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TRAINING FORMAT

Consortium

مؤسسة أصدقاء المغرب
Fondation des Amis du Maroc
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TRAINING WITHOUT BORDERS

Non-formal education with young learners

In order to ensure the development of individuals in a changing and interconnected world, **it is essential to have access to training opportunities** that enable the acquisition, development and functional maintenance of the competences necessary to enhance personal and professional aspirations.[1]

Non-formal education (NFE) refers to any educational action that occurs outside of conventional or formal learning contexts but within a framework of some type.[2] It is typically defined within an education spectrum that incorporates how it relates to formal education and Informal learning.

- **Formal education** corresponds to a systematic, organized education model, structured and administered according to a given set of laws and norms, presenting a rather rigid curriculum as regards objectives, content and methodology. It encompasses the formal education system, including vocational and university education, and it culminates in the achievement of a recognised certification, diploma, degree or professional qualification.
- **Informal learning** occurs whether or not there is a deliberate choice and is realised in the performance of activities in everyday situations and interactions that take place. It is without external support and is not institutionalised and occurs within the context of work, family and leisure.
- **Non-formal education** and learning is characterised by a deliberate engagement of a person, in any organisation which provides purposeful education and training, even volunteering, civil service, private social service and in enterprises. Non–formal education is any type of structured and organised learning which is intentional and planned by an educational provider, but which does not lead to formal qualifications recognised by the relevant national education authorities.

NFE is an integral part of a lifelong learning concept that ensures that young people and adults acquire and maintain the skills, abilities and dispositions needed to adapt to a continuously changing environment. Generally, the most consistent part of non-formal education is carried out by non-governmental organisations involved in community and youth work. Non-Formal Education is the outcome of deliberate effort and arises from the learner's conscious decision to acquire and master a certain activity, skill, or area of knowledge. It does not require an external accreditation or assessment and it does not follow a defined syllabus.

[1] Asunción Manzanares Moya, Non-formal training and lifelong learning, 2021

[2] Council of Europe, COMPASS Manual for human rights education with young people, 2020

Also, the educative processes promoted by NFE supports the development of flexible curricula and methodologies, capable of adapting to the needs and interests of participants, for which time is not a pre-established factor but is contingent upon their work pace. This means that NF learning includes various structured learning situations which do not either have the level of curriculum, syllabus, accreditation and certification associated with 'formal learning', but have more structure than that associated with 'informal learning', which typically take place naturally and spontaneously as part of other activities.[3]

Young/Adult learning refers to the idea that adults (18 years or older) engage in learning activities to acquire more knowledge and skills for professional and personal life. Adult education can be part of a *formal* education system, vocational training, or course to obtain a degree. **Non-formal adult education** includes all forms of structured learning activities other than formal education systems. *Informal adult learning*, on the other end, includes all learning activities of adult life that take place in an unstructured way.

The objective of non-formal adult education is, by taking a point of departure in the courses and activities, to **increase** the individual's general and academic insight and skills and enhance the ability and desire to take responsibility for their own life, as well as taking an active and engaged part in society.

The desire to learn is the key competency of the future. It is therefore important that the non-formal adult education sector is in tune with using and further developing its obvious potential to create and strengthen the motivation for people to learn.

In their research, Pedersen and Elsborg discovered five key elements of non-formal adult education, that also motivate the desire to learn:[4]

- The insistence on meeting the participant at eye level and relating to them as a resourceful player
- An energizing social setting for action
- Flexible and targeted preparation of the content
- Active interaction between teaching and counselling
- Focus on both process of education and development.

[3] Edustorytelling l Guide, 2022

[4] Elsborg, S., Pedersen, S., *Non-formal adult education and motivation for life-long learning*, 2013

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PUNTLAND TRAINING FORMAT - AGROECO

MODULE 1

VERTICAL FARMING

Puntland Community ry

Fondation des Amis du Maroc
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TRAINING WITHOUT BORDERS

Aquaponics Workshop for Youth	
Learning Objectives:	• Understand the main components and principles of vertical farming. • Develop teamwork, research, and planning skills. • Apply theoretical knowledge to design a sustainable vertical farming project. • Explore sustainable agricultural practices. • Participants will get to know each other. • Participants will learn basic concepts related to vertical farming. **Icebreaker Activity**: Participants will get to know each other and learn basic concepts related to vertical farming. **Team Building Activity**: Foster teamwork and coordination while introducing the concept of resource management related to aquaponics. **Main Activity**: Apply knowledge of vertical farming, develop detailed planning skills focusing on sustainability and efficiency
Duration:	• Icebreaker Activity: 15-30 minutes • Team Building Activity: 30-40 minutes • 2 Main Activity: 1.5 hours each (to be chosen one)

Materials needed:	**1.1.1.1 Materials Needed:**
	
	• **Icebreaker Activity**:
	  ○ Bingo cards with prompts related to vertical farming and personal interests.
	  ○ Pens or markers.
	• **Team Building Activity**:
	  ○ Balloons (preferably eco-friendly and biodegradable) filled with air or water.
	  ○ Whistle or timer.
	  ○ Cones or markers to divide the field into two halves.
	• **Main Activity**:
	  ○ Large sheets of paper or poster boards.
	  ○ Markers, pens, and pencils.
	  ○ Laptops or tablets (optional, for research purposes).
	  ○ Reference materials on vertical farming techniques and best practices.

