

METHODOLOGICAL GUIDE TO INTRODUCING AGROECOLOGY TO FARMERS



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CONTENTS

INTRODUCTION	6
THEORY	8
ABOUT ADULT EDUCATION	9
WHO IS AN ADULT LEARNER?	9
SELF-REFLECTION OF THE EDUCATOR	10
REFLECTION UPON THE TARGET GROUP	11
DIFFERENT APPROACHES TO EDUCATIONAL ATTITUDES	13
COMPETENCY-BASED EDUCATION	13
EUROPEAN QUALIFICATION FRAMEWORK	14
EDUCATIONAL GOALS AND OBJECTIVES	15
TRAINING MODEL STRUCTURE	16
FACILITATION SKILLS	18
LEARNING STYLES	20
LIST OF PARTICIPATORY LEARNING TECHNIQUES (METHODS), TIPS AND TRICKS TO ENHANCE THE RECIPROCAL LEARNING PROCESS	23
ICEBREAKERS	24
STAND UP IF YOU	24
ΗΟΤ ΡΟΤΑΤΟ	25
PRESENT YOUR 'PARTNER'	25
LINE UP GAME	26
COURSE EXPECTATION EXERCISE I.	26
COURSE EXPECTATION EXERCISE II.	27
THE LITTLE-KNOWN FACT	27
WORLD CAFÉ METHOD	28
GUIDED FARM WALK	28
EXPLORING ECOLOGICAL PRINCIPLES	29

TRANSECT WALK	29
WORKSHOP EXERCISE FOR PERMACULTURE DESIGNING	31
RICH PICTURE	35
REFRAMING MATRIX	36
EXPEDITE SOIL TESTING	36
DEMONSTRATIVE HANDS-ON METHOD	38
BUSINESS MODEL CANVAS (BMC) WORKSHOP	40
WORKSHOP EXERCISES FOR AGROECOLOGY AND SUSTAINABLE RURAL LIVELIHOODS	44
LIVELIHOOD ASSETS	44
EQUAL ACCESS	44
ROSE TEAM	44
GOAL SETTING	44
WORKSHOP EXERCISES FOR MULTIFUNCTIONAL APPROACH TO FARMING	45
BRAINSTORMING MULTIFUNCTIONALLY	45
KNOW YOUR STRENGTHS	45
ENERGISERS	45
KNOTS OF PEOPLE	45
THE POSITIVE DEVIANT "RAIN DANCE"	46
ZIP, ZAP, BOING	46
THE MESSAGE	47
MIXED WORKSHOP DESIGN	47
PARTICIPATORY MODELLING GAME OF THE FOOD SYSTEM	59
BALL TOSS REVIEW	63



BACKGROUND REPORT FOR AGROECOLOGICAL VOCATIONAL TRAINING

trece

This agroecological situation analysis aims to investigate and describe the current state of agroecology in conceptual definition and practice in five countries in Europe (Austria, Czech Republic, Hungary, Portugal and Romania). It identifies applicable international and national policies as well

as campaigns initiated by numerous non-governmental initiatives and research institutes that impact the adoption of agroecological principles in farming practices. At the training level, it offers a summary of the possibilities for advancing training and education in agroecology.

For whom do we recommend the report?

Policymakers, farmers, practitioners, educators, advisors

Offering extensive teaching material, this handbook accompanies the curricula of the training modules and is comprised of 6 chapters: (1) An overview of agroecology (2) Permaculture farm design (3) Economic strategy and business model (4) Agroecology in action on the farm a) Arable crop production b) Smallscale diversified vegetable production c) Grassland and livestock management (5) Added value creation and marketing (6) Social benefits of agroecology. Agroecological keywords, concepts, terms or acronyms appearing in the chapters are underlined and explained in the glossary.

AGROECOLOGY: INTRODUCTORY HANDBOOK FOR FARMERS

tr @ce

For whom do we recommend the handbook?

Farmers, practitioners, trainers, educators, advisors

The training curriculum summary outlines in detail the learning content, structure, and expected outcomes of a practice-oriented training course, which is comprised of 6 modules: (1) An overview of agroecology (2)

of agroecology.

For whom do we

lum summary?

advisors

Permaculture farm design

(3) Economic strategy and

business model (4) Agroe-

cology in action on the farm

(5) Added value creation and

marketing (6) Social benefits

recommend the curricu-

Trainers, educators, teach-

ers, opinion-leader farmers

looking to be future trainers,



AGROECOLOGICAL VOCATIONAL TRAINING CURRICULUM MODULE SUMMARY

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These short motivational films assist the learning process by documenting model agroecological practices in different European countries or introducing topics found within specific chapters:

The little film icon indicates these short films in both the handbook and the curriculum summary.



METHODOLOGICAL GUIDE TO INTRODUCING AGROECOLOGY TO FARMERS This methodological guide contains methods and effective teaching tools that aim to provide practical expertise for each of the modules of the agroecological vocational training. The aim is to facilitate the knowledge transfer to farmers and learners interested in agroecology.

For whom do we recommend the guide? Trainers, educators, teachers, opinion-leader farmers looking to be future trainers All the books are available in pdf on our website:

https://traece.eu/documents/



INTRODUCTION

About the project

The trAEce project is aimed at providing training tools for farmers and trainers (educators) to adapt their agricultural practices to incorporate agroecological (AE) principles. It is a new initiative that intends to take further the concept considering agroecology as a discipline and practice by pooling together the experience and expertise of 6 prominent institutions from 5 European countries (Hungary, Romania, Austria, Czech Republic and Portugal). This should contribute to the regeneration of agriculture since farming activity based on ecosystems is fundamentally different from industrial production that may be considered unsustainable. Agroecology as a discipline examines agriculture from an ecological point of view, keeping in mind the stability and optimization of the whole agricultural system. Agroecology as a practice, based on traditional farming knowledge, is more forward-looking in terms of sustainability and energy efficiency in the long run. The practice of agroecology encourages farmers to become part of the ecological systems to strengthen and apply in practice the natural processes that are beneficial also for production.



The common feature of all partner institutions is the belief in a holistic approach of AE that can be reflected in practice. However, the implementation of holistic solutions requires a thorough analysis of the situation regarding AE in each partner country. Therefore, each project partner elaborated country-specific situation analysis that assisted to gain a comprehensive view of the level of knowledge and opinion of farmers regarding AE based activities and to identify related political discourse, regulations, actors, practices, networks etc. It contains useful information for those who want to manage their farm based on AE and want to get acquainted with practical solu-

tions. These solutions are the main focus of the AE vocational training that is the main result of the trAEce project team. The training embraces topics that help farmers to design or transform their farms in line with the AE principles. The training with its carefully selected 6 modules (Overview of AE; Permaculture farm design; Economic strategy and business model; AE in action on the farm; Added value creation and marketing; Social benefits) strive for social and environmental sustainability and at the same time keeps the agricultural activity profitable. Each module can be delivered to groups of 15 farmers and multipliable as a series of on-farm sites in different regions of EU countries. The curriculum is accompanied by learning materials including short films and an introductory handbook for farmers. Accordingly, a Methodological Guide for introducing agroecology to farmers designed for opinion leader farmers and educators (teachers or farmers) is an integral part of the project. The Methodological Guide contains methods and tools suitable for different modules of the training with the purpose to facilitate the knowledge transfer towards the farmers and learners.

Moreover, 7 pilot training events for farmers and trainers were organized during which the complete vocational training was tested. The localization mechanism is supported by 3 focus group meetings that provided systematic feedback throughout the project about the relevance and applicability of the outcomes to key stakeholder groups, as well as communication tools. The diversity of participants in other project-related events ensured the multiplication of the project results at the international level and the opportunity to collect feedback.

To sum up, our project vision was to provide tools to farmers and trainers to implement agroecological practice including its social dimension and disseminate this knowledge and experience to reach the wider farming community across Europe.

The purpose of the methodological guide for introducing agroecology to farmers

Being a professional and experienced agroecological farmer does not automatically result in being a perfect presenter or coming with a talent for knowledge transfer. To prevent this situation, we offer this guide to present some basic steps for successful adult educators. This tool does not contain the content – what expert knowledge to teach or transfer, but the way and the technique – how to transfer the knowledge effectively. It describes the strengths and the weakness of the adult learning process. At the same time, it acknowledges that the learning process grows in close partnership with learners, their experiences, and their involvement. This guide thus presents several ways that should ensure smooth dissemination and wide sharing of the desired skills for agroecology to a wider array of audiences. It provides an effective tool on how to deliver practical expertise to future farmers and specialists in agroecology. The aim is also to show the scale of techniques, tips and tricks for transferring the expert agroecological knowledge practically and by participatory means and in compliance with study modules of the trAEce project.

Emphasis is put on the holistic process of gaining knowledge, skills and attitudes together with the farmers and other training participants. Also, the approach is rather participative, focused on observation, experience, dialogue, collaborative work, reflection, active learning, problem-solving learning, real case studies, action-oriented and practical.

The target group of the guide

We discern two general target groups for the guide. The first group is experienced farmers who are not teachers and will share, in the role of adult educator, their knowledge with future agroecologists. The second target group is adult educators/trainers in agroecology who are not primarily farmers but will teach agroecology practically and enthusiastically. Many other target groups of this guide will look for inspiration in adult education and the ways of working with adult learners.

The content of the guide

An effective educational process requires the knowledge of needs and an understanding of how adults learn best. For this purpose, the Guide proposes two parts. In the first part, the reader is given more about the theory of adult learning and about important steps the educator is encouraged to reflect upon before the education process itself. The second part contains a list of 20 methods and techniques for effective learning that can be used when transferring agroecological knowledge. Some of them are rather general, others very practical and based on experience.





THEORY

ABOUT ADULT EDUCATION

Adult education is a lifelong process and answers the reality of constant development and change of social life, the surrounding environment and knowledge. This presupposes that people keep learning to adapt to changes in the outside world. The basic assumption of adult education is that adult learners want to learn voluntarily, they are motivated in self-educating as they want to gain new forms of knowledge, skills, attitudes, or values. Their expectancy is more focused, concretely oriented and the learning should respond to their needs. They look for usefulness that can interconnect with their existing knowledge. The basic function of adult education is to promote the physical, cognitive, and mental development of adult learners and it can gradually lead to an improved society.

WHO IS AN ADULT LEARNER?

Adult learners belong to various categories and backgrounds. They form a heterogeneous group of individuals with different biographies and diversified educational needs. Generally, they belong to the group aiming at developing their abilities, enriching their knowledge, improving their technical or professional qualifications or opening them to new directions and bringing about changes in their attitudes. Adult learners enrol into the education process when they are motivated for this. Stephen Lieb (1991) proposes six factors serving as a source of motivation for adult learning:

- *i)* Social relationship: to make new friends, to meet a need for associations and friendship;
- *ii)* External expectations: to comply with instructions from someone else, to fulfil the expectations or recommendations of someone with formal authority;
- *iii)* Social welfare: to improve the ability to serve mankind, prepare for service to the community, and improve the ability to participate in community work;
- *iv)* Personal advancement: to achieve higher status in a job, secure professional advancement, and stay abreast of competitors;
- v) Escape/Stimulation: to relieve boredom, provide a break in the routine of home or work, and provide a contrast to other exacting details of life;
- *vi)* Cognitive interest: to learn for the sake of learning, seek the knowledge for its own sake, and to satisfy an inquiring mind.¹

At the same time, adults can also learn for the simple purpose of joy and personally meaningful learning without any specific goal in mind.

An American adult educator, Malcolm Shepherd Knowles, influenced the development of a research area called andragogy (that of methods and principles used in adult lifelong education) and he discerned five characteristics of adult learners (Knowles et. al., 1984: 12):

- a) Self-concept: As a person matures his or her self-concept moves from one of being a dependent personality toward one of being a self-directed human being;
- b) Experience: As a person matures, he or she accumulates a growing reservoir of experience that becomes an increasing resource for learning;

¹ Lieb, S. (1991). Principles of Adult Learning. South Mountain Community College from VISION. Retrieved from: Principles of Adult Learning Document | PDF | Adult Education | Learning (scribd.com) [2021-06-10].

