education program is aimed at business owners and employees who want to implement a comprehensive training program in agriculture for modern and ecological farming. The aim is to make this further education program available to chambers and other vocational training institutions so that they can continuously qualify business owners and employees in all regions in order to obtain practical information and impulses for the further development of their businesses according to ecological standards.

The scope of this evaluation includes the following aspects (among others):

- Assessment of the framework conditions conducive to learning (organization, equipment),
- Teaching and learning concept
- Curriculum
- Didactics and methodology
- Learning atmosphere
- Fulfilment of the practical project work to make adjustments as needed and to optimize the training

Surveys and interviews must be carried out once - at the end of phase three. According to the methodology two questionnaires will be prepared:

- **One written surveys of participants**

Participants will be asked to fill out questionnaires after the training in which they will be able to assess the quality of the training in its various aspects.

- **One written surveys of all teachers using an identical questionnaire**

All trainers will be asked to fill out questionnaires after the training in which they will be able to assess the quality of the training in its various aspects.

Annex

Modern ecological agriculture

Annex I Questionnaire for Participants

Course:

Location:

Date:

Your desired participation in this survey serves to assess all aspects of the qualification measure in order to evaluate what is good and what needs to be improved.

Of course, all information will be treated confidentially in compliance with data protection laws and will only be evaluated anonymously.

⇒ Please tick the applicable box.

Personal Data

Gender	<input type="checkbox"/> Female (Mrs)	<input type="checkbox"/> Male (Mr)	<input type="checkbox"/> Other (Mx)
--------	---------------------------------------	------------------------------------	-------------------------------------

Age	<input type="checkbox"/> < 35 years	<input type="checkbox"/> 35 - 49 years	<input type="checkbox"/> ≥ 50 years
-----	-------------------------------------	--	-------------------------------------

Economic sector / Branch	<input type="checkbox"/> Crafts	<input type="checkbox"/> Industry	<input type="checkbox"/> Trade	<input type="checkbox"/> Services	<input type="checkbox"/> Other
--------------------------	---------------------------------	-----------------------------------	--------------------------------	-----------------------------------	--------------------------------

Workplace / Job	<input type="checkbox"/> Production	<input type="checkbox"/> HR area	<input type="checkbox"/> Other, namely:
-----------------	-------------------------------------	----------------------------------	--

Scale: 1 = absolutely disagree / 2 = rather disagree / 3 = neither disagree or agree / 4 = tend to agree / 5 = fully

agree

	1	2	3	4	5
The organisation of the seminar (invitation, information, ...) was good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The facilitation (location, room, technical equipment etc.) was suitable for training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The course material is comprehensible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The training material reflects the state of knowledge well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The "red thread" was obvious; the sequence of lessons made sense	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I felt the theory-practice ratio to be good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The topics and issues were relevant and responded to the goals of training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The lecturers explained topics of the lessons, additional questions, experiences, and topical issues arisen during the course well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The methodology and didactics of the lecturers were appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There was enough time planned for each topic, each presentation and each discussion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I got valuable knowledge from lessons and examples presented by lecturers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I got valuable insights from the presentations of other participants and the reflection on the results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I believe that I can utilize the knowledge gained from lessons in my future career	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It was a pleasant group atmosphere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There was enough time for social contacts to other participants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The support by the lecturer in the project work phase was good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The result reports were sufficiently valued by the lecturer and the other participants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments (free text)

What was good? What has pleased you?
What was not good? What made you upset?
Was the proportion of theory and practice suitable or should something be increased / decreased?
Was anything missing that you might need in your future profession / occupation / job?
Would you recommend the course to someone you know? If not, why not?
Do you think that the KAIN concept is basically suitable for linking theory and practice and for supporting your own learning?
Other comments

Thank you for your participation and cooperation.

Modern ecological agriculture

Annex II Questionnaire for Lecturers

Course:

Location:

Date:

Subjects / Topics that you have taught:

.....
.....
.....
.....

Your participation in this survey will help us to evaluate all aspects of the qualification program in order to assess what is good and what needs to be improved.

All information will of course be treated confidentially in accordance with data protection regulations and only analysed in anonymised form

⇒ Please tick the applicable box and write a comment if possible.

(1) The organisation of the seminar (invitation, information, ...) was ...