Preparation:	**1.1.1.2 Preparation:** • **Icebreaker Activity**:

	○ Create bingo cards with a mix of personal and vertical farming-related prompts. Each card should be unique. • **Team Building Activity**: ○ Inflate balloons and set up the field with a clear boundary between two halves. • **Main Activity**: ○ Prepare an overview presentation or handout on vertical farming principles. ○ Ensure all materials are organized and readily available for participants.
Description:	**1.1.1.3 Description:** **Icebreaker Activity – Vertical Farming Bingo**: 1. **Introduction**: Explain the rules. Participants need to find others who match the prompts on their bingo card. Each person they find should sign the relevant box. 2. **Activity**: Allow 15-20 minutes for mingling and filling out cards. Encourage participants to talk to as many people as possible. 3. **Wrap-Up**: Ask if anyone has completed their bingo card or come close. Highlight interesting facts or stories discovered. **Team Building Activity – Aquaponics Balloon Toss**: 1. **Formation of Teams**: Divide the participants into two teams. Position each team in one half of the field. 2. **Introduction**: Explain that the balloons represent resources (e.g., water, nutrients) in an aquaponics system, and the goal is to manage resources efficiently. 3. **Activity**: ○ Each participant has a few balloons at the start. ○ On the whistle, participants throw the balloons into the opposing team's half, trying to keep their own side as clear as possible. ○ After the set time (e.g., 5-10 minutes), stop the activity. 4. **Scoring**: Count the number of balloons in each half. The team with fewer balloons in their half wins. 5. **Variation**: To add complexity, participants can only use one hand or have to balance on one foot while throwing balloons. **Main Activity – Design and Plan a Vertical Farming Project**: 1. **Introduction (10 minutes)**: Provide an overview of vertical farming, highlighting key components and sustainability practices. 2. **Formation of Teams (5 minutes)**: Divide participants into small groups of 4-5 people. 3. **Activity**: ○ **Phase 1: Research and Brainstorm (30 minutes)**: Teams brainstorm ideas and conduct quick research using provided materials or devices.

	○ **Phase 2: Design and Planning (45 minutes)**: Teams design a detailed plan for their vertical farm on poster boards, including layout, crop selection, water and nutrient management, sustainability practices, and potential challenges. ○ **Presentation and Feedback (15 minutes)**: Each team presents their project to the group. Allow time for questions and constructive feedback. 4. **Wrap-Up (10 minutes)**: Summarize key points, emphasize planning, innovation, and sustainability. Encourage participants to reflect and consider how to apply what they've learned.
Learn check/ Debriefing:	**1.1.1.4 Learn Check/Debriefing:** • **Icebreaker Activity**: After the activity, gather participants to discuss what they learned about each other. Highlight any common interests or surprising facts related to vertical farming. • **Team Building Activity**: Discuss the importance of resource management in aquaponics. Highlight how teamwork and coordination can lead to better resource management. • **Main Activity**: Conduct a brief Q&A session to review key concepts. Ask participants to share one key takeaway from the activity.
Tips for the Trainer:	**1.1.1.5 Tips for the Trainer:** • **Icebreaker Activity**: Ensure the prompts on the bingo cards are diverse and interesting. Encourage shy participants to engage by pairing them with more outgoing individuals. • **Team Building Activity**: Ensure the playing area is safe and free of obstacles. Encourage participants to strategize and communicate effectively. • **Main Activity**: Facilitate group discussions and encourage participation from all team members. Be prepared to assist with technical questions and provide guidance.
Handouts:	**1.1.1.6 Handouts:** • **Icebreaker Activity**: Bingo cards with vertical farming and personal interest prompts. • **Team Building Activity**: None needed. • **Main Activity**: Provide a handout summarizing key vertical farming concepts and examples. Include a list of further readings and online resources.
References:	University of Hawaii Aquaponics, FAO Aquaponics Guide ***https://ojs.pensamultimedia.it/index.php/siref/article/view/4931/4292***

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PUNTLAND TRAINING FORMAT - AGROECO

MODULE 2

AQUAPONICS

Aquaponics Workshop for Youth	
Learning Objectives:	• Understand the basic principles and components of aquaponics systems. • Develop teamwork and collaboration skills. • Apply practical knowledge to design and build a mini aquaponics system. • Explore sustainable agricultural practices.
Duration:	• Icebreaker Activity: 15-30 minutes • Team Building Activity: 30-40 minutes • Main Activity: 1.5 hours
Materials needed:	• Icebreaker Activity: Index cards with questions/facts, bell or timer. • Team Building Activity: Small fish tanks or clear containers, plastic tubing, air pumps, water pumps, plant pots/net cups, gravel/pebbles, small fish or fish figurines, seeds or small plants, scissors, glue, tape, markers. • Main Activity: Large sheets of paper or poster boards, markers, pens, pencils, laptops/tablets (optional), reference materials on aquaponics.
Preparation:	• Prepare index cards for the icebreaker activity with relevant questions and facts about aquaponics. • Gather and organize materials for the team-building and main activities. • Arrange the workshop space to facilitate group work and presentations. • Prepare reference materials and handouts on aquaponics.
Description:	**Icebreaker Activity: "Aquaponics Speed Networking"** 1. **Preparation**: Create index cards with aquaponics-related questions and facts. Distribute one card to each participant. 2. **Instructions**: Explain that participants will pair up and discuss the question or fact on their card with their partner for two minutes. After two minutes, they switch partners. Continue until they have interacted with several people. 3. **Wrap-Up**: Gather everyone and ask a few volunteers to share interesting facts they learned. **Team Building Activity Adaptation: "Aquaponics Circles"** **Objective**: To build teamwork, coordination, and quick thinking related to the topic of aquaponics. **Materials Needed**:

- Five large circles (can be drawn on the ground with chalk, or made with hula hoops or rope)
- Small soft balls or beanbags
- Whistle

Preparation:

- Place the five circles on the ground in an open space.
- Ensure there is enough space around the circles for participants to move freely.