- c) Readiness to learn: As a person matures his or her readiness to learn becomes oriented increasingly to the development tasks of his or her social roles;
- d) Orientation to learning: As a person matures his or her time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly his orientation toward learning shifts from one of subject-centeredness to one of problem centredness;
- e) Motivation to learn: As a person matures the motivation to learn is internal.²

SELF-REFLECTION OF THE EDUCATOR

The educator's engagement in reflection is a core component of effective teacher professional development. It helps gain new insights on self, one's limits and strengths, perceptions and abilities, and one's traits of personality. It is a personal tool for educators to observe and evaluate the way they behave in the educational process. Reflective practice improves professional growth and encourages educators to understand their learners and their abilities and needs. It also means to work with humility, admitting mistakes, and planning to overcome challenges. Alexandra Spalding (2019) lists 7 aspects educators can focus on when self-reflecting:

- 1. The ratio of interaction How much are learners responding to the educator and how much they are talking to them? Is there a dialogue between participants or is the talking mainly one-sided?
- 2. Growth vs. fixed mindset Are the educator's qualities unchangeable (fixed mindset) or is he/she open to improving their qualities through effort (growth mindset)? The way an educator responds to their learners can inspire either a fixed or growth mindset. The growth mindset predisposes for greater success in life.
- 3. Consistent corrections Is the educator correcting their learners consistently? He/she should avoid inconsistency; such as stopping a side conversation one day but ignoring it the next, as this will confuse learners and the feeling that the educators are being unfair.
- 4. Opportunities to respond Are the educators giving their learners enough opportunities to respond or to act to what they are learning? Responses can include asking learners to answer questions, promoting the use of practical instruction, or asking learners to discuss what they have learned with their neighbours and in the group.
- 5. Type and level of questions Do the questions they are asking match the method of learning that they want to foster in the group? Are the level of questions and the tasks to perform appropriately for the learner's particular level of learning?
- 6. Instruction vs. non-instructional time The more learners are engaged in learning activities, the more they will learn. The educators should try to keep track of how much time they give to learning activities compared to how much is spent on other transitional things such as handing out resources or direct practical work.
- Educator talks vs. learner talks Depending on the topic they are teaching, decide how much learners should be talking about what they are learning compared with how much you should be talking to them.³

² Knowles, M.S. et al. (1984). Andragogy in action: Applying modern principles of adult education. San Francisco: Jossey-Bass.

³ Spalding, A. (2019). What should you look for when you self-reflect? Retrieved from: What should you look for when you self-reflect? (irisconnect.com) [2021-06-15].

REFLECTION UPON THE TARGET GROUP

Knowledge of the target group is a core point when transferring the proposed knowledge. The target groups' learning requirements are based on their needs and previous knowledge, experiences and their expectations. There are different scales or principles of adult learning based upon comprehension and synthesis of knowledge rather than rote learning. The Canadian Literacy and Learning Network proposes Seven Principles of Adult Learning that helps the educator to realize the goals and expectations of adult learners:

- 1. Adults must want to learn
- 2. Adults will learn only what they feel they need to learn
- 3. Adults learn by doing
- 4. Adult learning focuses on problems and the problems must be realistic
- 5. Experience affects adult learning
- 6. Adult learn best in an informal situation
- 7. Adults want guidance

Remember that each learner is an individual and brings a different history, a different way of responding to and learning from the world, and a different dream for the future. Taking time to learn about the learners as individuals and by getting to know their life context enables the educator to think about their uniqueness.

In a respectful environment, learners feel safe and valued. Giving thoughtful attention to a learner's work demonstrates care and respect. Learners need to feel capable of completing tasks in a manner that meet their needs, they need to feel they can connect successfully with educators and other colleagues and they need to contribute to the group in a significant way. By satisfying these needs they can better experience a sense of belonging, enabling their personal growth.

Next to the previously listed goals and expectations of adult learners, there are also different aspects proposed by Global Learning Partners of what adult learners expect from the learning process:

- Immediacy: Important is the immediate usefulness of what adult learners are learning;
- Respect: Adult learners must feel they and their experiences and knowledge are respected; They are in the position of decision-makers in their learning process they can critically comment;
- Relevance: Adult learners must see the connection of new content with learners' everyday lives and real needs;
- Safety: When the surrounding environment in the adult learning process is unsafe it reduces the capacity for deep thinking; The sense of safety is crucial for gaining new skills, knowledge, competencies and attitudes;
- Engagement: Active engagement involves adult learners' intellect, their feeling, and their physical actions;
- Inclusion: It is important to include all participants in the learning process and provide enough space to express them.⁴

Adult educators should be aware of different types of learners that influence the group climate and the learning process. The Global Learning Partners (2012) developed a list of 10 Types of Learners with tips on how to handle them with respect. These types reflect the experiences of educators with learners in the dynamic of the school classroom, but this typography can be useful in adult learning as well:

⁴ Global Learning Partners. 6 Core Principles for Adult Learning. Retrieved from: GLP, Inc (globallearningpartners.com) [2021-06-10].

- **1. Talkative**. This person loves to talk and has something to say about everything. <u>You can say</u>: "I appreciate your comments, but let's hear from someone else." <u>You can do</u>: Use more group work so everyone gets a chance to talk.
- 2. Hostile. This person enjoys being aggressive and may throw negative phrases or ideas into the group regularly. You can say: "Thank you for your thoughts. What does the group think about this?" You can do this: Talk to the person in private to check if there is an underlying issue you should know about.
- **3.** Silent. This person is quiet and doesn't participate in group discussions. <u>You can say</u>: "I know you have a lot to offer this discussion. It would be great if you can share one of your ideas with the group." <u>You can do this</u>: Use more pair work to increase the person's safety and comfort level. People should always be given the option to "pass" or "opt-out" in the large group.
- 4. Know-it-all. This person thinks they know better than anyone else and has an opinion about everything.
 <u>You can say</u>: "That is one point of view. What do others think?"
 <u>You can do this</u>: Use smaller group or pair work to let everyone talk.
- 5. Class clown. This person has a funny joke or comment for just about everything. <u>You can say</u>: "We all enjoy a little fun. But right now, let's get serious and concentrate on the topic. <u>You can do this</u>: You can talk to the person in private and ask him or her to control the jokes because it can be distracting for others.
- **6. Negative**. This person always sees the negative or gloomy side to everything. <u>You can say</u>: "I understand your point of view. What suggestions do you have to change the situation?" <u>You can do this</u>: Affirm the person's comments but don't let them stay stuck there.
- 7. Personality clashes. This person does not get along well with another person (or you!) and will make negative comments or hurtful remarks at inopportune times. You can say: "I suggest that we keep personalities out of the discussion. Let's get back to the topic."
 You can do this: Whether you are involved, or two learners just dep't are even to even it.

<u>You can do this</u>: Whether you are involved, or two learners just don't see eye-to-eye, it is important to talk privately about the issue and how to resolve it.

- **8. Resistor**. This person enjoys resisting whatever is put before him. <u>You can say</u>: "How about you give it a try and understand that this way of doing things is important for some of your peers." <u>You can do this</u>: Always try to explain what you are doing and why, so learners know it has a reason.
- **9. Helper**. This person enjoys helping others. <u>You can say</u>: "Thank you so much for doing that. This is very helpful." <u>You can do this</u>: Put up a sign-up list of things that you need assistance with and invite people to sign up for each workshop. For example, someone may not mind tidying up after each workshop.
- **10. Resource**. This person enjoys learning and knows tons.
 <u>You can say</u>: "I so appreciate your wealth of knowledge on the topic."
 <u>You can do this</u>: Ask someone in your group to help you start a bulletin board in the hall with information or some other public information space.⁵

⁵ Global Learning Partners (2012). The Art of Facilitation: 10 Types of Learners. Retrieved from: The Art of Facilitation: 10 Types of Learners - Global Learning Partners [2021-06-16].

DIFFERENT APPROACHES TO EDUCATIONAL ATTITUDES

There are several approaches on how to attain and fulfil the learning outcomes. The trAEce project presents two types of them which are Competency-Based Education and the European Qualification Framework of Lifelong Learning. They all present the ultimate purpose of the education process and its importance for fully-fledged life.

Competency-Based Education

Competency-based education presented by Nina Lopez, Susan Patrick and Chris Sturgis (2017) starts with a community's aspirations for learners who can articulate a vision for their futures. They say each community expresses its values and goals in the choices it makes around curriculum, pedagogy and school rituals. This core purpose is shared by districts leading the way in competency-based education. Competency-based structures place an equal emphasis upon lifelong skills such as growth mindset, metacognition, learning how to learn, problem-solving, advocacy, collaboration, creativity and the habits of success as they do upon academic content knowledge and skills.

Competency-based education is designed to help learners process academic knowledge and apply skills to be fully prepared for college, career and life. Grading in competency-based education is designed to communicate learner progress in learning academic skills and content as well as the skill they need to be lifelong learners. A competency-based education system is built upon a growth mindset with a belief that all individuals can learn with the right mix of challenges and supports. Competency-based education is organized to personalize learning and support the development of higher-order skills such as analysis, evaluation and problem-solving.

Working Definition of Competency-based Education (2011)

- Students advance upon demonstrated mastery By advancing upon demonstrated mastery rather than on seat time, students are more engaged and motivated, and educators can direct their efforts to where students need the most help.
- Competencies include explicit, measurable, transferable learning objectives that empower students With clear, transparent learning objectives, students have greater ownership over their education.
- Students receive timely, differentiated support based on their individual learning needs – students receive the support and flexibility they need, when they need them, to learn, thrive and master the competencies they will need to succeed.
- Assessment is meaningful and a positive learning experience for students New systems of assessments give students real-time information on their progress and provide the opportunity to show evidence of higher-order skills, whenever they are ready, rather than at set points in time during the school year.
- Learning outcomes emphasize competencies that include application and creation of knowledge, along with the development of important skills and dispositions – Personalized, competency-based learning models meet each student where they are to build the knowledge, skills and abilities they will need to succeed in post-secondary education, in an ever-changing workplace and civic life.⁶

⁶ Lopez, N., Patrick, S., Sturgis, Ch. (2017). Quality and Equity by Design: Charting the Course for the Next Phase of Competency-Based Education. International Association for K-12 Online Learning. ⁷ Retrieved from: CompetencyWorks-QualityAndEquityByDesign.pdf (aurora-institute.org) [2021-06-16].

Lopez, Patrick and Sturgis propose 16 Quality Design Principles that should be helpful in the planning and execution of competency-based education systems and personalized learning approaches. This educational approach aims mostly at primary and secondary school level students but in adult learning serves as an example of how to develop courses and modules considering the taught AE topics and aspects in the learning process.

Culture refers to the beliefs, percept rituals, routines and rules (both formatinteractions of 1 Equity 2 Learning and Ir 3 Relevance 4 Empowering and 5 Growth Mindse	SIGN PRINCIPLES tions, relationships, attitudes, practices, il and informal) that inform the day-to-day people at a school. Inclusivity
Structure refers to the beliefs, organizational configurations, processes and policies that create the conditions for high-quality learning. In a competency-based system, the structure is designed to support mastery by all students.	TEACHING AND LEARNING DESIGN PRINCIPLESThese principles relate to a theory and practice of teaching and learning that is based on the learning sciences and is shared across a school. It includes approaches to and uses of assessment as a critical ingredient to responsive teaching.
 Demonstrated Mastery 7 Transparency 8 Intentionality and Alignment 9 Consistency and Reliability 10 Flexibility 11 Educators as Learners 12 Continuous Improvement & Organizational Learning 	 13 Based on Learning Sciences 14 Student Agency and Ownership 15 Rigorous Higher-Level Skills 16 Responsive

Pic. 1 - Sixteen Quality Design Principles Source: <u>CompetencyWorks-QualityAndEquityByDesign.pdf(aurora-institute.org)</u>

European Qualification Framework

The European Qualification Framework defines a series of key competencies for lifelong learning. It complies with the principles of the European Pillar of Social Rights that everyone has the right to quality and inclusive education, training and lifelong learning allowing full participation in society and successful transitions in the labour market.

Competences are defined as a combination of knowledge, skills and attitudes, where:

- *a)* knowledge is composed of the facts and figures, concepts, ideas and theories which are already established and support the understanding of a certain area or subject;
- *b)* skills are defined as the ability and capacity to carry out processes and use the existing knowledge to achieve results;
- c) attitudes describe the disposition and mindsets to act or react to ideas, persons or situations.

Key competencies are those which all individuals need for personal fulfilment and development, employability, social inclusion, sustainable lifestyle, successful life in peaceful societies, health-conscious life management and active citizenship. They are developed in a lifelong learning perspective, from early childhood throughout adult life, and through formal, non-formal and informal learning in all contexts, including family, school, workplace, neighbourhood and other communities.

The key competencies are all considered equally important; each of them contributes to a successful life in society. Competences can be applied in many different contexts and a variety of combinations. They overlap and interlock; aspects essential to one domain will support competence in another. Skills such as critical thinking, problem-solving, teamwork, communication and negotiation skills, analytical skills, creativity, and intercultural skills are embedded throughout the key competencies.

The Reference Framework sets out eight key competencies:

(1)Literacy competence, (2)multilingual competence, (3)mathematical competence and competence in science, technology and engineering, (4)digital competence, (5)personal, social and learning to learn competence, (6)citizenship competence, (7)entrepreneurship competence, and (8)cultural awareness and expression competence.⁷

The document then describes more in detail individual competence and the bound with particular life areas, disciplines and curricula. It explains how the educational process should look like and why but it does not present concrete didactic steps to attain it.

EDUCATIONAL GOALS AND OBJECTIVES

Educational goals and objectives should be carried out in compliance with approaches to educational attitudes. Pedagogy generally strives to achieve three main goals:

- cognitive (intellectual);
- affective (expression of feeling, acceptance of opinions, values and attitudes);
- psychomotor (acquiring skills that require integration of mental and muscular activity.

