



# 13 AGROECOLOGY PRINCIPLES

<https://www.agroecology-europe.org/wp-content/uploads/2021/11/Poster-13-principles-of-Agroecology.pdf>

# AIM OF THESE 13 PRINCIPLES AND OBJECTIVES

- ▶ TO EMPOWER MARGINALISED COMMUNITIES AND ESPECIALLY THE VULNERABLE GROUPS SUCH AS YOUTH AND WOMEN WITH LIFE SKILLS AND RELEVANT MINDSETS.
- ▶ TO INTRODUCE 13 PRINCIPLES OF AGROECOLOGY, PERMACULTURE APPROACHES AND SYNTROPIC AGROFOREST FARMING
- ▶ TO HELP YOUNG PEOPLE IN FORMING ORGANIC CLUBS AFTER THE COURSE.
- ▶ TO INTRODUCE ORGANIC ROAD SIDE MARKETS
- ▶ TO SUPPORT THE MOST VULNERABLE GROUPS TO SET UP SOCIAL ENTERPRISES
- ▶ TO HELP DEVELOP VALUE CHAINS FOR THE ENVIRONMENTALLY FRIENDLY PRODUCTS FROM THOSE COMMUNITIES

# TRANSFORMATIONAL

# INCREMENTAL

## LEVEL 5

Build a new global food system based on participation, localness, fairness and justice

## LEVEL 4

Reconnect consumers and producers through the development of alternative food networks

## LEVEL 3

Redesign agroecosystems

## LEVEL 2

Substitute conventional inputs and practices with agroecological alternatives

## LEVEL 1

Increase efficiency of input use and reduce use of costly, scarce or environmentally damaging inputs

# FOOD SYSTEM

# AGROECOSYSTEM



# 1. RECYCLING -Use local renewable resources, resource cycles of nutrients and biomass - *By Annie Chikanji*

WEEK 1 - INTRODUCTION TO THE UBUNTU LEARNING HUB, INTRODUCTION TO AGROECOLOGY, COOKING USING THE SUN

WEEK 2 - DRYING USING THE SUN, VALUE ADDITION TO VEGETABLES AND FRUITS, TYPES OF SOLAR DRYERS.

WEEK 3 - THREE DAYS WORKSHOP ON SYNTROPIC AGROFOREST FARMING, ROCKET STOVE OPERATION

WEEK 4 - COOKING USING RECYCLED VEGETABLES AND COW DUNG BIOGAS, INTRODUCTION TO SOLAR PHOTOVOLTAIC, BASIC ENERGY SETUP.

WEEK 5 - PRESENTATION BY THE STUDENTS, CERTIFICATION

## 2. INPUT REDUCTION- Reduce or eliminate dependency on purchased inputs - *By Mr. Mugove Walter Nyika*

- ▶ Input reduction refers to using agroecological practices to reduce or eliminate dependency on purchased inputs by carefully planning and managing rich and diverse ecosystems that create synergies between different components of the agricultural system.
- ▶ This creates more efficient farms that use free natural resources such as solar radiation, atmospheric carbon, nitrogen, biological processes, and that recycle biomass, nutrients and water, which increases the autonomy of the farmer and increases resilience to natural or economic shocks.

# 3. SOIL HEALTH - *By MOTO*

- ▶ Secure and enhance soil health and functioning for improved plant growth, particularly by managing organic matter and by enhancing soil biological activity.
  - ▶ USE OF WASTE FROM THE KICTCHEN/CROP WASTE/WORMS/TREES ETC
- ▶ <https://youtu.be/QyDqIH87XJA>
- ▶ [https://youtu.be/ESZO\\_u3QReA](https://youtu.be/ESZO_u3QReA)
  
- ▶ SOIL TESTING USING SIMPLE METHODS
  - ▶ OBSERVATION/TESTING ACID
  - ▶ UNDERSTANDING MINERALS AND THE ROLE THEY PLAY IN THE SOIL
  - ▶ <https://youtu.be/3K1BKf7eYYk>

## 4. ANIMAL HEALTH AND WELFARE - *By MOTO*

- ▶ The negative impact of industrial livestock farming on animal health and welfare, but also on human health, ecosystems and the environment is indisputable and no longer needs to be demonstrated.
- ▶ Agroecology, on the other hand, makes it possible to reconfigure livestock systems and reintegrate them into agro-ecosystems in order to ensure the well-being and health of animals, humans and ecosystems, and to produce healthy, high-quality food while providing ecosystem services.
- ▶ <https://youtu.be/tz0GutJc6Cl>

## 5. BIODIVERSITY- *By Mr. Mugove Walter Nyika*

- ▶ How can biodiversity be an ally of the agricultural production? and how can agroecology be a cornerstone for the biodiversity maintenance and preservation?
- ▶ To learn more about agroecology and biodiversity, have a look at this short video and meet inspiring farmers, market gardeners and dairy farmers who place biodiversity at the heart of their production system in the Ain region, where agroecological initiatives are flourishing and the transition is underway.
- ▶ Between science and practice, this video takes stock of biodiversity in Europe and explores possible transition pathways with Alexander Wezel, director of research at Isara, Lyon and vice-president of Agroecology Europe.