Instructions:

1. **Formation of Teams**: Divide the group into teams of five. Each team will have a turn to participate in the activity.
2. **Activity Setup**:
    - Five participants from a team stand inside each of the circles, facing away from the trainer (educator).
    - The trainer stands a few meters away with a ball or beanbag.
3. **Activity Execution**:
    - On the trainer's whistle, the participants jump in place with their backs turned to the trainer.
    - At the next whistle, the participants stop jumping, turn around, and balance on one foot.
    - The trainer then throws the ball to one of the participants at random.
    - The participant who receives the ball must catch it without stepping out of their circle or losing balance.
    - If a participant drops the ball or steps out of their circle, they are temporarily eliminated and go to the back of the line of waiting participants from their team.
4. **Re-Entry**:
    - Participants who are eliminated can re-enter the game by performing a task related to aquaponics (e.g., correctly answering a question about aquaponics, naming a fish or plant used in aquaponics, or demonstrating a relevant action such as mimicking fish swimming).
    - Once they complete the task, they go to the end of the line and await their next turn to enter the circle.
5. **Variation**:
    - Once participants turn around, they must maintain their balance on one foot while catching the ball.
    - Increase the challenge by having participants perform a quick aquaponics-related fact or action before re-entering the circle.

Main Activity: "Design and Plan an Aquaponics Project" (1.5 hours)

1. **Introduction**: Provide an overview of a successful aquaponics system's components, including design, fish and plant selection, water and nutrient management, and sustainability.
2. **Instructions**:

- **Phase 1: Research and Brainstorm (30 minutes)**: Teams brainstorm and conduct quick research to gather information and inspiration.
- **Phase 2: Design and Planning (45 minutes)**: Teams design a detailed plan for their aquaponics system on poster boards. Plans should include layout, fish and plant selection, water and nutrient management strategies, sustainable practices, and potential challenges.

3. **Presentation and Feedback (15 minutes)**: Each team presents their project. Allow time for questions and feedback.
4. **Wrap-Up**: Summarize key points from the presentations, emphasizing planning, innovation, and sustainability.

1.1.2 Main Activity 2: "Aquaponics Design Challenge" (1.5 Hours)

1.1.3 Objective:

- To apply theoretical knowledge by designing a functional aquaponics system using simple, readily available materials.
- To develop problem-solving and teamwork skills.

1.1.4 **Duration:** 1.5 hours

1.1.5 Materials Needed:

- Large sheets of paper or poster boards
- Markers, pens, and pencils
- Recycled materials (e.g., plastic bottles, cartons, straws)
- Tape, glue, and scissors
- Small cups or containers to represent fish tanks and grow beds
- Handouts or reference sheets on basic aquaponics principles
- Laptops or tablets (optional, for research and design inspiration)

1.1.6 Preparation:

- Prepare a brief presentation or handout on the basic principles of aquaponics, including the nitrogen cycle, fish and plant care, and system design.
- Gather recycled materials and ensure there are enough supplies for each group.
- Arrange the workshop space to facilitate group work and presentations.

1.1.6.1 **Description:**

1. **Introduction (10 minutes)**:
   - Start with a brief overview of aquaponics, explaining how it integrates aquaculture (raising fish) with hydroponics (growing plants in water).
   - Highlight the key components and functions: fish tank, grow bed, water circulation, and the nitrogen cycle.

	○ Provide examples of simple and innovative aquaponics systems using everyday materials. 2. **Group Formation (5 minutes)**: ○ Divide participants into small groups of 4-5 people. 3. **Design Phase (30 minutes)**: ○ Each group is tasked with designing a simple aquaponics system using the materials provided. ○ Encourage groups to be creative and resourceful with their designs, considering how water will circulate between the fish tank and grow bed, and how the system will support both fish and plants. ○ Groups should draw a detailed design of their system on the poster board, labeling key components and explaining their functions. 4. **Build Phase (30 minutes)**: ○ Using the recycled materials, groups create a scale model of their aquaponics system based on their design. ○ They should focus on the structural integrity of their model and ensure it represents their proposed system accurately. 5. **Presentation and Feedback (15 minutes)**: ○ Each group presents their design and model to the entire group. ○ They should explain their design choices, how their system works, and any challenges they faced during the design and build phases. ○ Allow time for questions and constructive feedback from other participants and the trainer. 6. **Wrap-Up and Reflection (10 minutes)**: ○ Summarize the key points learned during the activity, emphasizing the importance of design, innovation, and sustainability in aquaponics. ○ Encourage participants to reflect on the process and share what they found most challenging or interesting. ○ Open the floor for any questions and provide answers or further resources as needed.
Learn check/ Debriefing:	• Conduct a brief Q&A session after each activity to check understanding and reinforce key concepts. • Encourage participants to reflect on what they learned and how they can apply it in real-life situations.
Tips for the Trainer:	• Ensure all materials are prepared and organized beforehand. • Facilitate group discussions and encourage participation from all team members. • Be ready to assist with technical aspects of building the models and provide guidance as needed.
Handouts:	• Provide reference materials and handouts on aquaponics systems, including diagrams, design tips, and best practices. • Distribute a list of further readings and online resources for participants to explore after the workshop.
References:	• University of Hawaii Aquaponics, FAO Aquaponics Guide

	• https://ojs.pensamultimedia.it/index.php/siref/article/view/4931/4292

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MVNGO TRAINING FORMAT - AGROECO

MODULE 3.1

Agro-Ecology Workshop

Designing a Synergistic Vegetable Garden

The Synergistic Vegetable Garden as Agro-Ecology Workshop and NFE Education

The Synergistic Vegetable Garden represents one of the most innovative and sustainable forms of agriculture, based on ecological principles and cooperation between plants. This method stands out from traditional horticulture due to its integrated approach that respects the natural balance of the ground and the environment. Moreover, the implementation of a synergistic garden can be seen as a powerful New Form of Education (NFE), as it promotes experiential learning, environmental education, and the development of practical and transversal skills.

Beside of that, the Agro experience offers a unique opportunity to teach environmental education. Youth learn to respect nature, understanding the importance of biodiversity and practising sustainable cultivation techniques.