The educational goals in agroecology studies have different depths. Some of them can be acquired on the level of basic understanding while others can be acquired by sustained repetition and mastery by combining theory and experience (deeper insight and usage). This experience is influenced by a wide scale of variables such as climate and geographical area, seasonal change, soil conditions, water management, cultivated plants and animals, consumer trends, local and global trades, surrounding community, etc.

⁷ Council Recommendation on Key Competences for Lifelong Learning. 22 May 2018. ST/9009/2018/ INIT. Retrieved from: EUR-Lex - 32018H0604(01) - EN - EUR-Lex (europa.eu). [2021-07-05].

Finding the balance between theory and everyday skills is very important and should be flexibly arranged according to the needs, experience and group dynamics of learners. We consider the SMART(ER) methodology as an effective tool to ensure the desired educational goals and objectives. Therefore, every particular goal should be:

- **S**pecific & Simple (Strategic)
- **M**easurable (Motivating, Meaningful)
- Ambitious (Agreed, Attainable and Achievable, Action-oriented)
- **R**ealistic (Reasonable, Relevant, Results-based)
- **T**ime-bound (Time-limited, Trackable)

Some authors add two more aspects:

- **E**valuated (Exciting)
- **R**eviewed (Recognize mastery, Recorded)

TRAINING MODEL STRUCTURE

This Methodological Guide offers the traditional training model structure containing Introduction, Body and Conclusion that makes the learning process transparent. Each part has its logic and content through which it guides the learners comfortably, and can interact with the group dynamics and individual needs arising during the training course. The educator should be empathetic and attentive to learners' experiences and inputs.

The design of the training should be considered according to the length, target group, size of the group, needs of the group, environment, additional tools and machinery and whether the training is theory-oriented, practice-oriented, experience-oriented, or action-oriented.

Introduction

This is the crucial moment to grab participants' interest, establish credibility, preview the main ideas, and clarify the learning objectives and timeframe. The proposed GRACE approach should be helpful to structure the introduction:

Greetings: greet participants, talk about your experience and motivation for this topic, conduct a get-to-know-each-other icebreaker, ask participants to suggest rules of collaboration and put them on a flipchart (e.g., every idea counts; no mobile phones; raise your hands for questions; mutual respect).

Attention: grab participants' attention by telling a captivating story, asking a provoking question, stating a shocking statistic, using a powerful quote, showing a gripping photo, using a creative visual aid, playing a short video.

Content outline: present the learning objectives and key learning points. "By the end of this session/training you will be able to ...". Use active verbs rather than passive verbs, explain how the learning will be useful to participants, including how they can apply it in their work, assess participants' prior knowledge and expectations.

Elaborate: present the agenda highlighting the training benefits, set up criteria for passing the final exam or test.

Body

Enter into the topics, with reasons, examples, evidence, advantages and disadvantages, providing solutions to problems and related actions. Top tips:

- Maintain a conducive working/learning atmosphere: ask questions, maintain vocal quality, touch with humour, give real-life examples, pause regularly, get participants involved;
- Ensure proper logical transition to the next topic;
- Give participants enough time to properly practice and apply knowledge: practical individual or group work;
- Ensure full participation and motivate your audience: appeal to different learning styles, encourage the sharing of ideas and opinions;
- Connect the topic with prior knowledge: ask participants to share their experience;
- Stay on time and track: respect the logical flow of the session, cover the curriculum, ask for a timekeeper when doing exercises;
- Don't forget to accommodate all learning styles;
- Give space for participants' feedback to you and other participants to better understand learning progress and meeting of expectations: make sure participants follow the basic rules of feedback: give positive and constructive feedback that does not put anyone down or hurt their feelings, do not judge another person's behaviour – this is a safe space for learning, accept and learn from the feedback you receive and use it as a constructive and helpful tool;
- Check regularly for understanding to monitor learning progress: agree/disagree corner pose questions or make a statement. Participants move to the appropriate corner of the room to indicate their response. Think-pair-share: participants think about the question, pair with the person next to them to compare thoughts, then share with the group.

Conclusion

Provide closure, summarise main points, appeal for action, inspire, answer questions and handle objections.

Summarize main points of the training/workshop, reconfirm the benefits of the training/ workshop, connect with the introduction.

Assess post knowledge with the most appropriate tool according to the type of training/ workshop.

Get participants' training/workshop feedback, for example, reflection - participants write down what they have learnt. Check as a group whether their learning links to the expectations they gave at the beginning of the session; quiz (Kahoot.com); questioning, plenary discussion, happy and sad face.

Motivate and inspire participants to transfer knowledge in their workplace/daily life: use for example personal stories, case studies, role models.

As training/workshop closure, confirm any action points/next steps, close the training/workshop and say goodbye.

Workshop preparation of the educator

- a) Before the workshop: review the full training (teachers' book and other study materials, e.g., articles, reviews, newspaper articles, web pages, videos, and the field and other necessary theoretical or practical tools;
- b) Select the range of participatory facilitation techniques, make a choice from the below listed participatory methods and techniques, follow the tips and tricks suitable for your content and audience. Remember to cover different learning styles and be flexible following your learners;
- C) Prepare the training schedule and materials, allocating plenty of time for each activity.

On the day of the workshop

- 1. Arrive at least 30 minutes before the scheduled start of the workshop;
- Prepare the learning environment (organise the seating: groups, U-shape, rows, fishbone, conference table, circle etc.; Display visual aids (i.e., posters, photos, diagrams, flip-charts showing agenda/learning objectives); Check projector, computer, presentation, internet connection, audio and video if needed; Print and prepare handouts in a logical order;
- 3. Greet participants individually as they arrive.

FACILITATION SKILLS

The next paragraphs give tips for educators on how to make the learning process smooth.

The educator in the role of facilitator:

- Orients the group towards the generation of knowledge. That is, he/she helps the group to make lists, categorize issues or strengths, and develop solutions to problems;
- Make sure that all participants are safe from negative judgements by others. For example, the facilitator asks participants not to criticize personalities;
- Helps people express themselves well. For example, if a participant is unclear, the facilitator will ask questions that help clarify the participant's position;
- Summarizes and reflects the group what the individuals and group collectively are saying. For example, the facilitator records participants' suggestions on a flip chart or makes a verbal summary of what several participants have said;
- Understanding the "group energy" and being flexible in dealing with it. For example, if a group is excited about an idea or ready to offer some solutions the facilitator may allow the "group energy" to lead the way, even though something different might have been planned.

Educator can motivate learners by:

- Showing enthusiasm for what he/she is teaching
- Using concrete examples from the local context
- Showing his/her curiosity and interest in learning
- Assessing the needs of learners for various kinds of information

- Finding ways of rewarding all learners for hard work
- Providing opportunities for learners to use learning in their daily lives
- Asking learners to apply new learning to local situations and problems
- Using a variety of instructions approaches to collect information
- Providing learners with a reasonable degree of control over their learning
- Creating positive expectations by specifying clear instructional objectives
- Build confidence by providing opportunities for students to attain intended outcomes

A good educator:

- Guides the discussion
- Provides good questions
- Promotes dialogue
- Does not necessarily promote own ideas or opinions, although they can be offered where it is appropriate
- Is interested in having participants solve problems rather than providing solutions to problems
- Offers strategies for carrying on in group work
- Ensures that participants are safe from personal attacks
- Tries to show ways that all can benefit
- Provides opportunities for all to participate

Jeanette Romkema posts on the website of the Global Learning Partners facilitation skills that go beyond technique. They are more about "being" than "doing" and are based on her long-term education experience.

Authenticity. Being genuine with the learners is critical for building a relationship of trust in the learning event. Listen deeply, ask questions with real curiosity, and acknowledge when something they say gives you a new insight. Be honest about your questions, concerns and enthusiasm for the topic.

Autonomy. Adults' lives are their own and as such, they need to have full ownership of their decisions. Although as a facilitator you may create the structure for participants to set goals, frame plans and discuss accountability, the learners are the owners of those goals, plans and accountability. Autonomy reinforces ownership. Create space for people to decide. Celebrate when they ask for autonomy instead of clearer instructions. It is a sign of ownership

Brevity. Only share the right information for the exact moment with your specific audience. Learning events can fail due to too much content – "less is more!" A few ways to check what you may need to adapt in your workshop design are:

- *How many* people *are coming? Who are they?*
- Why are they coming? What do they need?
- What is your vision for change as a result of this 1-hour workshop? What is realistic?
- How much time do you have?
- What kind of space will you be in? How are people accustomed to using this space?

Get out of the way of learning. After setting a learning task or activity we often want to hear how the discussion is going or see how the work is unfolding. Don't. We need to get out of the way so learning can happen – it is through the struggle, decision-making, and debate that learners engage and personalize the content being learned.

Personalize. As much as possible, refer to examples and stories shared as well as topics and themes of interest to the group. New learning needs to hook into existing knowledge and experience, so get to know your audience at every opportunity: phone, email, breaks, conversations, check-ins, and the like.

Silence. So often we say too much. Don't be afraid to sit in silence or wait 5 seconds before adding something or redirecting a question – people need time to think.

Purpose. Be ready, at any time, to reconnect the learning to the purpose for including it now as you understand it. When you own it, they can own it too.⁸

LEARNING STYLES

The last section of the part about the theory of the learning process of the Methodological Guide is dedicated to different learning styles. The assumption is that people learn better when taught their preferred learning style. Rasool Somji⁹ discerns in his contribution 8 different learning styles and offers strategies supporting individual styles.

1. Visual learners

Visual learners retain information more effectively when visual aids are used, such as pictures, images, film clips, colours and diagrams. Better understanding is provided by presenting visual data in maps, charts and graphs.

Strategies for teaching visual learners:

- Use visual aids most other learners will benefit from visual elements as well
- Provide visual analogies and metaphors to help with visual imagery
- Substitute words for colours and pictures
- Colour or emphasise key points in a text
- Avoid using large blocks of text
- Include exercises where the learners create mind maps
- Use storytelling to help with visualisation
- Colour-code and organise any materials you provide as this helps organise things in their minds
- Get students to visualise using phrases, such as, "Picture This", "Let's see what you would do"

2. Aural learners

Aural learners respond to sound, music, recordings, rhymes, rhythms etc. They remember conversations well and music causes an emotional response in them.

Strategies for teaching aural learners:

- Encourage your learners to participate in discussions
- If reading is required, suggest audiobooks if appropriate
- Allow recordings of your training sessions or make your lessons accessible online
- Get students to pair up and explain concepts to each other
- Encourage problem-solving aloud
- Suggest rereading their notes back to themselves when they get home

3. Verbal learners

Verbal learners favour using words and linguistic skills - in speech and in writing, such as, reading, writing, listening or speaking. They like word games, puns and rhymes etc. and are often strong public speakers.

⁸ Romkema, J. (2016)- Facilitation for Real Ownership. Retrieved from: Facilitation for Real Ownership - Global Learning Partners [2021-07-05].

Strategies for teaching verbal learners:

- Use verbal teaching and writing activities
- Ask them to discuss or present
- Use acronyms or mnemonic devices
- Ask them to teach members of the course certain material
- Incorporate quizzes into your lessons
- Show them or provide them with lists of keywords

Providing these learners with a combination of information in a variety of verbal ways can assist their learning, for example, they may initially read about a concept, afterwards, they listen to an audio to support what has been read, then they write notes and finally they partner up with someone and discuss the topic.

4. Social learners

Social learners process information by interacting with and relating to others. They enjoy working with others and are often strong leaders.

Strategies for teaching social learners:

- Be inquisitive and ask them what they think about a concept/topic/idea
- Ask them to bounce ideas off of each other and compare their ideas with others
- Allow them to discuss and share stories
- Include group work
- Engage in a role-play

5. Logical learners

Logical learners favour using logic and reasoning. They like to classify and categorise information and solve problems with numbers. Logical learners are especially good at analysing cause and effect relationships.

Strategies for teaching logical learners:

- Provide the learners with problem-solving tasks
- Challenge them to work things out for themselves
- Ask them to interpret abstract visual information
- Include critical thinking exercises
- Provide statistics and facts
- Ask them to suggest conclusions after providing them with evidence

6. Physical and tactile learners

Practical learners process information effectively when they use their bodies and when they are doing something. They put their learning into practice.

Strategies for teaching physical and tactile learners:

- Use physical exercises and provide hands-on experiences
- Use exercises where they are standing and walking
- Include activities where they use a pen and paper to map out their thoughts and problem-solve because writing is a physical exercise
- Find a venue that provides these learners with large spaces so they can write and draw
- Get them to interact with physical objects or solve puzzles

- Direct practical work
- Provide real-life examples, such as case studies
- Suggest reviewing their notes whilst they engage in physical activity
- When you are asking them to visualise, explain the sensations that would be felt, such as "The wind was forcibly hitting against the left side of my body"

7. Solitary learners

Solitary learners like to work and learn by themselves and prefer self-study. They may come across as shy or cold as they keep to themselves. If you get solitary learners feeling comfortable during some of the training, they are more likely to speak up during presentations or group work.