<https://youtu.be/Li-ftlaTdJc>



## 6. SYNERGY - *By Annie Chikanji*

- ▶ Synergy is the essence of agroecology, as it represents the vital ecological interactions between different elements of the agroecosystem in both time and space.
- ▶ Instead of focusing on external inputs and specialisation, it relies on the interactions between plants, animals, trees, soil and water to create a system that imitates and reinforces the complexity of nature in order to mitigate climate change, create economic diversity and enhance biodiversity.

## 7. ECONOMIC DIVERSIFICATION -*By Vincent Green*

- ▶ Diversifying on-farm incomes insures greater financial independence and value addition opportunities and enable farmers to respond to demand from consumers.
- ▶ In this short video interview with Olivier Lefebvre, economist and co-founder of Perma-projects, let's discover how economic diversification strengthens ecological and socio-economic resilience of farmers and farming systems in Europe.
- ▶ <https://youtu.be/5UP2PC63se8>

# 8. CO-CREATION OF KNOWLEDGE - *By Annie Chikanji*

- ▶ Enhance co-creation and horizontal sharing of knowledge including local and scientific innovation, especially through farmer-to-farmer exchange.
  - ▶ LOOK AND LEARN FROM DIFFERENT FARMERS
  - ▶ FIELD DAYS
  - ▶ SEED FAIRS

## 9. SOCIAL VALUES AND DIETS - *By Micheal Munali*

- ▶ One of agroecology's core principle consists in “building food systems based on the culture, identity, tradition, social and gender equity of local communities that provide healthy, diversified, seasonally and culturally appropriate diets” (HLPE, 2019).
  - ▶ MAPPING OF WHO GROWS WHAT WHERE THE PARTICIPANTS ARE COMING FROM
  - ▶ IDENTIFICATION OF GAPS AND HELPING PARTICIPANTS TO FIND SOLUTIONS
  - ▶ WORKING WITH LOCAL TRADERS SUCH AS RESTRAUNTS

# 10. FAIRNESS - *By Mr. Mugove Walter Nyika*

- ▶ Support dignified and robust livelihoods for all actors engaged in food systems, especially small-scale food producers, based on fair trade, fair employment and fair treatment of intellectual property rights.
  - ▶ IDENTIFICATION OF OUR LOCAL FOOD PRODUCERS
  - ▶ EXPLORE APPS THAT CAN BE USED TO QUICKLY LINK THE FARMERS TO CONSUMERS
  - ▶ IDENTIFY LOCALLY FOOD PROCESSORS AND LINK THEM TO CONSUMERS

# 11. CONNECTIVITY -*By Annie Chikanji*

- ▶ Ensure proximity and confidence between producers and consumers through promotion of fair and short distribution networks and by re-embedding food systems into local economies
  - ▶ PARTICIPANTS WILL BE ENCOURAGED TO SET UP SOCIAL ENTERPRISES
  - ▶ TRAINING IN SETTING UP A BUSINESS

# 12. LAND AND NATURAL RESOURCE GOVERNANCE -*By Annie Chinkanji*

- ▶ Recognize and support the needs and interests of family farmers, smallholders and peasant food producers as sustainable managers and guardians of natural and genetic resources.
  - ▶ BACK YARD GARDENS IN THE PARTICIPANTS LOCATIONS
  - ▶ SEED MULTIPLICATION
  - ▶ COMMUNITY SEED BANKS/SEED SAVING

# 13. PARTICIPATION - *By Micheal Munali*

- ▶ Encourage social organization and greater participation in decision-making by food producers and consumers to support decentralized governance and local adaptive management of agricultural and food systems
  - ▶ TV AND RADIO CALL IN TOPICS
  - ▶ AWARENESS RAISING ON HOW TO ACCESS HEALTHY FOOD AND THE USE OF THE APP
  - ▶ CAMPAINS ON EAT, GROW, COOK YOUR OWN



THANK YOU FOR YOUR PARTICIPATION. WE LOOK  
FORWARD TO YOUR PARTICIPATION NEXT WEEK  
WHEN WE PRESENT SYNTROPIC FARMING BY  
ROLAND.