Taking part in the development and maintenance of a synergistic garden enables participants to acquire practical skills spendable in the future. As the matter of fact, through this module they learn cultivation techniques, soil management, composting and the use of natural resources thanks to creative tasks and engaging activities.

From the technical point of view, it is essential to follow a few key steps in order to build a sustainable garden, such as the designing part, the ground preparation, starting with a good base of compost and mulch to prepare the soil without tilling it and plants selection.

Furthermore, the synergistic garden provides several environmental and economic advantages. By reducing the need for chemicals and intensive tillage, this method lowers production costs and minimises environmental impact.

Along with the technical part, the proposed immersive workshop is a form of shared thinking and an eco-sustainable strategy that nurtures a passion for agriculture and outdoor activities among young people having a positive impact on their lives.

Agro-Ecology Workshop for Youth Designing a Synergistic Vegetable Garden	
Learning Objectives:	✓ Understanding Agro-Ecology basic principles ✓ Develop Creativity and Problem solving ✓ Build Teamwork and collaboration spirit ✓ Understanding Agro -Technical skills ✓ Designing a Synergistic Vegetable Garden
Duration:	• **Ice-Breaking** (15 minutes) • **Team Building** (30 minutes) • **Main Activity** (2 hours) • **Debriefing** (15 minutes)
Materials needed:	• **Ice-Breaking**: Timer or bells • **Team Building** Timer, sticky notes, sheets of recycled paper, drawing material, markers, coloured pencils, reference materials, (books, leaflets, brochures), prize • **Main Activity**: Projector, music player, guidelines, gardening tools (fun props, aprons, boots, gloves). • **Debriefing** (none)
Preparation:	✓ Share and organize materials for the team-building and main activity ✓ Arrange the workshop space presentation and designing tools (Projector for Video Presentation, drawing material and guidelines)
Description:	**Icebreaking: "Cross Presentations"** • **Preparation**: Divide participants into pairs. • **Instructions**: Explain that they have to interview the partner asking questions about personal interests, previous experience in Agro-Ecology and expectations for the workshop. • **Wrap-Up**: After the interview, each member of the pair introduces their partner to the group. • **Objective**: introduce the participants to the others, breaking ice making them comfortable 1.1.7 Team Building "Building a Sustainable Agro Map" • **Preparation:** Divide the participants into four groups of five. Assign each group a workspace with a large sheet of paper and drawing materials. • **Instructions:** Instruct each group to brainstorm ideas for their ideal sustainable garden. Encourage them to discuss and list down the elements they want to include, considering aspects such as: crop rotation, composting methods, efficient irrigation systems and biodiversity. After brainstorming, each group will start drawing their sustainable garden map. Once the maps are complete, each group prepares a 5-minute presentation. They should explain the design and the reasoning

	behind their choices. The best project in terms of creativity, feasibility, and sustainability wins a prize (set of eco-friendly gardening tools). • **Wrap-Up:** Summarize the key points from the task, highlighting the importance of applying sustainable practices in real – life gardening. • **Objective**: build group synergy, stimulate creativity and critical thinking sharing skills and solutions in order to apply sustainable practices in real life. **1.1.8 Main Activity "Designing a Synergistic Vegetable Garden"** • **Preparation**: Divide participants into four groups. Provide each one with a guideline handout to aid comprehension of the video content. Prepare music player beforehand and gardening tools (aprons and fun props). • **Instructions**: Start with a brief theoretical explanation of synergistic gardens, emphasizing agroecology principles such as intercropping, natural soil management, and the use of mulches. Provide them gardening tools. Then, show a video Presentation about a real sustainable garden. While the groups start designing their ground sections, play some background music creating lovely atmosphere. Encourage creativity and collaboration, using the guidelines and reference materials for inspiration. Each group, after brainstorming ideas, designs their section of the garden, deciding which crops to plant and how to arrange them to maximize synergy between the plants. Once designs are complete, each group prepares a short presentation about what they have done and why. Presentations are creative, such as incorporating a song related to their garden project (country playlist). • **Wrap-Up**: After the presentations, it will be announced the winning team based on design, creativity and effort. • **Objective**: creativity, collaboration, Agro skills, sustainable vision.
Learn check/ Debriefing:	✓ Along with the wrap-up for every activity, check understanding and curiosities about the tasks at the end of the workshop. ✓ Encourage participants to reflect on what they learned and how they can apply it in real-life situations.
Tips for the Trainer:	✓ Ensure all materials and tools are well organized beforehand ✓ Make sure that everyone in the group is participating actively, considering that not everyone has adequate gardening skills. ✓ Be ready to assist with technical skills the participants during the activities providing more information if needed.
Handouts:	Provide reference materials and handouts on Agro-Ecology and Synergistic Garden, such as technical guideline and gardening tools (rake, gardening gloves, boots, measuring tape).
References:	▪ *https//www.agricoltura Sinergica*

	▪ *Permacultura e orti sinergici: un'idea di sostenibilità (ilgiornaledellambiente.it)*

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MVNGO TRAINING FORMAT - AGROECO