Strategies for teaching solitary learners:

- Ask questions so you know what they are thinking and how they are feeling
- Provide individual problem-solving exercises
- Explain why the lesson material is important as solitary learners are often interested in outcomes
- Suggest links between what they have previously learned/should know and new concepts

8. Naturalist learners

Naturalist learners process information by working with and experiencing nature. They learn by finding patterns in nature and using scientific logic for understanding.

Strategies for teaching naturalist learners:

- Include experiments in your lessons
- Get them to imagine that what you are teaching is a new ecosystem that they can understand by finding patterns. This will help them link concepts together
- Have exercises where they can identify and classify
- Use examples linking to daily life, people or nature
- Provide observational data, such as case studies⁹

⁹Somji, R. (2018). Teaching Strategies for the 8 Different Learning Styles. Virtual Speech Glog. Retrieved from: Teaching Strategies for the 8 Different Learning Styles (virtualspeech.com) [2021-07-05].

LIST OF PARTICIPATORY LEARNING TECHNIQUES (METHODS)

TIPS AND TRICKS TO ENHANCE THE RECIPROCAL LEARNING PROCESS

ICEBREAKERS

Participants often enter a workshop as strangers and/or insecure about what will happen during the workshop. Right from the beginning of the session it is important to take some time to allow participants to get to know one another, to get to know the facilitator(s) and to create a sense of team working and camaraderie.

When to use:

- Help participants get to know each other and become comfortable together at the beginning of a workshop;
- Help energise participants at the beginning of a new stage of a workshop;
- Encourage team working and creative problem solving.

Icebreaker 1 - Stand up if you ...

This is a useful opening exercise. As the facilitator you can ask a series of fun, general questions or some more specific questions relevant to the workshop. This way as a facilitator you will get a snapshot of existing experience of the workshop participants.

Equipment: No materials need to be prepared for this activity. The facilitator needs to think about a list of questions before running the exercise.

These can be:

General questions - to get the participants laughing and offering a little bit of information about themselves. Start by asking silly questions to break the ice like "Stand up if you wear white socks" and progressively ask more serious questions that you feel might create human bonding and finally questions related to the topic so participants can situate themselves within the group.

Time demand: This is a fairly quick exercise or it can take more time, as considered needed to create connections among participants. The time needed will be determined by the number of questions that are asked.

Description: Ask questions to the participants using the following opening words: "Stand up if you ..."

For example: Stand up if you ...

- ... live in the countryside;
- ... have had coffee yet;
- ... have more than one book on your bed table.

It is best if each question is a little more risky than the last. But remember to make sure that the questions are culturally and gender appropriate and do not offend any of the participants. You can also design questions to bring out participants' talents and highlight diversity and/ or common characteristics of participants' existing knowledge.

For example: Stand up if you ...

- ... can speak more than one/two/three languages;
- ... can cook (name a favourite local dish);
- ... can dance (name a local dance).

You can also use questions that will tell you what prior experience people have in the areas that the course will cover:

For example: Stand up if you ...

- ... grow your own vegetables;
- ... raise chickens, cows or other animals;
- ... make money from your vegetables or animals;
- ... use compost in your garden;
- ... want to learn how to make more money with good working conditions.

Variation #1: One variation is standing up in a circle and whoever agrees with the question goes to the centre, those who are unsure can stand in between the initial circle and the centre. In this way people see who is where. Finish the exercise giving the opportunity to the participants of asking two or three questions.

Variation #2: Another variation is to open the question using the following words: "Have you ever...?". You can use a mix of fun questions as well as questions relating to the workshop material.

For example: Have you ever ...

- ... climbed to the highest point in your country?
- ... been displaced from a place where you lived?
- ... sung karaoke?
- ... gone without a shower for more than 2 days?
- ... been to a workshop?
- ... found it difficult to find drinking water for your family?
- ... used organic fertilizer?

This should be a quick, fun activity to help the participants laugh and help them to feel comfortable.

Icebreaker 2 - Hot potato

Very simple and short exercise to quickly get basic information about the people in the room.

Equipment: A potato or a similar object

Time demand: 5 to 10 mins

Description: The facilitator holds an object, preferably a potato, and warns participants that the potato is very hot. He/she then exemplifies the game by introducing him/herself quickly (name, place of origin, any other info he/she finds relevant) and passing the hot potato to the next person. The process repeats until everyone in the group is introduced.

Icebreaker 3 - Present your 'partner'

Equipment: -

Time demand: 10-15 mins (depending on the number of participants)

When to use: Suitable at the beginning of a new course

Description: Participants divide into pairs. Each member of a pair then has one minute (or 90 seconds) to present him/herself to the other person and say why he/she is participating in the course. The other members of the pairs then take turns in presenting their 'partner', in one phrase, highlighting the key information: name, one or two key facts about the person, motivation for the course. After all, have been presented, the second member of each pair presents him/herself to the other person, and they are then presented as above by this person.

Tips and tricks: The trainer can vary the information that he/she wishes for participants to share with their `partners'.

Suggested topics for use: This exercise is particularly useful at the start of a new course.

Icebreaker 4 -Line up game

Equipment: large open space, list of criteria/questions

Time demand: ca. 10-15 mins (depending on the number of questions)

When to use: Suitable at the beginning of a new course

Description: Participants are asked to line up in lines, organising themselves without any help. The line is formed by certain criteria (e.g., height from smallest to tallest; eyes colour; birthdays, from January to December; alphabetical first names from A to Z; anything else the facilitator can think up). A bigger group (with more than 10 people) can be split into smaller ones that are challenged to compete with one another (i.e., to complete the task first). The Line-Up game works especially well with groups of people who don't know each other. This icebreaker promotes communication and team collaboration activity and also can help to detect natural leader figures.

Tips and tricks: Since the facilitator does not give hints to the participants as to how to organize themselves, the tricky part of this activity is the establishment of leadership in a group of people who don't know each other. If no one starts to make leadership decisions, it will be very difficult for the participants to line up. The opposite (where too many people with different leadership strategies step forward) can also be problematic by threatening cohesion.

Suggested topics for use: Usable as an icebreaker for all topics

Icebreaker 5 - Course expectation exercise I.

Equipment: Pens, papers

Time demand: 15-20 mins

When to use: Suitable at the beginning of a new course/ module

Description: All participants first individually write down three expectations they have for the course or module. After this, the participants, divided into small groups of 3-5 people, discuss the individual answers to reach a consensus on their group's top 3-5 expectations. Then each group reports to others. In addition to providing useful information to the organisers, this simple icebreaker also encourages participants' openness.

Tips and tricks: Be available and encourage participants to share their thoughts about the course.

Suggested topics for use: This exercise can be applied in all modules.

Icebreaker 6 - Course expectation exercise II.

Equipment: Pictures that are not related to the topic of the module

Time demand: 15-20 mins

When to use: Suitable at the beginning of a new course/ module

Description: There are a lot of pictures on a table. All of the participants have to choose two of them: one which describes his/her attitude to the topic and another which describes how he/she is expected to relate to the topic at the end of the module. Everybody will explain their pictures. In the case of a larger group, smaller groups can also be formed.

Tips and tricks: The effect is better if the pictures are not directly connected to the topic of the module/entire course (e.g., animals, landscapes, vehicles, buildings).

Suggested topics for use: This exercise can be applied to all modules.

Icebreaker 7 - The little-known fact

Equipment: Pens, stickers, stickers or papers with printed names of the participants, flipchart

Time demand: 15-20 mins (depends on the number of participants)

When to use: Suitable at the beginning of a new course/ module

Description: All participants briefly introduce themselves and place stickers with their name on the flipchart (or just put a paper with their name on the table). After this, each participant writes a less obvious fact about themselves on the sticker. The stickers are shuffled and everyone draws one, reads it and attaches it to the sticker/paper with the name to which it probably belongs (one name - one sticker). To avoid drawing one's little-known fact, it is possible to divide participants into two groups and then participants from group A draw stickers of group B and vice versa. During the last part of the exercise, when all stickers are connected with names, the first participant reads the fact under his/her name and if it is not attached correctly, he asks the real owner of the fact to take this sticker and affix it under his name. This is done (participants take turns) until all the facts have been assigned correctly. Exercise helps to create a friendly and relaxed atmosphere.

Tips and tricks: The little-known facts could be connected with agroecology or replaced by "How I first time met agroecology" facts, but sometimes this can decrease the fun.

Suggested topics for use: This exercise can be applied in all modules.

WORLD CAFÉ METHOD

Equipment: Coloured pens, big paper sheets (resembling tablecloths in restaurants), tables in the number of the groups, chairs in the number of the participants, optional: beverages on the table

Time demand: Variable but at least 1, 30 hours

When to use: To facilitate group work, to collect the thoughts a group has over topics already known

Description: The facilitator directs the process starting by highlighting the initial purpose of the event, in terms of a knowledge/action gap that is considered relevant by the participants. One or more questions are formulated to be answered through this method

The big group is divided in small groups, each in a different table. Discussions take place in multiple rounds of 20-30 minutes. In each table there are specific question(s) and participants are encouraged to use pens and the big paper sheet to draw, scheme or write the main notes taken from that discussion. In each round a different group sits in that table and is hosted by one person who resumes the previous discussions, so that the group can start from the place where the previous group left and discussions and get cross-fertilised with ideas from other tables. After the number of rounds equivalent to the number of tables, so that each group rotates through all tables, each host presents the main ideas of that table in a plenary session. In the end, the facilitator facilitates the wrap-up and follow-up possibilities.

Tips and tricks: Create an informal café setting in small table groups to create a relaxed ambiance inviting free flow conversations around a topic; use it when the subject is meaningful for the participants and there is information in each participant a group wants to know - not a method to introduce new information, since this method is based on the principle that people like to exchange ideas about topics they care about. The initial question(s) should be phrased in open ended and positive format to facilitate a discussion to build on.

Suggested topics for use: This exercise can be applied in all modules but is not specifically useful for familiarisation with permaculture farm design module (module 2).

GUIDED FARM WALK

Equipment: -

Time demand: 30 mins

When to use: To demonstrate principles, techniques or best practices in real life conditions.

Description: Participants are invited to go for a farm walk with facilitated discussion. The host farmer will conduct the guided walk, while the facilitator will ask questions and also motivate participants to start a conversation around a specific topic e.g., adaptability of a technique etc.).

Tips and tricks: It is worth using this session at times when participants are getting tired of listening e.g.: after a longer morning presentation or after lunch, as on one hand it is moving and outside activity but also because most farmers like to learn from what they see in the practice.

Suggested to use for topics: To demonstrate principles, techniques or best practices in real life conditions. Case studies can be presented for the participants, this exercise is suggested for permaculture farm design module (module 2), but can be used in agroecology in action on the farm (module 4) as well.

EXPLORING ECOLOGICAL PRINCIPLES

Equipment: Forest patch, preferably as natural as possible (various tree and plant species)

Time demand: 20-30 mins

When to use: To demonstrate ecological principles

Description: Participants are invited to go for a walk in the forest and to observe patterns and principles guiding the life of a forest ecosystem. They have around 15 mins to carry out that observation on their own.

Tips and tricks: They can bring back things which remind them on the principle they explored (e.g., leaves of climbing plant, or piece of a dead tree to present how nutrient cycle works)

Suggested to use for topics: To explore ecological principles that are guiding ecosystem functioning, this exercise is suggested for permaculture farm design module (module 2), but can be used in overview of agroecology (module 1) as well.

TRANSECT WALK

Equipment: Site with enough space and natural assets, observation sheet with list of elements to observe for participants (observation sheet is at the end of the exercise summary)

Time demand: 75 mins

When to use: To practice permaculture site observation

Description: During the session participants are sent to wonder around the site to have a feeling of the site also to feel connectedness (also to practice sit spot) that would take 10 mins- then they re-join and a site observation sheet is given for everyone, also a base map of the place and participants are sent around for another 10 mins to observe and record elements on the site,- this two tasks take 20 mins so in the rest 55 mins (but at least 45) participants go around on the site together with the tutor and look at specific ecological themes: soil, water, biodiversity, habitats, plants on the site, specialities of the site, landscape and topography of the site, climate, zones and sectors.

Tips and tricks: There is no time at this point to do any measurements, or tests except to have a look at soil by digging a sample with spade. It is nice when the hosting farmer joins the group for the last minutes and stops at some points to discuss selected topics.

Suggested to use for topics: Useful method to practice observation skills. This exercise is suggested for permaculture farm design module (module 2).

OBSERVATION SHEET template

Instruction: First go around on the site and just discover it without conscious, directed/focused observation. Try to feel the site without all your senses, the best is if you choose a spot on the site and stay there a few minutes, close your eyes and just relax and embrace that you can sense (the smells, the sounds etc.)

After that you can start the direct observation of the site.