1 = Insufficient	<input type="checkbox"/>	Comments:
2= Sufficient	<input type="checkbox"/>	
3= Moderate	<input type="checkbox"/>	
4= Good	<input type="checkbox"/>	
5= Excellent	<input type="checkbox"/>	

(2) The facilitation (location, room, technical equipment etc.) was ...

1 = Insufficient	<input type="checkbox"/>	Comments:
2= Sufficient	<input type="checkbox"/>	
3= Moderate	<input type="checkbox"/>	
4= Good	<input type="checkbox"/>	
5= Excellent	<input type="checkbox"/>	

(3) How well did the curricular contents fit the needs and learning objectives of the participants?

1 = Insufficient	<input type="checkbox"/>	Comments:
2= Sufficient	<input type="checkbox"/>	
3= Moderate	<input type="checkbox"/>	
4= Good	<input type="checkbox"/>	
5= Excellent	<input type="checkbox"/>	

(4) How do you assess the qualification preconditions of the participants?

1 = Insufficient	<input type="checkbox"/>	Comments:
2= Sufficient	<input type="checkbox"/>	
3= Moderate	<input type="checkbox"/>	
4= Good	<input type="checkbox"/>	
5= Excellent	<input type="checkbox"/>	

(5) How do you rate the motivation and willingness to learn of the participants?

1 = Insufficient	<input type="checkbox"/>	Comments:
2= Sufficient	<input type="checkbox"/>	
3= Moderate	<input type="checkbox"/>	
4= Good	<input type="checkbox"/>	
5= Excellent	<input type="checkbox"/>	

(6) How do you assess the cooperation of the participants?

1 = Insufficient	<input type="checkbox"/>	Comments:
------------------	--------------------------	-----------

2= Sufficient	<input type="checkbox"/>	
3= Moderate	<input type="checkbox"/>	
4= Good	<input type="checkbox"/>	
5= Excellent	<input type="checkbox"/>	

(7) How do the contents of the training match to the requirements of the qualification?

1 = Insufficient	<input type="checkbox"/>	Comments:
2= Sufficient	<input type="checkbox"/>	
3= Moderate	<input type="checkbox"/>	
4= Good	<input type="checkbox"/>	
5= Excellent	<input type="checkbox"/>	

(8) How well did the schedules match the training content and the time for the practical reports?

1 = Insufficient	<input type="checkbox"/>	Comments:
2= Sufficient	<input type="checkbox"/>	
3= Moderate	<input type="checkbox"/>	
4= Good	<input type="checkbox"/>	
5= Excellent	<input type="checkbox"/>	

(9) How well were the participants prepared for the presentation of their practical reports?

1 = Insufficient	<input type="checkbox"/>	Comments:
2= Sufficient	<input type="checkbox"/>	
3= Moderate	<input type="checkbox"/>	
4= Good	<input type="checkbox"/>	
5= Excellent	<input type="checkbox"/>	

(10) How do you assess the communication about the reports and the internal cooperation by the other course participants?

1 = Insufficient	<input type="checkbox"/>	Comments:
2= Sufficient	<input type="checkbox"/>	
3= Moderate	<input type="checkbox"/>	
4= Good	<input type="checkbox"/>	
5= Excellent	<input type="checkbox"/>	

(11) Overall: What do you think of the KAIN concept in general?

1 = Insufficient	<input type="checkbox"/>	Comments:
2= Sufficient	<input type="checkbox"/>	
3= Moderate	<input type="checkbox"/>	
4= Good	<input type="checkbox"/>	
5= Excellent	<input type="checkbox"/>	



Thank you for your participation and cooperation.



Examination regulation and international recognition "Modern Ecological Farmer"



HANSE-PARLAMENT

Network for Small and Medium Enterprises



AUKŠTAITIJOS
PROFESINIO
RENGIMO CENTRAS
Aukštaitija Vocational Training Centre



Istituto Tecnico Agrario
EMILIO SERENI ROMA
AGRARIA, AGROALIMENTARE E AGROINDUSTRIA

HAMK
HÄMEEN AMMATTIKORKEAKOULU
HÄME UNIVERSITY OF APPLIED SCIENCES

Landwirtschaftskammer
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1. Examination regulation

1.1 Introduction

In Germany, the Chambers have the legal competence to issue legally valid examination regulations for continuing vocational education and training with official, recognized continuing vocational education and training qualifications that have legal validity for the area of the respective chamber.