MODULE 3.2

Agro-Ecology Workshop for youth

Implementing a Synergistic Vegetable Garden

Agro-Ecology Workshop for Youth Implementing a Synergistic Vegetable Garden	
Learning Objectives:	✓ Hands-on experience in creating a synergistic vegetable garden ✓ Develop Creativity and Synergy between people and nature ✓ Build Teamwork and collaboration spirit ✓ Implementing a Synergistic vegetable Garden
Duration:	• **Ice-Breaking** (15 minutes) • **Team Building** (30 minutes) • **Main Activity** (2 hours) • **Debriefing** (15 minutes)
Materials needed:	• **Ice-Breaking**: Timer or bells, snaks, bandanas • **Team Building** Timer, seeds, Mandala drawings • **Main Activity**: Timer, gardening tools, planting supplies (mulch), prizes for challenges. • **Debriefing** (none)
Preparation:	✓ Share and organize tools for the tasks.
Description:	**Icebreaking: "Green Treasure Hunt"** • **Preparation**: Divide participants into small groups giving them a list of plants or natural elements to find in the garden. In order to complete the activity, they have to wear a pirate bandana. The team that finds more "hidden treasures" wins a mini prize (snacks). • **Instructions**: Explain that they have 15 minutes to end the task. • **Wrap-Up**: Once the task is done, brief discussion about their observation skills and visual memory. • **Objective**: Introduce the participants to the others, encouraging cooperation and observation of the natural environment. **1.1.9 Team Building "Mandala Seeds"** • **Preparation:** Divide the participants into small groups. Provide them seeds and a large drawing sheet of paper to create the mandala design representing flowers or natural elements. • **Instructions:** Explain the steps of the task stimulating creativity and the value of synergy and harmony between people and nature. Each group use different seeds and natural materials to create a mandala on the ground. Each team member contributes a part of the design, symbolising the importance of diversity and unity. • **Wrap-Up:** Once the task is done, brief reflection on the relevance of co working and group synergy. • **Objective**: Promoting creativity and the importance of synergy in the garden.

	Main Activity "Implementing a Synergistic Vegetable Garden" • **Preparation**: Divide participants into their respective groups. Start with a quick energizer to get everyone excited, such as a "Garden Dance-Off" where groups perform a short dance routine related to gardening. • **Instructions**: Briefly review the principles of synergistic gardening and the specific design each group created in the previous session. Explain the steps of planting, mulching, and labelling the plants, emphasizing the importance of each task. Provide them the tools needed beforehand. Each group plants their selected crops in their designated area following the pattern of the synergistic bed through the "Planting Relay Race". They have 20 minutes to plant the crops chosen. The team that plants more crops wins an eco bag. Thereafter, the trainer guides participants in mulching with hay the plants to protect the soil and retain moisture. At the end, groups create labels with the names of the plants to make them easier to recognize. This task will be done through a "Label Design Contest" where groups compete to make the most creative and decorative plant labels. The most artistic one wins a mini prize (bio-coloured cases). Once all tasks are completed, each group takes turns giving a mini tour of their garden section, explaining their planting choices and any special features. • **Wrap-Up**: Gather all participants for a final reflection session. Discuss what they've learned and enjoyed about the process of creating a synergistic garden. • **Objective**: creativity, collaboration spirit, build sustainable strategy.
Learn check/ Debriefing:	✓ Along with the wrap-up for every activity, check understanding and curiosities about the tasks at the end of the workshop. ✓ Encourage participants to reflect on what they learned and how they felt working through symbols and nature.
Tips for the Trainer:	✓ Ensure all materials and tools are well organized beforehand ✓ Make sure that everyone is collaborative and comfortable with the group. ✓ Be ready to assist with technical skills the participants during the activities providing more information if needed.
Handouts:	Provide gardening tools and material needed (rake, gardening gloves, boots, mandala design et similia).
References:	▪ *Permaculture - an overview | ScienceDirect Topics* ▪ *Julius Krebs, Sonja Bach, Permaculture—Scientific Evidence of Principles for the Agroecological Design of Farming Systems*

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MVNGO TRAINING FORMAT - AGROECO

MODULE 4.1

ECO-ENGAGEMENT IN NON-FORMAL EDUCATION

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TRAINING WITHOUT BORDERS

Non-formal education

The concept of non-formal education (NFE) has emerged in the 1960s, when new types of learning methodologies were being introduced, as a response to the evolving societal conditions.

To this day, there is no univocal definition of NFE. In broad terms it can be seen as a negation of formal education, therefore any type of learning outside of the strict concept of planned teaching in educational institutions. Not having to follow a rigid curriculum, implies that NFE gives the opportunity to the teacher to easily adjust to learners' interests and better reflect the reality of the moment.

As far as learning methodologies are concerned, NFE is characterised by an experience-based approach rather than standard teaching. In this sense, group activities are often organised, to allow interactions among participants, promoting thus not only knowledge, but also the development of communication and social skills. In this context, it is essential for teachers to create a positive environment in which participants can engage and feel motivated. NFE relies, in fact, in great part on the willingness of learners to acquire knowledge and on their interests. This is what differentiates it from informal education, in which the learning process is not intended.

Formal learning	Non-formal learning	Informal learning
Learning is structured (e.g., linear learning objectives)	Learning **may be** structured	Learning is not structured
Learning is promoted through direct teaching behaviours	Learning is promoted through indirect teaching behaviours	
Learning is intended (by educator and learner)	Learning is intended by the **learner**	Learning may not be intended by the learner
Learning is recognised by the learner and educator	Learning is recognised by the **learner**	Learning may not be recognised by the learner
Motivation for learning may be extrinsic to the learner		Motivation for learning is intrinsic to the learner
Learning takes place in educational institutions	Learning **can** take place in educational institutions	Learning can take place anywhere
Learning has a mandated dimension	Learning has a voluntary dimension	
Learning may be recognised or measured through qualifications		Learning is not recognised or measured through qualifications
Learning may primarily focus on propositional knowledge	Learning may focus on both propositional and procedural knowledge[11]	
Learning tends to have a cognitive emphasis	Learning involves cognitive, emotional, social and behavioural elements	
Curriculum is written down	Curriculum **may be** written down	Curriculum is not written down
Learning process is 'top down', focusing on developing specific knowledge and skills	Learning process is 'bottom up', focusing on the learner and their needs	
Learning follows formal curriculum	Learning may complement formal curricula	
Learning may not be linked to socialisation[12]		Learning is often linked to socialisation

Interactive methods of teaching are essential for creating an inclusive space in which learners will have an active role in the learning process. These techniques are based on a simultaneous acquisition of knowledge through interaction, collaboration and decision making. They are methodology that challenge static and hierarchic education which does not belong to NFE.