Make your observations in the following order:

Elements on the site:

- What plants and trees are growing on the site: on the land and in any bodies of water? Note any fungi you find too.
- What habitats can be found on the site? Are there any biodiversity hotspots on the site?
- What animals (domesticated and wild mammals, birds, insects, fish etc.) are using the site? Look for any signs of their activities. Don't forget about humans either.
- What structures are there (e.g., buildings, greenhouse, shed, paving, pond, dam, terracing, wind turbine pole etc.)? What condition are they in? Are they all being used to their full potential? Any archaeological or sacred sites?
- What tools are being used here (e.g., wind turbine, pole lathe, washing line etc.)?
- What events take place here (natural: floods, frost, fire etc.)?

Access points and routes on the site:

- Condition and direction, materials used, width of paths/roads/gateways etc.
- Boundaries look at the borders around the farm and assess their state.
- Where are the borders? Is there any physical border like fence, or hedge around? What is its' condition?
- Water assess all forms of water on the site (wells, natural water bodies, other built water bodies, rainwater harvesting, waste water treatment on the site, storage of water).
- Soil look at the soil, determine its type, colour and assess its state, quality, soil life, soil health, vegetation.
- Topography describe slopes and contour lines, deepest and highest points of the site.
- Microclimates on the site- describe any microclimate due to built structures, vegetation, water or soil conditions or topographic features that you have observed before. Indicate those spots on the map (e.g., frost pockets, shady or sunny spots, temporary wetlands etc.).
- Sectors on the site determine the different incoming energies and external impact on the site (prevailing wind, water-frost, sunshine, outer unpleasant impacts (smell, pollution etc.), danger (game, fire, human impact etc.).
- Zones on the site assess the zones from zone 1 to zone 5 on the site what are the main elements/activities in the respective zones.

Landscape:

- How the landscape around the farm looks like? (e.g.: intensive agricultural, arable landscape or mountains with forests etc.).
- Is the farm connected to the landscape? Are there any ecological corridors (e.g., tree lines, water channels etc.)? Does the farm fit well into the landscape (e.g., the buildings, the parcels etc.)? Does the farm contribute to a mosaic landscape with various habitats?
- What are the major observable consequences of geographic forces that have shaped the landscape?
- What are the most obvious human impacts on the natural resources and current land uses in the landscape?
- What features of the landscape appear especially valuable to provide ecosystem services?
- How is the landscape designed or managed to promote agricultural productivity? ... to preserve biodiversity? ... to provide resilience and stability to agriculture?

WORKSHOP EXERCISE FOR PERMACULTURE DESIGNING

Equipment: 4-5 tables (groups of 3-5 persons), large paper sheets, pens or pencils, case study cards

Time demand: 80-90 mins

When to use: To practice permaculture designing

Description: All the teams design for the same site (either a theoretical model site, either a concrete site where they are) but design tasks would be different for every team. At the beginning the facilitator describes the method, the site and the tasks/design tools also separates participants into groups of 3-5 persons, and gives a large paper sheet and pens for each group. (12-15 mins). Proposed design tools for the exercise: zoning-sectoring; functions, subsystems/strategies, elements analysis; input-output analysis; McHarg's exclusion method. Groups are given 10 mins to work with each design tool (38-40 mins) and an extra 10 mins to finalise the concept (final design). At the end groups are given 5 mins for each group to present the design they have been working on.

Tips and tricks: The exact time slots depend on how many design tools and groups are in the session, preferably 3-4 groups and the same number of design tools.

Suggested to use for topics: To explore and practice Permaculture Design process and selected Design Tools, this exercise is developed for permaculture farm design module (module 2).

Model case study for the exercise:

Site features:

- Location: North Hungary, Börzsöny Mountains (highest mountain around is 6 km away and almost 1000 m high)
- Altitude: 270-280 m
- Altogether ~ 7 hectares of land

- Climate: temperate climate (late frosts can be expected, less severely affected by summer droughts than other parts of the country), average annual precipitation: 700 mm
- Conditions: there is a stream (1,5 m wide) bordering from W. Village is situated to E-SE, between the village and the site there is a tourist house hosting sometimes 50 people, who are very noisy, loud music etc., games are coming to the site from northern bordering forest and destroys any plantation, prevailing wind from N, NW. Many newcomers move to the village, and the neighbouring lands in the direction of village are likely to be lands for building sites (family houses). In the past the village was famous for raspberry and strawberry production. The next hillside (to NE) was the grape growing area of the village. More and more tourists visit the village and local area, hiking in the mountains in the vicinity, the local major is very progressive, open to organic farming and ecological initiatives, there is an active local community, only very few people have no jobs, but most people have to travel to work, Budapest the capital city is 50 km away.
- The whole area is part of Hungarian National Park (Duna-Ipoly National Park).

Design challenge/aim:

- complex agroecological permaculture farm
- family farm (with 1-2 employees if needed), agricultural activity
- main idea for production type:

1st team: fruit production and processing 2nd team: small-scale (0,5-1 ha) market gardening 3rd team: extensive pasture based grazing system for meat (sheep or beef) 4th team: cattle for milk and processing

But any other idea is welcome and can be integrated (keep in mind you have to design a complex farm, the above are only the main focuses).

Tasks:

- 1. Zoning and sectoring: draw up the base map of the site and indicate the zones (intensity of use) from 1 till 5 and also the sectors (external impacts) and interpret it in the view of designed project.
- 2. Functions, subsystems/strategies, elements: determine a list of elements which is needed on the site then determine the desired functions of the designed system and align strategies/subsystems and elements to the respective functions.
- 3. Input-output analysis: list the elements on the left side of your sheet and then align the needs (required inputs) and products (output) of the respective element. At the end think about circularities and connections between the elements.
- 4. McHarg's exclusion method: it turns out that the farming family loves horse riding. How would you integrate the horses in the system? Where would you place the horse stall? Let's try your best!

In the last time slot, draw up the designed farm to your sheet (just a quick draft!) and explain for the others what, how and why your group did!

Maps: Location of the site in Hungary:



Site map:





Topography:



RICH PICTURE

Equipment: Pencils, papers, or software for simple painting

Time demands: 5-15 mins

When to use: Usually suitable for the opening of the new topic, at the beginning of the course/lecture/block/chapter

Description: The Rich picture is the method, where the participants (each of them independently) try to describe an object, process, or activity without the use of the words. It is suitable for most topics, the principle is to draw or paint, but not to write the letters and words. An example of the topic/question could be e.g., "what is agroecology (for you)?". After this, participants have time to draw/paint whatever comes to their minds concerning agroecology. After the time limit, participants present their rich pictures and there is the possibility to work with them further (e.g., to quantify the most commonly mentioned points, divide the displayed components into thematic groups, etc.).

The method allows participants to change the way they think about an issue and to avoid the use of phrases.

Tips and tricks: Motivate the participants to not be afraid to create and present their pictures – "This is not a painting course for artists!".

Suggested topics for use: This exercise can be applied in all modules.

Don't show examples of Rich pictures in advance – this could lead to almost identical rich pictures with the same elements and suppress innovative and original approaches.



Pic. 2 - Rich picture of marketing (author: Monika Čermáková, USB)



Pic. 3 - Rich picture of a farm (product/resource) cycle (author: Monika Čermáková, USB)



Pic. 4-5 - Example of Rich picture of agroecology (Agroecological Training in Palmela, Portugal, October 2021) Source: Júlia Csibi



REFRAMING MATRIX

Equipment: Pen and paper

Time demand: 5-15 mins

When to use: This technique is useful when it is needed to look at a problem from another perspective. A new view can help to come up with appropriate and more creative solutions and outcomes.

Description: The technique is based on the fact that different people with different experiences will likely approach problems in different ways. The first step is to draw a simple four-square grid with a space in the middle with the defined problem. In the second step, decide on four different perspectives to address the problem: Product perspective, Planning perspective, Potential perspective, People perspective when solving a problem. Useful is a professional approach to – the problem is viewed from the perspective of different specialists or stakeholders. For the third step participants brainstorm the factors related to a problem from each perspective.

When the matrix is completed a better understanding of a problem can generate more solutions. The outcome is a range of different ways to find more causes and solutions.

Fig. 1 – Reframing Matrix

<section-header>HOW TO SELL AGROECOLOGY?Product perspectiveAgroecological products have no attractive design
the origin of the products is not well explained
the products are not accessible in normal marketsPlaning perspectiveThe mainstram market does not know the agroecological products
the market strategy does not support these productsPotential perspectiveMore conventional farmers will adapt the agroecology models
better dissemination of beneficials of agroecologyAgroecological products are too expensive
the customers do not understand the context of
agroecological products

Tips and tricks: Motivate the participants to develop nutty thoughts. Every thought counts.

Suggested topics for use: This exercise can be applied in all modules.

EXPEDITE SOIL TESTING

Equipment: A soil penetrator, it can be a long metal rod; Preferably a spade but a normal shovel works as well; A plate; A recipient with water; A knife to help open the soil, observe its properties, and assess soil compaction.

Time demand: Varies depending on the number of sites observed and the time spent on each site. To properly assess all that soil has to show, at least 30 minutes per site.

When to use: The purpose of this method is to teach participants how to expedite assess the health of their soil, while understanding the importance and benefits of a healthy soil. This activity should be done during a site visit and after a theoretical introduction to soil health concepts.

Description: The activity should start with a small exercise of tuning to the importance of soil health. Facilitators can start by asking the group:

- Why should we be aware of soil health?
- How was this particular soil formed over the eras?
- What were the agricultural practices applied in the past?

Then there are several expedite methods to assess the soil:

<u>Using a soil penetrator</u>: A very simple method that the facilitator can demonstrate and then pass it to the participants to try it out.

- The object is pushed into the soil;
- By the depth it reaches, participants can assess different areas with different degrees of soil compaction.

<u>Aggregate stability test</u>: Another simple test that can be used to assess the structure of soil aggregates, and the effect rain impact has on them.

- Small aggregates (the size of a finger phalange) are put on a plate and a small amount of water is added to the plate, gently and not directly onto the aggregates;
- Different aggregates should choose from several parts of the soil profile (topsoil and lower parts);
- The facilitator then shakes the plate horizontally and asks the participants to observe what happens;
- Aggregates disaggregate progressively and it should be correlated with the tillage practices and organic matter content of the soil;
- Facilitators can then pour water directly on the aggregates (simulating rain) and ask participants for conclusions about the observed.

<u>Soil structure observation</u>: A more complex exercise for observing the soil structure and correlating it with the tillage and organic matter management practices.

- The facilitator marks, with the spade, a square of 40x40 cm in the soil;
- He/she digs out this volume of soil to the desired depth, it can be up to 20cm but by digging deeper holes, more soil characteristics can be observed. For a simple observation, 20cm is advised;
- Then the facilitator takes an undisturbed slice of the 20 cm of soil profile without destroying the structure, and the observation starts;

- A series of questions are then asked to the group of people, that have the chance to observe and feel the soil:
 - What do you observe? (More concentration of organic matter on the surface? Soil life? Any compaction layers? Good root development?);
 - What do you feel when you touch the soil? (Is the soil dry? Is it wet? Is it sandy? Is it clayey?);
 - What do you smell? (What's the smell of the upper layers compared with the lower layers?);
 - What's the soil taste? (optional)
- The facilitator then answers the questions, or gives the word to any experienced participants that wish to contribute, and facilitates a discussion around the characteristics observed.

Tips and tricks: To answer the initial questions, the facilitators can refer to the importance of soils in providing nutrients and preventing erosion, among other characteristics. Explaining to the farmers that a degraded soil cannot provide for the needs of future generations. In using the penetrator try to experiment different parts of the soil in the same site.

Suggested topics for use: This activity was developed for agroecology in action on the farm (module 4), but any module that has the need to show and discuss soil health and structure is advised to use this method.

Pic. 6 - Soil structure observation (Agroecological Training in Portugal, October 2021) Source: Júlia Csibi



DEMONSTRATIVE HANDS-ON METHOD

Equipment:

- Some sort of noise apparatus. It can be an instrument, a bell or something else. This has the purpose of warning the participants when to change activity;
- Different tools, equipment and materials depending on the activity;
- One experienced practitioner/facilitator per activity.

Time demand: The time can vary, but it is advised to use 20 minutes per activity. The total time depends on the number of activities.

When to use: The purpose of this method is to provide practical experience of the different farming practices combined with explanations of the several agroecological principles behind them. The trainees acquire practical skills while understanding the multiple positive impacts that single practices can have on the agroecosystem and on ecosystem services. This method should be used after the theoretical introduction given in the first part of the module. This gives the chance of observing and putting in practice the things learned. The facilitator should make connections between the class content and the practical work. By working together, participants feel happy because they did manual work and connected to the land. Teamwork makes them feel connected to each other.

Description: Trainers should select any number of different agroecological activities they find relevant, and prepare them well: know where they start, gather all the tools and materials necessary, get to know well the procedures of the task, study the agroecological principles behind them and know why is this task relevant;

- Before starting, a person among the participants, or an external facilitator, is assigned with the task of <u>keeping time and warning the other participants</u>.
- Then trainees are divided into groups of up to 10 people, and head out to the place where the activities are happening.
- The task is performed for 20 minutes:
 - The facilitator first demonstrates how to perform the task;
 - Then one participant at the time or in simultaneous, <u>experiments the activity while</u> receiving feedback from the facilitator;
 - In the end, when everybody has experienced, or while the activity is ongoing, the facilitator should <u>start a discussion about the agroecological principles behind the practice;</u>
 - After 20 minutes, <u>a loud noise should sound</u>, warning the participants it is time to go to another part of the farm and perform the next activity.
- This process repeats until the total time runs out and every group has experimented with each activity.

