

REPORT ON UBUNTU LEARNING CENTRE PERMACULRE DESIGN COURSE



PREPARED BY MATTHEWS MPOFU



PERM-A-OUTREACH

*Registered Environment Consulting Firm
Permaculture/ILUD/Anamed/Soap
Making/Entrepreneurship*

Lead Facilitator: Mr. Mugove Walter Nyika (General Coordinator,
ReSCOPE network)

Number of participants: 12 Female, 8 Male Total: 20

Venue: Ubuntu Learning Centre, Kasisi, Chongwe District, Lusaka Province,
Zambia

1.0 EXECUTIVE SUMMARY

This Permaculture course is a twelve -day program that prepares and equips the participants for the internalization of concepts and practical implementation of the relevant techniques. The Permaculture Design Course is taught over a period of not less than 72 hours of sharing and learning with hands on activities. The course covers the understanding of ‘what is permaculture, ethics, principles, designing principles, other sustainable farming approaches such as agro ecology, syntropic, and related natural elements of ecological systems as indicated in the course content below. Practical permaculture course also helps to strengthen and add value to the farmers, who are already practicing diverse, sustainable and resilient farming practices as a refresher, reminder with broader spectrum of expertise and experiences. It is not limited to specific groups as others might assume, anyone who has the inspiration and aspiration to work with nature is very welcome and have fun! I hope the participants did enjoy and expected to implement the acquired skills and knowledge in their working respective areas

2.0 Main Objective

The main objective of the course was to empower participants with the knowledge and skills they need to integrate sustainability into their lives. The Permaculture Design Course participants are expected to share and implement the skills and knowledge acquired with others for ecological, social, economic agro ecological benefits and help to create sustainable livelihoods

2.1 Specific Objectives

- To share the relevant practical activities that participants need for sustainable farming and living
- To strengthen the practical skills and knowledge about agroecology and permaculture
- To highlight the potential learning experiences and expertise for farmers
- To provide farmers with a wide spectrum of interactions and networking opportunities

3.0 GUIDING COURSE CONTENT TIMETABLE

Time table from the course as indicated on course outline

Permaculture Design Certificate course at Ubuntu Learning Centre 2024

29 August to 9 Sept 2024	Ubuntu Learning Centre, Chikancila village, near Kasisi mission, Chongwe district.	Check in on Thurs 29 Aug; Check out on Tuesday 9 th Sept 2024
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	30 Aug Fri	31 Aug Sat	01 Sep Sun	02 Sep Mon	03 Sep Tues	04 Sep Wed	05 Sep Thurs	06 Sep Fri	07 Sep Sat	08 Sun
08:00 to 10:00	Welcome and Introduction	Permaculture and AE principles	Ecological processes	Grounding	Animal integration	Rain water harvesting	Environmental audits	Local economies	Social Permaculture	Presentations
Health break										
10:30 to 12:30	Introduction to Permaculture	Bioregions and micro-climates	Permaculture design	Situational analysis	Ecological crisis, ecological footprints	Rain water harvesting	Seed saving and multiplication	Food preparation and handling	Dryland cropping	Presentations
Lunch break										
13:30 to 15:00	Soil Health: Making bokashi	Plant and soil health	Design exercises	Visioning	Climate change adaptation and mitigation	Natural pest and disease control	Food forests	Earth building	Value addition	Work plans
Health break										
15:30 to 17:00	Nursery skills	Holistic health	Integrated land use design (ILUD)	Garden design	Planning and Monitoring	Post harvest handling	Waste management	Earth building	Energy	Evaluation and Closure

NOTES

1. **Arrival** date is Thursday the 29th August. The venue will be Ubuntu Learning Centre in Chikancila village, Chinkuli area of Chongwe just behind Kasisi mission, Drop off from the Kasisi Mponda minibuses at the Blue Shop/ Chasha bus stop and call 0978402378 for directions from there. The buses can be boarded from Lumumba bus station.
2. **Accommodation** will be in shared rooms and tents
3. **Food** will be local, wholesome and healthy and participants will be involved in cooking.
4. **Shops** – There are nearby shops in the community.