References

Johnson, M., and Majewska, D. (2022). *Formal, non-formal, and informal learning: What are they, and how can we research them?* Cambridge University Press & Assessment Research Report. Retrieved from: https://www.cambridgeassessment.org.uk/Images/665425-formal-non-formal-and-informal-learning-what-are-they-and-how-can-we-research-them-.pdf

https://www.coe.int/en/web/european-youth-foundation/definitions

https://iicbg.org/wp-content/uploads/2016/10/STEPs-4-LIFE_NFE-Manual.pdf

Eco-engagement in Non-Formal Education	
Learning Objectives:	• Creativity and problem solving • Teamwork and collaboration • Social interaction • Environmental awareness and practical skills
Duration:	• Ice breaker (15 minutes) • Team building (30 minutes) • Main activity (2 hours) • Debriefing (15 minutes)
Materials needed:	• Ice breaker: none • Team building: puzzles • Main activity: plant pots, wooden pallets, glass jars, old tools, wood scraps • Debriefing: pen and piece of paper
Preparation:	The trainer should: • Study methods of recycling and upcycling farm equipment and materials • Updated on NFE methodologies and inclusion tools • Make sure to plan activities beforehand
Description:	**Ice Breaker "Fact or fiction"** ➢ **Preparation:** Gather the participants in a circle. ➢ **Instructions:** Explain that each participant needs to share three statements about themselves: two are true and one is false. The others needs to discuss which statement is the fake one. ➢ **Wrap-up:** Each person reveals the solution and shares more details about themselves. ➢ **Objective:** Get to know each other in an engaging way. **Team Building "Puzzle challenge"** ➢ **Preparation:** Divide the participants into an equal number of people per group, if possible. ➢ **Instructions:** Every group receives a set of puzzle pieces that, when completed, form a picture related to agriculture. The catch is that some pieces belong to other groups. This must not be said. Teams should realise it and communicate with each other to get the pieces they need to complete their puzzle. ➢ **Wrap-up:** Ask each group to briefly discuss their experience. ➢ **Objective:** Develop communication skills and problem-solving. **Main Activity "Upcycling farm items"**

	➢ **Preparation:** Participants are divided into small groups and given a variety of materials that can be recycled and upcycled into new items. ➢ **Instructions:** The trainer guides the groups through the process, encouraging them to think creatively about how to transform the materials sustainably. ➢ **Wrap-up:** Each group presents their creations and explains the thought process behind them. ➢ **Objective:** Develop creative thinking, problem-solving and collaboration, while learning about upcycling techniques.
Learn check/ Debriefing:	• After each activity participants will discuss and give feedback on what they have learnt. • The trainer will check the achievements through a final survey.
Tips for the Trainer:	The trainer needs to make sure that everyone in the group is participating actively, and that every participant feels fully included into the group.
Handouts:	The activity implies the usage of puzzles. Each puzzle needs to be handed out to a group, but before some pieces need to be taken out and given to another team, so that no one is able to complete the puzzle without consulting the other groups, promoting thus socialisation and collaboration.
References:	• *https://drop-in.eu/media/drop-in-io2-en.pdf* • *https://platformgifted.eu/blog/revolutionizing-agriculture-the-transformative-power-of-upcycling-in-farming/*

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MVNGO TRAINING FORMAT - AGROECO

MODULE 4.2

NON-FORMAL EDUCATION ACTIVITIES: AGRO-TOURISM AND ORGANIC FARMING

Non-Formal Education Activities: Agro-Tourism and Organic Farming	
Learning Objectives:	• Improve knowledge of organic farming and agritourism • Develop team collaboration skills • Promote creativity • Enhance problem-solving skills
Duration:	• Ice breaker (15 minutes) • Team building (30 minutes) • Main activity (2 hours) • Debriefing (15 minutes)
Materials needed:	• Ice breaker: seats. • Team building: pieces of paper, pens. • Main activity: organic vegetables and food to prepare the snacks, cooking utensils. • Debriefing: piece of paper, pen
Preparation:	The trainer should: • Study methods of organic food and agrotourism • Prepare questions the quiz questions • Make sure that each activity is prepared in advance
Description:	**Ice Breaker "Fruit shuffle"** ➢ **Preparation:** Arrange chairs to form a circle and ask the participants to seat. Assign a fruit to each participant, making sure that there are at least three or four participants with the same fruit. ➢ **Instructions:** One person stands in the centre of the circle and has to call a fruit. All the people associated with that fruit need to stand up and switch seats. From time to time the person standing in the middle calls "fruit salad" which means that all people need to change seats, not being able to seat in the seats just next to them in their left or right. In this occasion also the person standing in the centre should find a place to sit and the participant left without a seat becomes the new person in the centre. ➢ **Wrap-up:** At the end of the game participants will share their experience underlining which features, according to them, are important for the game. ➢ **Objectives:** Develop quick thinking and collaboration. **Team Building "Farm quiz"**

	➢ **Preparation:** Divide the groups into an equal number of participants, if possible, and prepare quizzes related to agrotourism and organic farming. Give each group a piece of paper in which they will have to write the correct answer. ➢ **Instructions:** Pose a question to all groups simultaneously. Allow time for group discussion. After collecting answers, read the correct answer aloud and update each group's score based on the number of correct responses. ➢ **Wrap-up:** Reveal the winning group. ➢ **Objectives:** Improve knowledge on agrotourism and organic farming. **Main activity "Organic food creations"** ➢ **Preparation:** Divide the participants into two main groups and provide kitchen utensils. ➢ **Instructions:** Explain how organic farming influences food quality and sustainability and make each group prepare two simple no-cook meals with organic vegetables within a set period of time. ➢ **Wrap-up:** Reflect on how the use of local, sustainably grown food can impact agrotourism. ➢ **Objectives:** Learn about organic farming and its benefits.
Learn check/ Debriefing:	• After each activity, participants will discuss what they have learnt and share their opinions. • A quiz will check the knowledge of participants during the team building activity.
Tips for the Trainer:	The trainer should encourage active participation, reflection and collaboration.
Handouts:	Provide kitchen utensils and organic food for the main activity.
References:	• Petroman, I., & Varga, M., & Constantin, E.C., & Petroman, C., & Momir, B., & Turc, B., & Merce, I. (2016). *Agritourism: An Educational Tool for the Students with Agro-food Profile. Procedia* Economics and Finance. • https://agriculture.ec.europa.eu/farming/organic-farming_en