Example: In an agroecological market garden, people were divided in groups of 7. The activities performed were: maintenance of the agroforestry (where they learned about biodiversity on a farm, and nutrient cycling by deep rooted plants, while experimenting with the manual tools), preparation of a fixed bed (where they experimented with a broadfork and other tools, while learning how to prepare a fixed bed, and the benefits of minimum tillage), and vermicompost preparation (where they learned how to maintain a vermicomposter, while acknowledging ways to walk towards input autonomy in a market garden). Each group started in a different activity and performed it for 20 minutes, then a bell rang and they went to the other activity, and so on until the 1 hour of the exercise ran out.

Examples of other activities:

- Composting;
- Roller crimping;
- Bed preparation;
- Companion planting;
- Winter unheated growing;
- etc.

Tips and tricks:

- Try to exclude from the activities any use of sharp tools, as participants can cut themselves and a very good exercise turns into a bad collective experience;
- The time used per task can vary, but we found that 20 minutes is the best timeframe, because it gives enough time for everyone to experiment the practices but at the same time doesn't tire the participants;
- During the activities, facilitators should give feedback to the participants, saying if they are doing it correctly and explaining how to do it, if a participant already knows how to do the task, the facilitator can ask this person to demonstrate;

- The tasks should be relatively simple and participants should be able to start and finish it. By seeing the results of a job well done, participants get a feeling of accomplishment;
- Performing physical activities is a lot easier when the climate is mild, not raining too much and neither under a scorching sun.

Suggested topics for use: We suggest the use of this method in any module that needs to demonstrate by doing. It was developed specifically for teaching in the context of an agroe-cological market garden, since it has a very practical hands-on component.

BUSINESS MODEL CANVAS (BMC) WORKSHOP

During the module day three different steps are used which are more or less well-known but their proper timing and building on each other is the key to success.

- 1. Frontal presentation
- 2. Individual or team work on the sample canvas
- 3. Guided group discussion

The first step is always a short ppt presentation at the beginning of each topic/subtopic. This part introduces the main facts and findings about the BMC and the main building blocks of the BMC. It is followed by an individual or team work on the sample canvas, depending on the size of the group. Each solution has advantages and disadvantages as well. In the case of individual work all participants can work on their own farm's canvas but at the end it could be very time consuming to introduce all of the canvases. Teamwork can spare time but in that case the teams can agree in an existing or imagined farm for which they prepare the canvas. A session is always closed with the third step, a guided group discussion, when the participants can evaluate each other's canvases lead by a facilitator.

Equipment: PowerPoint slides, hand-outs, sample BMC, blank papers, pencils, large space for team work, flip chart

Time demand: Frontal presentation about the BMC in general – 20 mins

Subtopics:

The presentation introduces the BMC by categorising the main building blocks into 4 groups (subtopics):

- Infrastructure: Key activities, Key resources, Partner network
- Offering: Value proposition(s)
- Customers: Customer segments, Channels, Customer relationships:
- Finances: Cost structure, Revenue streams.

(In the case of Sustainable BMC, the two additional blocks - Environmental and social costs, Environmental and social benefits – are also presented.)

- 1. Frontal presentation with examples 10 mins
- 2. Individual/team work 15 mins
- 3. Guided group discussion Each participant or team presents their solution for the canvas, the whole group evaluates it – 15 mins

These three parts are repeated until all of the canvas part are introduced, discussed and worked out by the participants.

When to use: The method helps to understand the BMC as a business planning method. At the beginning of the module day it is necessary to introduce larger quantities of new,

theoretical information. The practical parts of the method (individual/team work) help to maintain the interest and make the BMC easier to understand. The exercises deepen the knowledge and the questions that arise during the work can clarify the still unclear parts. The group discussion is an opportunity for brainstorming, clarifying all misunderstandings.

Tips and tricks:

- The main task of the trainer during the plenary presentations is to check and ensure that the learners understand the concept of the subtopics well
- Facilitator's time management is crucial. As there are several subtopics, the delay of some of them will add at the end of the module day
- Frontal presentations have to be very substantial. Although they should not be too long in order to keep the participants interested, the ppt-s need to summarize the main points clearly and understandably.
- BMC and hand-out questions can make the individual/team work clearer
- during the team work there is a need for the active facilitating
- Think Pair Share model also can be applied (at the beginning of a (sub)topic as an example). Based on the introduced case participants have to fill first the canvas, after that they compare their answers in pairs. Finally, participants are asked to share the assumptions they filled in.

Suggested to use for topics: This method is suitable to BMC in practice but can be used for teaching new, theoretical learning materials.

Since both the "Economic strategy and Business Model" and "Marketing and added value creation" modules are connected to each other, it is suggested to relate the exercises to the same farm.

Hand-out questions

1. Customers

- Who is the value created for?
- Who are the target customers?
- Who may be the most important users or customers?
- Are the aims focused on mass markets or niche markets?
- How to deal with negative buyers?

2. Value proposition

- What value is delivered to the customer?
- Which problem of the customers are dealt with?
- What bundles of products and services are offered to each Customer Segment?
- Which customer needs are the focus on?

3. Channels

- Through which Channels do Customer Segments want to be reached?
- How can they be reached?
- Which ones work best?
- Which ones are most cost-efficient?
- How can they be integrated with customer routines?

4. Customer Relationships

- What type of relationship does each Customer Segment expect?
- Which ones have been established?
- How costly are they?
- How are they integrated with the rest of our business model?

5. Revenue Streams

- What values are customers willing to pay?
- How would customers prefer to pay?
- How much does each Revenue Stream contribute to the overall revenues?

6. Key resources

- What Key Resources are needed on the basis of the Value Propositions?
- What may be the most suitable Distribution Channels?
- What Customer Relationships should be created?
- What are Revenue Streams like?

7. Key activities

- What Key Activities are required by the Value Propositions?
- What Distribution Channels could work best?
- What Customer Relationships are needed?
- What are the Revenue streams like?

8. Key partners

- Who are the Key Partners?
- Who are the Key Suppliers?
- Which Key Resources are acquired from partners?
- What Key Activities can partners perform?

9. Cost structure

- What are the most important costs for our business or business model?
- What Key Resources are the most expensive ones?
- What Key Activities are the most expensive ones?
- How to reduce costs?
- What to focus on: cost reduction or value?
- Can value increase in parallel with cost reduction?

ADDITIONAL BLOCKS

Environmental and social costs

- What environmental and social negative impacts (costs) is our BM causing?
- Which are the non-renewable Key Resources?
- Which are the Key Activities using a lot of resources?

Environmental and social benefits

- What environmental and social positive impacts/benefits (revenues) is our BM generating?
- Who are the beneficiaries? Are they potential customers?
- Can we transform the benefits into a Value Proposition? If yes, for whom?



Fig. 2 - BMC and Sustainable BMC templates Source: http://strategyzer.com

WORKSHOP EXERCISES FOR AGROECOLOGY AND SUSTAINABLE RURAL LIVELIHOODS

Exercise 1 - Livelihood assets

- Individually list all of the things on your farm which has value to you or someone else.
- In pairs compare your lists how similar are they? Does the other person's list give you a different insight?
- Create a group Mindmap of farm assets can these be grouped? Does a picture emerge which everybody shares?

Exercise 2 - Equal access

- In pairs, discuss who has access to the assets identified in Exercise 1? Consider this question for yourself, for members of your family, for employees, for people living on the periphery of your village.
- As a group, discuss what are the reasons some people have more access to assets than others.

Exercise 3 - Rose team

- In groups of 4 roles play a "Rose" team meeting. Each person gets an equal 3 minutes to share with the group: the positive things that happened to them that week (the flower); the challenging things of the week (the thorn) and; the hopes for the coming week (the bud).
- Be strict in time-keeping to make sure you each have the same 3 minutes to share thoughts. If someone is uncomfortable talking for 3 minutes, don't force them, but no-body should talk for more than 3 minutes.
- Reflect in a plenary on what you learnt about the other person. Was it clear who was "the boss"? Why? Did you learn anything surprising from anyone in your group? Did people speak equally about the flower, the thorn and the bud? Do you believe team meetings are useful?

Exercise 4 - Goal setting

- Take 10 minutes to write down the 5 most important goals you have in life.
- With a partner share your goals and discuss what metrics you can set (and in what timeframe) to see whether you are achieving these goals (10 minutes).
- Together with your partner look again at your goals and decide how sustainable these are. Are the goals dependent on limited resources? By achieving your goals are you going to have to exploit the environment or take advantage of other people? Will other people (or entities) be able to pursue these goals either now or later when you are satisfying these goals?

WORKSHOP EXERCISES FOR MULTIFUNCTIONAL APPROACH TO FARMING

Exercise 1 - Brainstorming multifunctionally

- In a group note ideas on a whiteboard of any kind of possible ventures which could be started up on your farms
- How do these activities add social and environmental value to your farm?
- Can the idea be set up so that it is commercially viable?

This simple exercise last 20 mins.

Exercise 2 - Know your strengths

- In pairs choose a multifunctional enterprise idea, and in the context of your farm undertake a SWOT analysis (strengths-weaknesses-opportunities-threats) to see how real this enterprise could work on your farm (15 mins)
- Present your enterprise to the group (15 mins)

ENERGISERS

There are times when people's energy is low during workshops, particularly after a long lecture or after a break. After lunch time workshop participants tend to be tired while they are still digesting.

When to use:

Energisers are fast and fun ways to get people laughing; put people at ease; get participants refocused on the workshop.

Energiser 1 - Knots of people

This is a fun activity game in which participants work together to solve a problem.

Time demand: This is a fairly quick exercise - the time needed depends on how long it takes for the first group to untangle itself.

Description: Divide the group into teams of 8 to 12 members (note: less people than this per group won't work). Have each person in the team raise their left hands in the air. Then have each person join right hands with another person in the team - but it must be someone that is NOT standing immediately to the left or right of them. Then have each person join left hands with another person in the team - but again it has to be someone who is NOT standing immediately to the left or right and it has to be a new person on the team than they already joined their right hands with. The teams have to untangle themselves without letting go of hands. They may have to loosen their grips a little to allow for twisting and turning. They may also have to step over or under other people. The first group to untangle their knot is the winner.

There are four possible solutions to the knot:

- One large circle with people facing either direction;
- Two interlocking circles;
- A figure eight;
- A circle within a circle.

Energiser 2 - The positive deviant "Rain Dance"

Imagine you are leading a training with 10 village mothers. From the beginning you need to keep things interactive. This exercise needs no language skills and can help you and your group see how an idea becomes at first tolerated, then appreciated, and finally, adopted. By the end, the group will also be learning how to manage their most vital resource: water.

Equipment: No materials need to be prepared for this activity.

Time demand: This is a fairly quick exercise.

Description: In front of the group, simply rub your palms together. After a minute, walk around, smiling, while still rubbing your palms together. You are looking for the first to follow you. As soon as you see her, walk over and join her. Now it is just the two of you (you, the Positive Deviant, and she, the Early Adopter). Watch what happens next. Soon it will be a few more (the early followers who just needed to see someone else start). Soon, it will be nearly everyone (the Late Followers) and even a few who will stubbornly refuse. This is what you hope to see; you have started the 'hand rubbing' movement! Now the fun really begins. When all are rubbing their palms, lead them through the next actions for 10 seconds each: snap fingers; clap hands; slap thighs, louder and louder. All should be following you. It sounds like rain on a roof. Now: Stop! All will stop. You should have their full attention in the stunning silence. Now, do the following actions slowly, giving time for all to follow you: arms extended, palms up (stop); slowly stretch your hands to either side of your body (slow); slowly crouch to the ground (sink); reach your arms in front of you (spread); hug your shoulders (save); and finally, slowly twist as you rise up, 'water through the roots', breathing out as you stand (transpiration) giving shade to the ground with your hands and arms (shade).

What did we just learn? That change starts with simple actions by a Deviant and an Early Adopter. While at first reluctant, others quickly followed because it was now "the thing to do". It was simple, easy and fun. What emotions were people feeling? Many will say nervous, scared, confused but then happier as everyone joined in. That is the whole point. Change is always uncomfortable and awkward at first. If we want others to follow, we must do a simple act, and wait for the early adopters to find us! The others will follow in their own time.

Energiser 3 - Zip, zap, boing

Very fun game to do when the energy is low.

Equipment: No materials need to be prepared for this activity.

Time demand: This is a fairly quick exercise.

Description: The people stand in a circle. The facilitator introduces the zip by saying "Zip!" and clapping at the same time, in the direction of one of the people adjacent, the participant adjacent has to continue the chain of zips to the person next to him/her, the zips go around the circle until they reach the facilitator. Then the zap is introduced.