The German Federal Ministry for Economic Affairs and Climate Protection can establish such examination regulations with a recognized qualification for the entire federal territory.

The following examination regulations shall be adopted and enacted by a North German Chamber of Skilled Crafts.

The training program developed and implemented can be examined alternatively:

- On the basis of an official examination regulation leading to a state-recognized degree. The following examination regulations fulfil this purpose.
- As an internal audit, which is also carried out on the basis of the following examination regulations but does not lead to a recognized degree. In this case, the participants will receive a certificate and attestation showing the overall examination grade.

1.2 Official Examination Regulation

§ 1 Purpose of the examination and designation of the degree

1) The examination for Modern Ecological Farmer is intended to determine whether the candidate possesses the necessary knowledge, skills and experience required for the implementation of modern ecological farming practices on farms.

2) A successful pass in this examination leads to a recognized degree as Modern Ecological Farmer.

§ 2 Requirements

The examination is to admit those who have:

1) Successfully completed vocational training and have at least five years' professional experience

2) Further to Paragraph 1, admission to the examination may also be granted on presentation of certificates or otherwise, as proof that the requisite knowledge, skills and experience have been acquired in previous activities and can justify admission to the examination.

§ 3 Structure, content and duration of the test

1) Theoretical fundamentals

In the first part of the examination, basic knowledge in the following fields of activity must be demonstrated:

- a) Analysis of operational conditions with regard to their current and future modern or ecological farming potential.
- b) Submission of economically justified proposals for the anchoring of modern or ecological farming measures in the company.
- c) Activities for the implementation of operational measures of modern or ecological farming measures on the farm.
- d) Examination of the operational suitability of operational measures of modern or ecological farming.
- e) Development of optimisation proposals for the improvement of operational modern or ecological farming.
- f) Demonstrate the right knowledge to modernise their farming operations and ensure a sustainable and successful future for the farm.
- g) Recognise and assess the content, scope and importance of a modern and ecological farming strategy.

2) Planning, implementation and evaluation of measures of modern or ecological farming.

In the second part of the examination, the candidate should prove that he/she is capable of planning, implementing and evaluating a farm-related modern or ecological transformation process. This includes:

- a) Analysing the current conditions on the farm, including status quo of farming practices, natural resources, environmental conditions, worker conditions, market conditions.
- b) Tracking and assessing the potential of new modern and ecological farming techniques. Identify and address the needs of the company, the employees, the customers, the market and the owner to ensure that individual goals and employer business objectives are aligned.
- c) Effects of the implementation of a new modern or ecological farming method on the farming business.
- d) Demonstrating the necessary tools to achieve accelerated innovation cycles in the company.
- e) Identifying fields of action for modern ecological farming on the farm.
- f) The planning of operational innovation activities on the farm.

- g) The presentation of advantages and disadvantages in the implementation of modern or ecological farming practices in the company.
- h) The anchoring of technological or ecological transformative activities in the company as a project.
- i) Measures to check the suitability of modern or ecological farming practices in the company.

3) Project work

The third part of the examination is in the form of a project work, which is to be prepared as a written, extra-occupational term paper. The scope start and processing time of the project work is determined by the examination board.

- 4) The first part of the examination is oral and should not take longer than 30 minutes in total.
- 5) The second part of the examination is conducted in writing and should not exceed 60 minutes.
- 6) On the basis of the examination performances in the project work, a technical discussion is to be held in which the candidate is to show that he/she can demonstrate the technical connections underlying the project work, justify the course of the project work and present technical problems associated with the project work and their solutions. The technical discussion should not last longer than 15 minutes.

§ 4 Consideration of previous examinations

- 1) The examinee can apply for exemption from the examination in individual areas of action, if he/she has passed a previous examination before a competent authority, a public or state accredited educational institution or before a state examination board whose content requirements correspond to the respective fields of activity.
- 2) A complete exemption is not allowed.