5. **What to bring** – Do bring comfortable working clothes, a blanket, your toiletries including soaps, towels, toothpaste and some **seeds** to exchange with others.
6. **Participants are responsible for their own transportation.** No refunds and or allowances will be paid.
7. **Check out** is in the morning of Tuesday the 9th September 2024.
8. **Active participation during and outside sessions will be a required. Cooking will be part of the course. Volunteering will be encouraged.** The available tasks will include:

Mood monitoring	Recap	Food and catering
Time keeping	Documentation	Entertainment
House -keeping	Chairing sessions	Workshop program changes

4.0 CONCEPTUAL TOOLS USED TO DELIVER THE ACTUAL COURSE CONTENT

4.1 Community Food Forest

This is an ecological forests system that creates diverse edible and productive and functional environment. Food forests are also built on plants functional guild, permaculture land-based zoning, vertical heights of plants layering, horizontal packing of plants stacking and sector analysis (external forces) of permaculture designing processes.

4.2 Permaculture

Holistic designing approaches to create sustainable environment for productive landscapes for building resilient communities living in harmony with nature. The approach is about tool for sustainable designing process for agro-ecology development and livelihoods. Permaculture has inspirational values, ethics and principles for care for earth, people and sharing fairly what is available. It is the interweaving connecting process of ecological elements such as water, soil, plants, animals and energy whilst providing natural abundance.

4.3 Agroecology (Agro'- farming and 'ecology – nature)

This means that agriculture approaches that prioritise sustainable and environmental practises and interconnectedness to social, economic and ecological benefits for the people and the earth. The well-defined farming systems within the agroecology include; regenerative agriculture, organic farming, permaculture, agroforestry, crop rotation, integrated pest management, crop cover and other sustainable farming systems. Agroecology principles; diversity, resilience, participation, reciprocity, synergies and equity. Actually, farmers practising agroecology enjoys the benefits of improvements in soil health, biodiversity, ecosystems, good yields, climate mitigation and adaptation and above all sustainable support for local existing food systems

4.4 Syntropic farming systems – ‘syn’ – together, ‘tropos’ – direction or growth- as a Greek word

This refers to promoting the growth, wellbeing of living systems in the ecological approaches. Therefore, we can define syntropic agriculture as an approach that focus on farming and

ecosystems management that focuses on creating diverse, resilient, and regenerative systems- Ernst Gotsch – Brazilian farmer. Principles of syntropic farming include diversification, stratification, succession, association, natural pest control, minimum soil disturbances, cover cropping and water harvesting management. Actually, with reference to the above approaches, syntropic farming also have increased diversity, improved soil health, enhanced ecosystems, increased crop yield, climate resilient, reduced chemical inputs and of course economic benefits to practising farmers.

4.5 Seeds and nursery – with seeds

where life of any living things begin- sacrifice of life for another generation. Considering of seed type – indigenous, heirloom, open pollinated, hybrid, genetic modified and their advantages and disadvantages. Another area of importance in seeds management is on seed policies, seeds issues, farmer's seed systems, seed collection, harvesting, seed banking, seed multiplication and seed sovereignty. All these processes start from the nursery site with favourable conditions such as water sources, soil fertility, bed designs, pest and disease management and other good manufacturing practises.

4.6 Integrated Animal management

Introducing the animals to the ecological systems for the dynamic function, mutual benefits, bio diverse, whilst able to meet the basic needs. The integration depends on the permaculture zones, size of the animal, and function of the animals, value and management within the ecological systems. With reference, to the Food Forest, **rabbit integration**, is given a priority because they are fast breeder, nutrient, income and good source of income.

4.7 Integrated land use design (ILUD) and cultural aspects

A step-by-step approach to use the limited land with respect to ecological and cultural existence in regenerating the degraded school environment. It involves whole designing the land, whether homestead, school or the field for productive landscapes aspects. ILUD has objectives, vision, implementing strategies and various stakeholders are involved to ensure effective and vibrant implementation

4.8 Compost making

The power to feed the soil in order to have healthier outs that support the life pattern of macro and microorganisms. It is an exercise that create productive soils of economic, social, ecological and environmentally sustainable benefit to the communities. Compost making is about converting/ transforming insoluble minerals and elements into usable/ soluble through microbe's activities that can be absorbed by plant roots – osmotic and capillary pressure gradients. Decomposition and fermentation processes are the main processes.

4.9 Water Harvesting

Observing the hydrological cycle and appreciate the role of the human being activities has affected the efficiency and effectiveness of the cycle. To restore the potentials of water energy, harvesting has been some of the initiatives – Start harvesting structures from the top, then stop, slow, spread, sink and shade/ store for future use. Depending on the gradient of the land and other related factors, different tools are being used to achieve the above principles such as tanks, pits, swales, and indeed heavy mulching.

4.10 Waste Management

Understanding that in permaculture there is zero wastes- whether physical, chemical or biological with creativity; recycle, reuse, repair, retain, reduce, refuse, re-oxygenate, refurbish and even redesign is part of managing the wastes for sustainable environmental systems.