By saying "Zap" the facilitator inverts the flow of zips and setting it in the opposite direction. After some time, the boing is introduced. By saying "Boing!" the facilitator sends an imaginary ball to anyone on the circle, even on the opposite side, and the "boinged" person then can zip to the left or right or can boing someone else

Example: Person 'A' says "Zip!" to the one next to him/her, person B, and person 'B' says "Zip" continuing the flow to person 'C'. Person 'C' then says "Zap", inverting the flow to person 'B', which in turn zips person 'A', person 'A', zips person 'Z', and person 'Z' decides to boing person 'F', and so on ...

Energiser 4 - The message

A very funny game to make people laugh and make them more relaxed. Even funnier when people from different nationalities and languages play together.

Equipment: No materials need to be prepared for this activity, apart from some funny messages that should have something to do with what is being learned in the course.

Time demand: 15 minutes

Description: People form a circle, sitting or standing, one person is chosen to start a message. This person should think of a funny message with 2 to 3 sentences. Then he/she whispers in the ear of the person sitting next to him/her. The passage of the message should be silent so the other participants in the room don't figure out the message. The person that received the message transmits it silently to the ear of the next person. This process repeats until the message reaches the final person of the circle (that should be standing next to the starter of the message). This person then says the message out loud, that reached him/her.

MIXED WORKSHOP DESIGN

This method is a combination of 3 basic methods:

- 1. Frontal presentation
- 2. Individual work
- 3. Guided group discussion

These three methods can be used repeatedly (or in various combinations) to digest the individual subtopics throughout a training day. When using the "mixed workshop design", after processing one subtopic of the learning material by the three basic methods, the series of these basic methods starts again to process the next subtopic. This loop can be repeated as many times as necessary.

Equipment: PowerPoint slides, handouts, brainstorming table (see below), blank paper, pencil.

Time demand: Time demand depends on the complexity of the topic discussed.

Example: Subtopic 1. "Mission statement" of the Marketing and added value creation module (module 5).

10 min: frontal presentation (incl. real life farm examples)

10 min: individual work (key information summary of the subtopic plus real-life examples projected on the wall)

10 min: guided group discussion (2-3 people present their results in front of the whole group, trainer asks guiding questions, general exchange)

We provide a detailed daily timetable plan in the Annex below.

When to use: The method helps to process large quantities of new information during the training. It loosens up the monotony of frontal teaching and engages the learner in processing and fixing new information in the memory. This step empowers the learners, who will own the newly learned material more securely which then enables them to pick up the next part of the learning material more easily and coherently. The method can be used in various combinations for some specific parts of a training or even throughout the whole day. The purpose of the method is to minimise frontal teaching (1) and by involving individual work (2) it helps learners to understand and process the new topic more quickly and more securely. The guided group discussion (3) helps participants to ask questions; and it allows the trainer to sort out misunderstandings or lack of clarity.

Tips and tricks:

- Punctual time management is crucial: trainers set the timeframe for the individual work and remind the learners shortly before ending this task to avoid delays in the daily time-table (delays can add up to an hour or more by the end of the day!);
- Frontal introductory presentations have to be very well developed in advance which allow learners to understand a new concept quickly and precisely to be able to work on their own as a next step - short videos can also be a useful complement and provide diversity in the day;
- To support the individual work, have a list of key information of the topic on the screen/ projection wall or in the brainstorming table (see below) as a reminder, inspiration or pool of ideas;
- If the participants work on their own businesses, the group can go through their plans and help to overcome their `business as usual` thinking and come up with new ideas;
- If a brainstorming table is available with key information on it, wall projections can provide additional information or be inspirational pictures;
- Guide and support participants in the individual work, if necessary, in an intense workload a facilitator for each group might be necessary;
- Enable everyone to present their results at some point in the group discussion, motivate restrained learners and try to facilitate a balanced participation;
- Another key task of the trainer during the guided group discussion is to ensure that the learners understand the concept of the subtopic well;
- Learners are free to modify their ideas during the process, even if they have to go back to previous lines of the table.
- It is important to do in situ testing of the working day to unveil inconsistencies or other practical details for successful teaching:
 - Example: In the below Brainstorming table the first topic of the section "3. Marketing strategy" is to set SMART goals. This task can only be carried out well if the content of the next rows in the table, namely "Definition of Target Audience" and "Positioning" are already defined and set. Therefore, these steps have to be done before working on the SMART goals although they are not in the same order in the Brainstorming table, which follows the widely used structure of a Marketing plan.

Suggested to use for topics: This method is suitable to teach big quantities of new and rather theoretical learning materials. We propose to use it for the "Economic strategy and business model" (module 3) and the "Marketing and added value creation" module (module 5). Because of the similarities of the structure and the connectedness of the content, teachers of these two modules should iterate the teaching content: learners should work on the business plan and the marketing plan of the same example (possibly their own farm). The below table is an example of how to guide and frame this work in the "Marketing" module.

Brainstorming table for the "Marketing and added value creation" module

This table allows the learner to have an overview of the whole learning material on the one hand. More importantly it provides support for their individual work by containing the key information of the learning material being processed. The task of the learner is to sketch up some first ideas of their own farm's marketing plan based on the introductory presentation of the trainer and the key information available in the table. The learners should fill in the last column of the table with their own ideas. Because this table becomes the first draft of the future marketing plan of the learner's own farm, it will be a strong motivation for the learner to pay attention and be active during the learning day.

The trainer has to keep the participants aware of the agroecological principles while building the marketing plan so that they don't divert too much to general marketing approaches.

Because of the complexity of the task, learners are free to make modifications on the plan during the process of filling in the table. If they realise that a previous idea needs modification, they can do it any time. The goal is to have a useful and realistic marketing plan by the end of the day.

BRAINSTORMING TABLE						
STEPS	MODULE SUBTOPICS	CONTENT DESCRIPTION	AGROECOLOGICAL PERSPECTIVE	INDIVIDUAL BRAINSTORMING		
1. MISSION	Mission Statement	A short definition of what the over- all mission of the farm is. A vision- ary outlook into the future.	The future vision of an entrepreneur- ial activity that is environmentally sustainable, social- ly inclusive, and economically via- ble.			
	Farm Ob- jectives	Based on the visionary mission statement, clear objectives of the farm are defined using the SMART method (specific, measurable, as- signable, realistic, time-bound).	Setting short and long-term goals for the chosen product and market, mea- suring the mar- ket share and the growth potential; Deciding whether to get new custom- ers and/or to keep the old ones.			

2. SITUATION ANALYSIS	Internal Analysis	Who are we? Strengths, weak- nesses, special skills, values, traditions etc. of the farm.	Special attention is placed on AE practice of the farm.	
	Customer Analysis	Who are my existing and potential cus- tomers? Age, gen- der, socio-economic background etc and most importantly their needs!		
	Competi- tor Anal- ysis	Who are my compet- itors? Other farms/ enterprises serve the same customer needs in the same market.		
	Collabora- tion Anal- ysis	What collaborations are there and how could we use them? Allied farmers, farm- er networks, associa- tions etc.	Getting to know AE-re- lated organizations, networks etc. at least in a national context. To whom can we turn with professional ques- tions?	
	Analysis of the external environ- ment	Characterization of the macro-envi- ronment we work in, e.g., by PESTEL analysis (political, economic, social, technical, environ- mental and legal dimensions)	Political agendas, social activities, tech- nological endowments, environmental issues, legislation and regula- tions related to agro- ecology.	

3. MARKETING STRATEGY	Strategic objectives Definition of Target Audience	SMART goals are defined specifical- ly for the planned marketing strat- egy. The exact defi- nition of which consumer groups should be ad- dressed by the marketing activi- ties.	Defining the tar- get audience that is interested in AE products. (Good example can be the social farm products' consum- ers.)	
	Positioning	Based on the strengths, special skills, values and traditions of the farm the most relevant elements are selected and put together to form a strong brand position in the mind of the target audi- ence. It should help customers to clearly differenti- ate the farm from its competitors.	High value empha- sizing techniques of the products'/ produces' issued from farms that follow AE princi- ples.	
	Branding	Following the basic positioning decisions, distinc- tive branding is done (brand name + Logo + packag- ing design).		
	Budget	A clear decision about how much money should be spent in which time-period.		

4. MARKETING MIX	Product Develop- ment	Based on all pre- vious research and strategic decisions, it is now time to think about product in- novation, process- ing and product portfolio.	Agroecological "origin" as product value	
	Pricing	Also based on all previous decisions a pricing strategy is worked out.		
	Promotion	Suitable commu- nication methods are selected and planned. In-per- son, online, so- cial media, print, newsletter		
	Place & Distribu- tion	The most effective and efficient dis- tribution channels must be chosen.	Direct sales, short chains, CSA	
5. IMPLEMEN- TATION & CONTROL	Put Plan into Action	Based on farm mission, situa- tion analysis and marketing strat- egy all marketing activities from the marketing mix are carried out.		
	Monitor results	The better you can measure the results of your marketing activ- ities, the better you can optimize them.		
	Optimize and Adapt	Don't forget to optimize and adapt your strat- egy and/or activi- ties if needed.		

Annexe 1: Timetable and methodology guide for the "Mixed workshop design" method

This example is designed for the "Marketing and added value creation" module. It helps to understand how to use the three basic methods during a stuffed learning day.

STEPS	MODULE SUBTOPICS	CONTENT DESCRIP- TION	AGROECO- LOGICAL PERSPEC- TIVE	TIMETABLE	PEDAGOGI- CAL METHODS
INTRO		Short info about the trAEce proj- ect in gen- eral, intro to the market- ing module (wide over- view over the marketing strategy), answer the WHY (why is it important to conduct this day?)		09:00 - 09:30	Frontal pre- sentation
1. MISSION	Mission Statement	A short definition of what the overall mis- sion of the farm is. A visionary outlook into the future.	The future vision of an entrepre- neurial ac- tivity that is environmen- tally sustain- able, socially inclusive, and econom- ically viable.	09:30 - 10:00	10min: fron- tal presenta- tion + ex- amples from other farms 10min: indi- vidual brain- storming 10min: 2-3 people pres- ent their results in front of the whole group, the facilitator asks guiding questions, general ex- change

	Farm Objectives	Based on the vision- ary mission statement, clear objec- tives of the farm are defined using the SMART method (specific, measurable, assignable, realistic, time-bound).	Setting short and long- term goals for the cho- sen product and market, measuring the market share and the growth potential; Deciding whether to get new cus- tomers and/ or to keep the old ones.	10:00 - 10:30	10min: fron- tal presenta- tion + ex- amples from other farms 10min: indi- vidual brain- storming 10min: 2-3 people pres- ent their results in front of the whole group, the facilitator asks guiding questions, general ex- change
COFFEE BREA	AK (10:30 - 10):45)			
2. SITUATION ANALYSIS	Internal Analysis	Who are we? Strengths, weaknesses, special skills, values, tradi- tions etc. of the farm	Special atten- tion is placed on AE prac- tice on the farm.	10:45 - 11:00	5min: frontal presentation (incl. exam- ple) 10min: indi- vidual brain- storming
	Customer Analysis	Who are my existing and potential cus- tomers? Age, gender, so- cio-economic background etc and most impor- tantly their needs!		11:00 - 11:15	5min: frontal presentation (incl. exam- ple) 10min: individual brainstorming
	Competitor Analysis	Who are my competi- tors? Oth- er farms/ enterprises serve the same cus- tomer needs in the same market.		11:15 11:30	5min: fron- tal pres- entation (incl. exam- ple) 10min: individual brainstorm- ing

	Collaboration Analysis	What collab- orations are there and how could we use them? allied farm- ers, farmer networks, associations etc.	Getting to know AE-re- lated or- ganizations, networks etc. at least in the national context. To whom can we turn with professional questions?	11:30 11:45	5min: frontal presentation (incl. exam- ple) 10min: indi- vidual brain- storming
	Analysis of the external environment	Characteri- zation of the macro-envi- ronment we work in, e.g., by PESTEL analysis (po- litical, eco- nomic, social, technical, environmen- tal and legal dimensions)	Political agendas, so- cial activities, technological endowments, environmen- tal issues, legislation and regula- tions related to agroecol- ogy	11:45 12:00	5min: frontal presentation (incl. exam- ple) 10min: indi- vidual brain- storming
				12:00 - 12:15	AFTER ALL: 15min dis- cussion in the panel, 2-3 people pres- ent their re- sults in front of the whole group, facil- itator asks guiding ques- tions, general the exchange
LUNCH BREA	K (12:15 - 13:	:30)			

