

# Ecological Land Use Management and Organic Farming/agriculture in Kenya (East Africa)



Presented by:  
Maryleen Micheni  
Snr Programme Officer  
PELUM Kenya

# **1. Introduction to PELUM Association and PELUM Kenya**

- Participatory Ecological Land Use Management (PELUM) Association is a network of Civil Society Organizations in East, Central and Southern Africa and was founded in 1995
- PELUM Association operates in 10 African countries Eastern Africa - Kenya, Uganda, Tanzania and Rwanda; Central Africa - Zambia, Zimbabwe and Malawi; and in Southern Africa: South Africa, Lesotho and Botswana and has a membership of over 230 CSOs (2011)

## **2. Structures of PELUM Association**

- The Small scale farmers – the epi-centre of the PELUM work – organized around farmer / community groups.
- The Country Working Groups (CWG)– member NGOs in each country
- The Country (National) Board
- The Country Secretariats (Offices): the Country Coordinator & Staff
- The Regional Secretariat (Office): the Secretary General & Staff; based in Lusaka, Zambia
- The Regional Board: Chairpersons from countries and its sub-committees
- Triennial General Meeting (TGM)

# 3. About PELUM Kenya

- PELUM Kenya is a membership network and part of the bigger PELUM Association
- The membership currently in Kenya is 42 organizations composed of 34 International; 4 National and Regional NGOs and 4 CBOS spread across 28/47 counties located in different ecological zones and working directly with 1, 680,000 farmers
- Since inception in 1995 PELUM-Kenya has been working towards achieving its Vision of ensuring empowered and prosperous communities deriving their livelihoods from sustainable land use and management

## **4. Contextual agricultural and development sector**

- In Kenya 80% of the total population lives in the rural areas and this comprises over 90% of the farming population with agric. as the main economic activity
- There is declining resource base against an ever increasing human population which exerts immense pressure on the quality and quantity of available resources for productive exploitation to meet the basic needs
- It is against this background that the programme areas of focus is on farming technologies and approaches that nurture the environment, provide healthy foods and improve the economic capacities. These include:

# 5.Indigenous Food programme

- Promotion by PELUM Association since 2005 in the 10 countries
- Nutritious esp. the leafy vegetables, eaten in small amounts
- Adaptable to local climatic conditions – withstand adverse weather periods such as the drought
- Optimization on the land space due to their nature of growth
- Acts as food storage for longer periods
- Plays a central role in culture, tradition and heritage
- Higher resistance to pests and diseases

# Seed saving and sharing: Farmers from Tarsoi Group in West Pokot celebrating with song and dance as they meet to share saved seeds before the planting season



# Cultural women group working with Institute of Culture and Ecology (ICE) Celebrate a good harvest at a group seed saving meeting



# Kithio Kya Mawithyululuko women group pride in their harvests



Seed banking for endangered and orphaned food crops;  
processing through drying and grinding of *Moringa*,



# Encouraging seed diversity



# Value addition of indigenous food cereals and grain



- The indigenous food programme worked with 5 communities, each with 10 community groups and a total of 1800 as direct beneficiaries. Communities promote their respective local indigenous foods of tubers, leafy vegetables, small and large grains
- The focus aspects: ecological production including increased acreage, consumption, value addition and marketing
- PELUM-Kenya has for three seasons of three years each consecutively won the regional Food Torch in the East, Central and Southern Africa regions for promoting the indigenous foods
- Creation of awareness on GMOs and its implications to African Agriculture (e.g. the popularized WEMA) and sustainable farming systems

# PELUM Kenya booth in Morogoro Tanzania, 2008



## 6. Use of non-chemical Pest management

- Use of OISAT information enriched by traditional knowledge for the management of pests [www.oisat.org](http://www.oisat.org)
- Promoting Non-Chemical Pest Management focusing on training the local farmers on use of internet based online services to access information on pest management using locally available materials

# Mechanical methods of pest management in cotton by hand-picking where the threshold level is low



# 7. The one million tree campaign

- This campaign is geared towards bringing in efforts from communities and their MOs to plant trees in wetlands and the deforested areas.
- By December 2012 PELUM-Kenya had 'grown' of 389,415 trees, mostly indigenous species and was awarded a certificate of participation by the United Nations Environmental Program (UNEP) for progressive contribution to the Billion Tree campaign set up by UNEP for the planet