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MFF TRAINING FORMAT - AGROECO

MODULE 5

Agroecological Entrepreneurship Challenge

مؤسسة أصدقاء المغرب
Fondation des Amis du Maroc
Morocco's Friends Foundation

Activity 1 –Agroecological Entrepreneurship Challenge	
Learning Objectives:	Participants will : • Understand the principles of agroecology and sustainable farming. • Explore how ecological methods can be applied in agriculture to create profitable and sustainable businesses. • Develop critical thinking and problem-solving skills related to agroecological challenges. • Learn about green business models and their importance in rural development.
Duration:	**2 hours**
Materials needed:	• Flipcharts or whiteboards • Markers • Projector or screen (for presenting concepts and showing examples) • Printed handouts of basic agroecological principles and example business models • Sticky notes • Notebooks and pens for each participant.
Preparation:	• Research Preparation: The trainer should gather basic information on agroecology, sustainable agriculture practices, and examples of green businesses, specifically in rural or agricultural settings. • Materials Setup: Prepare handouts summarizing key concepts of agroecology and examples of successful agroecological business models. • Space Arrangement: Arrange the room to facilitate group work, ideally with tables for small groups of 3-5 participants.
Description:	**<u>Step 1: Introduction to Agroecology and Green Business (20 minutes):</u>** • Start with a brief presentation on agroecology, highlighting its environmental and social benefits. • Explain the importance of green businesses, especially in rural areas, using real-life examples where possible.

- Briefly introduce the concept of entrepreneurship within the agroecology context.

Step 2: Group Brainstorming on Rural Challenges (20 minutes):

- Divide participants into small groups and ask them to identify key challenges that rural areas face in their regions (e.g., limited job opportunities, environmental degradation, or lack of resources).
- Each group writes their identified challenges on sticky notes and posts them on a wall for everyone to see.

Step 3: Designing an Agroecological Business Idea (40 minutes)

- In the same groups, ask participants to choose one of the posted challenges and brainstorm an agroecological business idea to address it.
- Encourage them to think about:
  - What kind of product or service they could offer?
  - How will it benefit the environment and local community?
  - What resources or skills would they need?
  - Who their target customers would be.
- Each group should prepare a quick outline of their business idea on flipchart paper.

Step 4: Presentation of Ideas and Feedback (30 minutes)

- Each group presents their business idea to the rest of the participants.
- After each presentation, the trainer and other participants provide constructive feedback, emphasizing the ecological and social impacts of each idea.

Step 5: Wrap-up and Key Takeaways (10 minutes)

- Summarize the main concepts covered in the session.
- Encourage participants to think about how they could further develop their ideas, possibly with local support or resources.

Learn check/ Debriefing:	• Conduct a brief debriefing by asking participants to reflect on what they learned and how they can apply it in their communities.
	• Use questions such as:
	  ○ "What was the most challenging part of creating your business idea?"
	  ○ "How do you see agroecological entrepreneurship benefiting your community?"
	• End by conducting a quick knowledge check with questions about key agroecological concepts to reinforce learning.

References:	• Food and Agriculture Organization (FAO). (2021). "Agroecology Knowledge Hub." [Link to FAO Agroecology] • International Labor Organization (ILO). (2019). "Green Jobs in Agriculture." [Link to ILO Green Jobs] • Case studies from the European Network for Rural Development (ENRD) on sustainable rural businesses.

Understanding Ecological Agriculture:

Ecological agriculture, also known as agroecology, is a farming approach that integrates principles of ecology into agricultural practices. It emphasizes sustainable and regenerative methods to maintain and enhance the health of the environment, ecosystems, and communities. The focus is on creating agricultural systems that are both productive and sustainable, minimizing negative impacts on the environment while promoting biodiversity, soil health, and ecological balance[5].

Ecological Farming ensures healthy farming and healthy food for today and tomorrow, by protecting soil, water and climate, and does not contaminate the environment with chemical inputs or genetic engineering[6].

Some benefits of agroecology:

- Biodiversity: Ecological agriculture encourages the use of diverse plant and animal species to create resilient and productive farming systems. Crop diversity contributes to pest control, nutrient cycling and soil health.

[5] https://www.fao.org/agroecology/home/en/
[6] Defining Ecological Farming: https://www.greenpeace.org/static/planet4-international-stateless/2011/05/2970dfa6-defining-ecological-farming-2009.pdf

- Soil health: Maintaining and improving soil fertility is a fundamental principle. Practices such as composting, cover crops, reduced tillage and crop rotation improve soil structure, nutrient content and microbial activity.

- Community involvement and knowledge sharing: Engaging local communities and integrating traditional knowledge into farming practices strengthens the social fabric and promotes collective learning and innovation.

- Conservation of natural resources: Protect and restore natural habitats, wetlands, forests and other ecosystems adjacent to farmland to maintain ecological balance and biodiversity.