3. MARKETING STRATEGY	Strategic objectives	SMART goals are defined specifical- ly for the planned mar- keting strat- egy.		13:30 13:45	5min: frontal presenta- tion (incl. example) 10min: indi- vidual brain- storming
	Definition of Target Audience	Exact defini- tion of which consum- er groups should the exact the dressed by the market- ing activities.	Defining the target audi- ence that is interested in AE prod- ucts. (a good example can be the social farm prod- ucts' con- sumers.)	13:45 14:00	5min: frontal presentation (incl. exam- ple) 10min: individual brainstorming
	Positioning	Based on strengths, special skills, values and traditions of the farm the most relevant elements are selected and put togeth- er to form a strong brand position in the mind of the target audience. It should help customers to clearly differ- entiate the farm from its competitors.	High value emphasizing techniques of the prod- ucts'/pro- duces issued from farms that follow AE principles.	14:00 14:15	5min: frontal presentation (incl. exam- ple) 10min: individual brainstorming
	Branding	Following the basic positioning decisions, distinctive branding is done (brand name + Logo + packaging design).		14:15 14:30	5min: frontal presentation (incl. exam- ple) 10min: individual brainstorming

	Budget	A clear decision about how much mon- ey should be spent in which time-period.		14:30 14:45	5min: frontal presentation (incl. exam- ple) 10min: individual brainstorming
				14:45 15:00	AFTER ALL: 15min dis- cussion in the panel, 2-3 people pres- ent their re- sults in front of the whole group, the fa- cilitator asks guiding ques- tions, general exchange
COFFEE BREA	K (15:00 - 15	:15)			
4. MARKET- ING MIX	Product Development	Based on all previous research and strategic decisions, it is now the time to think about product innovation, processing and product portfolio.	Agroecologi- cal "origin" as product value	15:15 15:30	5min: frontal presentation (incl. exam- ple) 10min: individual brainstorming
	Pricing	Also based on all previous decisions a pricing strat- egy is worked out.		15:30 15:45	5min: frontal presentation (incl. exam- ple) 10min: individual brainstorming
	Promotion	Suitable communica- tion methods are selected and planned. in-person, online, social media, print, newsletter		15:45 16:00	5min: frontal presentation (incl. exam- ple) 10min: individual brainstorming

	Place & Dis- tribution	The most effective and efficient distribution channels must be cho- sen.	Direct sales, short chains, CSA	16:00 16:15	5min: frontal presentation (incl. exam- ple) 10min: individual brainstorming
				16:15 16:30	AFTER ALL: 15min dis- cussion in the panel, 2-3 people present their results in front of the whole group, teacher asks guiding ques- tions, general exchange
COFFEE BREA	K (16:30 - 16	:45)			
5. IMPLE- MENTATION & CONTROL	Put Plan into Action	Based on farm mission, situ- ation analysis and marketing strategy all marketing activ- ities from the marketing mix are carried out.		16:45 17:00	frontal presentation
	Monitor re- sults	The better you can measure the results of your marketing activities, the better you can optimize them.			
	Optimize and Adapt	Don't forget to adapt your stra activities if nee	o optimize and ategy and/or eded.		
CLOSING		Round off the day, closing with practical tips for par- ticipants to further develop their individual marketing strategy		17:00 17:30	frontal presentation

PARTICIPATORY MODELLING GAME OF THE FOOD SYSTEM

Equipment: 4-5 tables for groups of 4-5 people, roll of paper or size A2 paper sheets, colour markers, post-its in three colours. Optionally, the facilitator can print the step-by-step instructions for the exercise on a poster-size sheet and hang it for the groups to guide themselves by. He/she can also print examples of causal relationships, feedback loops and dynamic hypotheses to aid the learners in their tasks.

Time demands: 90 mins

When to use: As part of creating agroecological awareness and stimulate holistic/systems thinking, this exercise is useful as a tool of self-reflection on the state and conditions of current modern food systems. It is best administered at the beginning of the course, as part of the theoretical modules.

Description: This is a pedagogical game to familiarise learners with systems thinking and incentivise them to reflect critically on the workings of our food systems. Working in groups, learners will come to their own conclusions about the key workings of food systems and about the variables or actions that could change its present shortcomings. The different solutions can then be confronted and debated. This is a collaborative exercise, for which there are no right or wrong answers, and which can be done in indoor as well as outdoor classrooms. The facilitator should first explain the objective of the exercise (see introduction) and then give instructions for each of the steps of the exercise as the exercise progresses, while keeping the time.

Introduction to be given by the facilitator

A model is a simplified version of reality and can help learners understand the real systems on which it is based, allowing us to test ways of solving the problems therein.

System dynamics is a methodology developed by Jay Forrester in the mid 1950s that supports the study of problems in dynamic systems, in particular problems that evolve over time. Later, other scholars further developed the system dynamics methodology to use in the modelling of complex systems, such as water and carbon cycles in certain territories, waste disposal systems, and food systems. The system dynamics approach defends that in order to understand a dynamic problem one must first identify the structure that guides its behaviour. The structure is the sum of causal relationships between the variables that are related to the problem.



Pic. 7: Example of a model of the modern food system created by a group of learners (Agroe-cological Training in Palmela, Portugal, October 2021) Source: Júlia Csibi

For this exercise, in different groups, learners will try to construct a model, specifically a causal diagram of a key dynamic system, the modern food system. To create a causal diagram, learners need to place all the important variables in the system on a sheet and then link them according to the effect each has on the other or others. Variables of the food system include the resources and activities needed for food production, but also the distribution, consumption and disposal of food, the people and entities involved and also immaterial factors such as knowledge, culture and gastronomy and even politics. In groups of about 4 to 5 people, learners will collaboratively model the modern food system in five stages, first defining the key variable, then the 1st and 2nd degree variables as well as their causal relationship, subsequently hypothesising about what explains the dynamic in the system such as they have modelled it, and lastly, coming up with the variables (either already defined by you or new ones) that they believe can be leverage points for change in the system. In the final stage, groups present their models to each other and discuss their choices.

The objective of this exercise is to familiarise learners with the dynamics within the modern food system, perhaps identify new relationships that were less obvious before, discover new variables, all the while augmenting their cumulative knowledge of the food system(s) through working in a group. The whole exercise, including the instructions, will take approximately 90 minutes, and instructions will be given to learners step by step.

Step-by-step instructions for the exercise

Step 1 (10 min)

The first step is to define the key variable, which will be the centre or hub of the group's food system. This is the variable that the group believes is the one that is the most influenced by actions in the food system and in turn influences many other variables. Each group member first thinks of two, writing them on post-its, then the group negotiates for the final choice. If absolutely necessary, groups may have two key variables.

Step 2 (20 min)

Using the piece of paper or A2 sheet provided, groups will place the key variable(s) in the middle and now define the variables that influence the key variable or are influenced by it.

2a. Groups write these variables on post-its of a different colour from that of the key variable and place them around the key variable(s).

2b. Now groups will show the direction of the causal relationship between the variables and the key variable (i.e., which variable is influencing which) by drawing arrows between the variables with the markers provided. If a group has more than one key variable, they must also show whether these are related or have their own set of influencing and influenced variables.

2c. Groups should indicate, by drawing either a plus (+) or a minus (-) sign above the arrows, whether the relationship between the variables in question is positive or negative.

Note: a positive relationship means that when variable A increases or decreases, variable B does exactly the same (i.e., B increases when A increases or decreases when A decreases). A negative relationship means that when variable A increases, variable B does the opposite (i.e., B decreases when A increases or increases when A decreases).

2d. After having identified the 1st degree variables (those directly influencing or influenced by the key variable), groups may move on to 2nd and 3d degree variables. These are the variables that influence or are influenced by the variables that either influence or are influenced by the variables that either influence or are influenced by the diagram is growing into a model with several levels of variables.

Step 3 (15 min)

3a. Now groups will look at their model/causal diagram and see if they can identify possible feedback loops (retroactive cycles). They then draw a circle around the variables that are part of the feedback loop and place either a plus (+) or a minus (-) to indicate whether this feedback is positive or negative.

Note: A feedback loop occurs when several variables that are influencing each other in a sequence constitute a closed circle, where the first variable is the same as the last variable. The tendency of this loop can be either positive (the tendency is strengthened) or negative (the tendency is annulled). An example is that of a water treatment diagram: there are the variables 'water quality' (of a river), 'species mortality', 'sewage and effluent control', and 'investment in sewage and effluent treatment'. If the water quality (of a river) diminishes, species mortality goes up, which increases the need for sewage and effluent control, which in turn increases the investment in sewage and effluent treatment, which in the end improves water quality. Since this cycle improves water quality and diminishes species mortality, it is a negative retroactive cycle. If the cycle would have further diminished water quality, it would have been a positive retroactive cycle.

3b. The groups may now be able to come up with a dynamic hypothesis that explains the behaviour in the system they created in one or two phrases. An example of a dynamic hypothesis in the case of the modelling of an existing industrial waste system is: 'The absence of adequate policies for the management and treatment of Hazardous Industrial Waste (HIW) has led to an increase in the amount of HIW presented for processing while the rush in finding a solution led to the co-incineration option, the implications of which led to a significant increase in social and environmental contestation, which, due to the government's reluctance in revisiting their decision, significantly delayed the search for viable processing alternatives.'

Step 4 (15 min)

Now groups go back to their model, the relationships and the feedback loops and see if they can identify 2 or 3 variables in their food system that can be considered leverage points. This means that if their influence is strengthened, the system dynamics will change, and the system will change (for the better). These are the variables that can be part of policy options if one wishes to actively change the system. Groups may also introduce new variables as the leverage points, i.e., an action or activity that can be created and added to the food system at one point or other.

Step 5 - Presentation of the different causal diagrams (15-20 min)

Groups will now present their results in a plenary session, summarising their model, offering their dynamic hypothesis and the leverage points they came up with. Groups may enter into debate and query each other's choices.

Tips and tricks: It is helpful to have the step-by-step instructions as well as the examples printed on poster-size sheets and hung up for learners to guide themselves by. Also, the facilitator should circle from group to group during each step to make sure learners understand what they have to do. Finally, the facilitator can show the learners examples of a causal diagram of a different complex system to help with understanding the exercise, two of which are suggested below:



Pic. 8. Source: Macmillan et al. (2014). The societal costs and benefits of commuter bicycling: simulating the effects of specific policies using system dynamics modeling. Environmental health perspectives, 122(4), 335-344.



(+) Positive causal link; (-) Negative causal link; (≠) Time delay; Negative loops balance initial conditions; Positive loops reinforce initial conditions

Pic. 9. Source: Videira, N., Antunes, P., & Santos, R. (2009). Scoping river basin management issues with participatory modelling: the Baixo Guadiana experience. Ecological Economics, 68(4), 965-978.

The following literature may further help the facilitator in preparing the exercise:

Allen, T., & Prosperi, P. (2016). Modelling sustainable food systems. *Environmental management*, 57(5), 956-975.

Lane, D. (2008). The Emergence and Use of Diagramming in System Dynamics: A Critical Account. *Systems Research and Behavioral Science*, *25*: 3-23.

Macmillan, J. Connor, K. Witten, A. Kearns, D. Rees & A. Woodward (2014). The societal costs and benefits of commuter bicycling: simulating the effects of specific policies using system dynamics modelling. *Environ. Health Perspect.*, *122* (4).

Meadows, D. (1999). Leverage Points, *Places to Intervene in a System*. Sustainability Institute, Hartland, USA.

Sterman, J.D. (2000). *Business Dynamics — Systems Thinking and Modelling for a Complex World.* McGraw-Hill, Boston.

BALL TOSS REVIEW

This is a physically active exercise that can be used at the end of the day or at the end of a session. It is especially useful after a session that involves a lot of technical material or requires heavy concentration as it is also an energizer.

Equipment: A ball (a soft ball is best)

Time demand: 15 - 20 mins

Dynamic Review No. 1a - "Valuable Lessons Learned" Ball Toss

Description: The facilitator asks the workshop participants to form a circle. The facilitator starts by saying what they thought was the most valuable lesson or concept they learned that day, and then throws the ball to another participant. The participant states the most valuable or important lesson / concept they learned that day and throws to another participants and so on until all participants have expressed their valuable lessons/concepts learned.

Dynamic Review No. 1b - "Concepts in Action" Ball Toss

Description: The facilitator asks the workshop participants to form a circle. The facilitator starts by stating a concept that relates to the workshop / exercise, and then throws the ball to another participant. The participant gives an example of that concept in action, and then states another concept and throws to another participants and so on.

Example:

- The person throwing the ball yells: "Soil improvement";
- The person receiving the ball says: "Using organic compost";
- This person then passes the ball to another participant and yells out a new concept: "Recycling";

If someone receives the ball but does not have an example ready, they can 'pass' by passing the ball to a different person and simply repeating the question.

Dynamic Reviews No. 2 - Calm Down!

Sometimes a group needs to slow down after an intensive session. This will help everyone to consider more of the benefits of new learning.

Time demand: 10 mins

Description: Invite the participants into a comfortable position with their eyes closed. Then, have them reflect on what is important about what they have just learned and how it might be helpful to them. After about five minutes, say a key word or phase, that relates to the main ideas that have been covered, and ask them to reflect on that for a couple of minutes. Repeat one or two more key words/phrases, leaving a couple of minutes for reflection each time. Then gather the group into a circle and invite them to share what they believe are the most important or valuable aspects of the ideas they have just reflected on, and how they can best use these ideas in their own life.



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