§ 5 Passing the written and oral examinations

- 1) The examination results in the parts stipulated in § 3 must be assessed separately.
- 2) The number of points obtained in the three papers for the oral and written examinations should be summarized into a total score. The final grade is therefore:
 - 15% from the first part of the examination,
 - 25% from the written examination in the second part of the test,
 - 40% of the project work in the third part of the test and
 - 20% of the technical discussion in the third examination.

- 3) The written examination of the second part of the examination must be supplemented by an oral examination if this can be decisive for passing the examination. The oral examination should not last longer than 15 minutes per examination.
- 4) The examination is passed if at least sufficient performance has been achieved in each examination part.
- 5) A certificate is to be issued on passing the examination, which must show the overall examination grade.

§ 6 Retests

- (1) An examination which was not passed can be repeated twice.
- (2) If the candidate has passed individual sections of the examination but has not performed at least adequately in sections in accordance with §3, the parts successfully passed must not be repeated on further application, provided that the candidate has filed for reassessment within two years from the date of the declared result of the failed examination. The assessment of the examination will be made with regard to this factor.

§ 7 Application of other provisions

For all craft and non-craft occupations, the respective training examination regulations apply in their currently valid version.

§ 8 Entry into force

These legal provisions enter into force with their publication.

2. Evaluation in the Qualification Framework and international recognition

2.1 Qualifications Framework “Baltic Sea Region”

A qualifications framework for the Baltic Sea Region was designed under the Project Leonardo “Baltic Education”¹. By means of the European Credit Transfer System of Vocational Education and Training (ECVET), this “BSR-QF” provided the basis for the evaluation of two craft occupations – “carpenter” and “painter”. ECVET is a system which allows to characterize qualification (knowledge, skills and competence) by transferable and accumulable learning units and to assign credit points to the learning outcomes. The BSR-QF and the applied ECVET process for the two named occupations formed the basis for the evaluation of the advanced training program developed “SME executives and HR experts.”

The Maastricht Declaration of 2004, the Lisbon Strategy of 2000 as well as several other European Union initiatives, and in this context specifically dedicated funding to raise the geographical and labour market mobility and to promote lifelong learning, will yield increased employment and economic growth across EU countries. Rapid social, technological and economic changes along with an aging society make lifelong learning a necessity. For that reason, education is a major component to meet and to achieve the ambitious Lisbon goals. Hence, the European Commission has induced to develop a European Qualifications Framework and to establish National Qualifications Frameworks (hereinafter: NQF) by 2010. The modelling of National Qualifications Frameworks lies in the competence of national authorities, whereas the EU-Commission has recommended that the EU Member States implement NQFs. The European Qualifications Framework represents a meta-framework and is considered by the European Commission as crucial in meeting European objectives, set out in the Lisbon Strategy.

The main purpose of a qualifications framework is to improve transparency, quality and comparability of professional and academic qualification levels across differing education systems and European countries. The EQF itself does not constitute a formal recognition of occupational qualifications. A special feature of Europe is the enormous diversity of educational systems. A prerequisite to make this specificity an asset is to foster transparency.

Transparency can be considered as a fundamental prerequisite for the recognition of qualifications, and it improves comparability. Better comparability between countries is a decisive element to increase labor mobility and to ensure permeability of qualifications, whereby permeability constitutes a prerequisite for lifelong learning.

In the near future, qualifications frameworks must meet these criteria with concrete and well-designed concepts. A qualifications framework is an appropriate tool for the development and

¹ Hanse-Parlament, Baltic Education, Hamburg

for classifying qualifications. The European Qualifications Framework was adopted in November 2007.

Under the project “Baltic Education”, constructive and fruitful discussions at Euro-pean and national levels should be encouraged by a “Baltic Sea Region Qualifications Framework” (hereinafter: BSR-QF). This BSR-QF should be regarded as a supplement and contribution to the ongoing debate rather than a substitute for the shaping of National Qualifications Frameworks. The project “Baltic Education” has delivered a sizeable contribution to this strategy.

The Baltic Sea Region (BSR) is an area with a considerable number of different countries. These countries share common problems as they endeavor to cope with the same economic and demographic challenges and concerns. It is essential for this region to further develop vocational training, to improve quality and to establish transparency and recognition models. To solve these complex issues, the BSR-QF provides an orientation, allowing for classifications across the whole qualification range and also serving as a common ground for constructive discussions, conceptual considerations and individual progress.