## Inculcating in the young: Secondary Schools Girls enjoying Porridge during an Indigenous food Competition



# Tree Planting by pupils in the Mau Complex Water tower



The District Officer in Nyando, lake region officiating the tree planting exercise at Kakuoyo and Paw Teng Primary School where 14 environmental and agricultural clubs came together to celebrate environmental conservation



Tree Planting by Loreto boys high school working with the ARDP as part of introduction of *elum* in schools. The school is located in the environs of the Mau Complex Water Tower



## **8. Ecological Organic Agriculture (EOA)**

- Promoting Ecological Land Use and Management (ELUM) practices such as: organic agriculture, Low external agricultural inputs production, sustainable agriculture, post harvest handling practices, soil and water conservation, permaculture and bio intensive agriculture at production level
- International and regional forums have been organized to share on innovations and approaches to Ecological Organic Agriculture (EOA)
- EOA has six pillars in research and extension, value chain and market development, information and communication, networking and partnerships, policy and programme development; and institutional capacity development

Sack gardening/multistory gardens in Gatanga where YARD works and the land sizes range between 0.25acre – 3 acres per household is used to optimize on available garden space



# Training of climbing beans and women farmers can continue harvesting leaves as vegetables



The grow bio-intensive agriculture practices is a Whole-System Farming Method that optimizes on the farm land by incorporating different farming technologies on the same piece of land e.g. Double-Dug, Raised Beds, Composting ,Intensive Planting, Companion Planting ,Carbon Farming, Calorie Farming, Use of Open-Pollinated Seeds



Mulched beds are used to maintain soil moisture, and creepers like the pumpkin planted to smother weeds



# Soil and water conservation using zai pits by the Ukamba Christian community services with the Kinyauni/Kituku women group in the drylands



Farmer in Marimanti and the PELUM Kenya Country Coordinator in a farm in Marimanti, in Agroecological Zone V of Kenya by use of dryland farming techniques are all smiles about the expected pawpaw harvests



## **9. The *Changieni Rasilimali (CRM)* programme (contributing to natural resources)**

- Advocating and Empowering Civil Society Organizations-County Governments collaboration in Promoting Ecological Land Use for Natural Resources Management
- Working with five major ecosystems in rehabilitation and conservation i.e. Mau Complex water tower, Kakamega forest, Mt. Elgon north rift catchment, Mt. Kenya in central Kenya and rangelands and ASALs of the South rift

# Farmers views of Benefits of OA

(PELUM Kenya 2012)

- Food security – 60%
- Lower production costs – 47%
- Production sustainability – 84%
- Healthy foods – 25%
- Economic gains – 60%
- Suppressed pests, weeds and diseases – 10%
- Knowledge build up – 10%
- Full capacity farm utilization – 30%
- Farmer independence – 40%
- Improved livelihood – 40%
- Climate change adaptation & mitigation – 7%
- Risk distribution – 10%
- Resilience – 20%

# Challenges of OA practices and principles application (PELUM Kenya 2012)

- Lack of government support – 90% (*extension and training*)
- Farmers slow adoption/resistance to change
- *elum* practices being tedious and labor intensive
- Poverty level
- Low farmers attendance/participation/ initial resistance
- Insufficient resources to reach farmers efficiently
- High competition and/ or anti-organic campaigns from the conventional side
- Poor infrastructures
- Expensive process of organic certification, standardization and labeling
- Difficult situations such as climate change or very infertile soils
- Poor time management by the farmers
- Lack of harmonized curriculum resulting to duplication of practices
- Farmers having very high expectations
- Lack of supportive facilities such as organic agro-vets and shops

# **Value Chain and Market development**

- The Kenya Organic Agriculture network (KOAN) is a member of PELUM Kenya network and works closely in linking smallholders with organic outlets
- Also accompanies the process of certification through farm scouting
- In the EOA Programme, NOGAMU in Uganda is the Pillar Coordinator in Value chain and Market development
- In East Africa, the PELUM Association is implementing the PESA Agro marketing model