4.11 Eco- Entrepreneurship

Step by step process of adding value on the resource / harvest for higher economic benefits, reducing harvest loss and creating sustainable environment. The approach empowers, inspires, encourages the school communities to have control, sense of ownership, belonging, rights and improved livelihoods.

5.0 SOME OF THE ACTUAL OUTPUTS

- Participants Internalization of the permaculture concepts
- Visible practical's – nursery, mandala , planting exercise, natural building
- Active participation in theoretical and practical planned activities
- Practical value addition activities- palm oil extraction by Mr. Mandala
- Participants taking different roles and responsibilities among themselves
- Commitment to participate in seed multiplier groups
- Submission of the designs a work plans as a commitment to implementation.



Class and discussion exercises



Practical A- frame for swale, diverting



Women for natural building – Ecosan



Value addition palm oil making



Enjoying the local prepared foods and some indigenous fruits at Ubuntu

4.0 SEED MULTIPLIER GROUP AND ALSO SERVING AS LIST OF ATTENDANCE

This is a group of farmers who have collected different seeds to grow and return the same quantity to the seed bank. Then they do share the rest with other farmers who later follow the same arrangements/ practices. The main purpose is to introduce and multiply the specific seeds into the farmer communities.

	Type of seed	Farmer	Location	Contacts
1	White Millet	Mrs. Msopelo Blessings Malindo	Chibombo Mufunbwe	0974388317 0973141977
2	Red millet	Rosemerry Mubita Bertha Tembo	Mongu Chongwe	0972222850 0975732442
3	Okra	Loveness Mwakapindula Rosemery Phiri	Kansenga Rufunsa	0971609869 0979288145
4	Bambara nut	Belinda Zumba Jacob Hajiro	Chibombo Monze	0972587481 0973149060
5	Kadonga Ground nuts	Vyiness Ngoma	Petauke	0976953435
7	Pigeon peas	Emmanuel Mazvimba Matthews Mpofu	Harare Mzimba	+263782430993 +265888595231
8	Mphonda	Gilbert knife	Mumbwa	0763307695
9	Cow peas	Patricia Chimwanzu Mandala Kunda Matthews Mpofu Florence Mooya	Chisamba Luapula Mzimba Monze	0779348839 0978920392 +265888595231 0979980219
10	Chalimbana Ground nuts	Innocent Mukondwa Emmanuel Mazvimba	Siyabonga Harare	0774596661 +263782430993

11	Local cow peas	Blessing Malindo	Mufunbwe	
12	Red sorghum	Blessings Malindo Mandala Kunda	Mufunbwe Luapula	
13	Gangata	Loveness Kapindula		
14	Kafwamba maize	Gravity Hamwenda	CHANKHUMBA	0970487735
15	Red beans	Rosemary Phiri		
16	Solwezi beans	Emmanuel Mazvimba		
17	Sunflower	Gravity Hamwenda Blessings Malindo		
18	Kayumu sorghum	Patricia		
	White sorghum	Mandala Kunda Florence Mooya		

7.0 CHALLENGES THAT MIGHT BE EXPERIENCED

- With the prevailing climate change effects, this might contribute to slow implementation and adaptation of the activities within the participants as they do come from different agro-ecological climate zones.
- External factors such as cultural practices, social status etc.

8.0 RECOMMENDATIONS FOR CONSIDERATIONS

- Monitoring, mentoring should be part of the hosting organization- Ubuntu to ensure effective implementation of the activities
- Understanding the conception and techniques permaculture for creating sustainable living is a gradual process, therefore, enough time and patient be considered to get the expected outcomes
- This is a program on capacity building and would be proper for these participants continuing attended other training for exposure and confidence in sharing the skills and knowledge gained with other farmers
- Exchange visits, sharing of seeds, seedlings, active participation of permaculture related events, be part of the plan within the catchment areas
- For circular economy developments, there is need to strengthen farmers cooperatives to establish markets systems and enjoy their rights

9.0 REMARKS / VOTE OF THANKS

It is great appreciation and acknowledge for the training, which has created a platform for learning and sharing ideas. Very special thank to Ubuntu Learning Centre and Mrs Nyika, Rescope and Mr. Nyika for organizing, hosting and supporting , and above all, feeding the team. It is our expectations that the knowledge and skills of good farming practices, farmers will implement, share with other farmers to ensuring food diversity abundance, economic vibrant and ecological sounds.

Thank you