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MFF TRAINING FORMAT - AGROECO

MODULE 6

Cultivating Sustainable Futures: Agroecology for Rural

مؤسسة أصدقاء المغرب
Fondation des Amis du Maroc
Morocco's Friends Foundation

Mine Vaganti NGO

Puntland Community ry

TRAINING WITHOUT BORDERS

Activity 2 – Cultivating Sustainable Futures: Agroecology for Rural	
Learning Objectives:	Participants will: • Gain knowledge of agroecological principles relevant to agricultural landscape. • Understand the impact of sustainable agriculture on soil health, water conservation, and biodiversity. • Learn how to apply agroecological practices in their own communities to promote sustainable development. • Develop an initial business concept that incorporates these principles.
Duration:	**2 hours**
Materials needed:	• Flipcharts or chalkboards • Markers or chalk • Projector or laptop (for showcasing examples if available) • Printed handouts with local agroecological principles and examples of sustainable farming techniques • Sticky notes • Notebooks and pens for participants
Preparation:	• Content Preparation: Prepare handouts with key information about agroecology and sustainable farming practices specifically adapted to climate and resources, including techniques like crop rotation, drip irrigation, and composting. • Examples: Gather examples of successful agroecological projects or businesses or similar regions to inspire participants. • Space Setup: Arrange the room for small group collaboration, ideally in circles or around tables for 3-5 participants each.
Description:	**<u>Step 1: Introduction to Agroecology in Morocco (20 minutes)</u>** • Begin with a brief presentation on agroecology, focusing on practices beneficial to rural areas, like soil preservation, water-efficient irrigation, and the use of local seeds. • Share a few examples of small-scale farms or cooperatives implementing these methods, such as Argan cooperatives (ex: Morocco) or organic vegetable farms. **<u>Step 2: Identifying Local Agricultural Challenges (20 minutes)</u>**

- Divide participants into small groups and ask them to identify specific challenges that farmers or communities face in their regions. Examples might include water scarcity, soil erosion, limited market access, or low employment opportunities.
- Each group writes their identified challenges on sticky notes and posts them on a shared wall or board.

Step 3: Designing a Community Agroecology Project (40 minutes)

- Ask each group to select one challenge from the wall and brainstorm a small-scale agroecological project that could address it.
- They should consider:
    - What sustainable agricultural methods they would implement (e.g., water-saving techniques, organic composting).
    - How the project would benefit both the environment and the community (e.g., job creation, improved soil health).
    - Who in the community could support or participate in the project.
    - Possible market opportunities for selling eco-friendly or organic products.
- Each group records their ideas on a flipchart.

Step 4: Presenting Ideas and Gathering Feedback (30 minutes)

- Each group presents their community project idea to the rest of the participants.
- After each presentation, encourage participants and the trainer to provide constructive feedback, focusing on cultural relevance, environmental impact, and feasibility.

Step 5: Wrap-up and Reflections (10 minutes)

- Summarize key takeaways on agroecology and its relevance for rural areas.
- Encourage participants to think about how they could turn their ideas into real projects, possibly with local or NGO support.

Learn check/ Debriefing:	• Conduct a brief debrief by asking participants reflective questions such as:
	  ○ "What did you learn about the connection between agriculture and sustainability?"
	  ○ "How might these ideas benefit your community specifically?"
	• End by quizzing participants with a few key questions on agroecological practices to reinforce learning.

References:	• Moroccan Ministry of Agriculture reports on sustainable practices and local agroecology. • International Cooperative Alliance (ICA) Morocco reports on rural agricultural cooperatives and sustainable development.

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TWB TRAINING FORMAT - AGROECO

MODULE 7

Eco-Solutions Lab: Innovating for Sustainable Agriculture

Eco-Solutions Lab: Innovating for Sustainable Agriculture	
Learning Objectives:	• Foster innovation and problem-solving skills in sustainable agriculture. Promote eco-friendly solutions to address agricultural challenges.
Duration:	1.5 hours
Materials needed:	Flip charts, markers, sticky notes, sets of cards (company types, agricultural challenges, product categories)
Preparation:	• Prepare sets of cards with combinations of company types (e.g., farm co-op, agricultural startup), agricultural challenges (e.g., soil degradation, water scarcity), and product categories (e.g., organic fertilizers, efficient irrigation systems). Arrange tables with flip charts, markers, and sticky notes.
Description:	1. Introduction (15 minutes): Discuss the importance of sustainable practices in agriculture and introduce the concept of eco-innovation. 2. Group Activity (45 minutes): Divide participants into groups, distributing card sets to each. Using the cards, groups brainstorm innovative solutions to address their challenge, describing how it promotes sustainability. Presentation & Discussion (30 minutes): Each group presents their solution, focusing on its ecological and economic benefits for sustainable agriculture.
Learn check/ Debriefing:	• Facilitate a discussion on the feasibility and potential impact of each solution. Encourage participants to reflect on the role of innovation in creating sustainable agricultural practices.
References:	LTP 7 Unit 5: City of Future, Sustainable Entrepreneurship Education (pg. 2-5)

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MODULE 8

From Waste to Wealth: Turning Agricultural Waste into Green Business Opportunities

From Waste to Wealth: Turning Agricultural Waste into Green Business Opportunities	
Learning Objectives:	• Encourage sustainable resource management by repurposing agricultural waste. Develop entrepreneurial thinking focused on green business opportunities.
Duration:	1.5 hours
Materials needed:	Flip charts, markers, sticky notes, list of common waste materials (e.g., crop residues, organic matter)
Preparation:	• Prepare a list of typical waste materials in agriculture, focusing on those that can be repurposed. Set up tables with flip charts, markers, and sticky notes.
Description:	3. Introduction (15 minutes): Introduce the concept of viewing waste as a resource, discussing examples where waste has been transformed into valuable products. 4. Brainstorming Session (45 minutes): In small groups, participants select a waste material and brainstorm ideas to repurpose it into a sustainable, marketable product. Presentation & Feedback (30 minutes): Each group presents their green business idea, receiving constructive feedback on its feasibility and sustainability.
Learn check/ Debriefing:	• Discuss the environmental and economic benefits of waste repurposing. Encourage participants to share ideas on how to implement similar practices in their local communities.
References:	Non-formal Education for Sustainable Entrepreneurship (pg. 18)

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