2.2 Structuring and evaluation

2.21 Introduction

The objective of the Baltic Education Project was to develop, introduce and implement a system for mutual recognition of professional qualifications. This will be achieved by using the European Credit Transfer System of Vocational Education and Training (ECVET).² ECVET is a system that enables describing qualifications by transferable and accumulable learning units (in the form of knowledge, skills and competence) and corresponding allocated credit units.³

ECVET also perfectly complements the European Qualifications Framework.⁴ In its guidelines, the European Commission outlined the overall concept as follows:

- a) focus on learning outcomes expressed in terms of knowledge, skills and competence.
- b) based on a process of qualification.

² EUROPEAN COMMISSION (EC) (2006): European Credit System for Vocational Education and Training (ECVET). A system for the transfer, accumulation and recognition of learning outcomes in Europe. SEC (2006) 1431, Brussels, p. 3

³ EUROPEAN COMMISSION (EC) (2006): European Credit System for Vocational Education and Training (ECVET). A system for the transfer, accumulation and recognition of learning outcomes in Europe. SEC (2006) 1431, Brussels, p. 3

⁴ cf. EUROPEAN COMMISSION (EC) (2006): Implementing the Community Lisbon Programme. Proposal for a recommendation of the European Parliament and of the Council on the establishment of the European Qualifications Framework for lifelong learning. COM (2006) 479 final, 2006/0163 (COD), Brussels.

- c) adapted to the demands of lifelong learning and all learning contexts, on an equal footing.
- d) geared towards the mobility of people.⁵

Further ECVET consultation guidelines and regulations specify:

- a) mobility of people undertaking training.
- b) validation of the outcomes of lifelong learning.
- c) transparency of qualifications.
- d) mutual trust and cooperation between vocational training and education providers in Europe.⁶

The experience and methods of ECVET in the project "Baltic Education", form the basis for the evaluation of the training program developed "Promoting and Upgrading Green Skills in Agriculture" (ProGREEN)"

In a first step, the individual training modules are evaluated according to the principle "25 training hours = 1 credit point". Based on this starting point, in a second step the significance and content of each training module is evaluated by project partners and experts and then the credit points for each module are determined in a group evaluation.

Within the framework of the "Baltic Education" project, a procedure for the mutual international recognition of vocational education and further training qualifications was developed and agreed with all countries bordering the Baltic Sea. Following this agreement, the project developed and agreed a procedure for the recognition of qualifications from all training courses. The following procedure then follows for the recognition of the degrees of all training courses of the project.

- Lecturers/examiner rates the courses by assigning credit points.
- Mutual recognition of completion in the Baltic Sea countries follows upon fulfilment of the following conditions:
 - a) The final exam was passed.
 - b) The assessment of the course has resulted in at least 80 % of the possible credit points shown in the table below (20% margin of tolerance).
 - c) Skills were acquired in all three mandatory modules
- Where they do not yet exist, each of the future participants will receive an EU education passport in which the results are documented.

⁵ EUROPEAN COMMISSION (EC) (2006): European Credit System for Vocational Education and Training (ECVET). A system for the transfer, accumulation and recognition of learning outcomes in Europe. SEC (2006) 1431, Brussels, p. 5

⁶ EUROPEAN COMMISSION (EC) (2006): European Credit System for Vocational Education and Training (ECVET). A system for the transfer, accumulation and recognition of learning outcomes in Europe. SEC (2006) 1431, Brussels, p. 35

2.22 Structuring and evaluation of further vocational training

In the project "Promoting and Upgrading Green Skills in Agriculture" (ProGREEN)" a continuing education program for Farmers has been developed and implemented.

In the training all modules are classified as mandatory, in which knowledge and skills have to be acquired.

With regard to the assignment of the course in the BSR-QF, the classification of both trainings was made in competence level 5 "Experienced qualified professional".

The assessment in the project led to the following conclusions:

Evaluation training "SME executives and HR experts" by credit points system

Course parts	Credit Points
Training module A: Knowledge	2
Training module B: Learning and project implementation phase at the workplace	7
Training module C: Report and Reflection	1
Total	10

2.23 Internationally recognised educational qualification

Upon completion of the training courses and the final examination, the participants acquire the recognised professional further training qualification of "Modern Ecological Farmer".