

Permaculture

Permanent Agriculture

Regenerative Agriculture



What is & how does it work?



**Combines agriculture, ecology
and landscape designing**



When the
garden is
safe for
children to
participate
in
harvesting

Does your child know this?

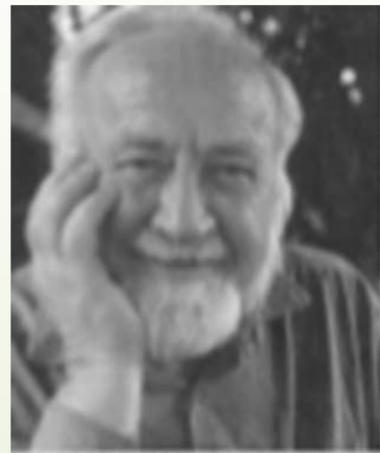


Permaculture Model

- Holds water on the landscape
- Sequesters Carbon (CO₂)
- Builds topsoil, fertility and humus
- No herbicides, pesticides or artificial fertilizers
- Yields increase for 30 years then continue to produce for generations
- Can create abundance for all

“Though the problems of the world are increasingly complex, the solutions remain embarrassingly simple.”

— **Bill Mollison**



Palm Chairs made by Sam & Isaac

Ark Farm office



Robert Kabushenga – CEO Vision Group



**Imagine!!
How
simple**



Free chicken in a simple coop

Cob House @ Midwest Permaculture Centre



Inside

Front

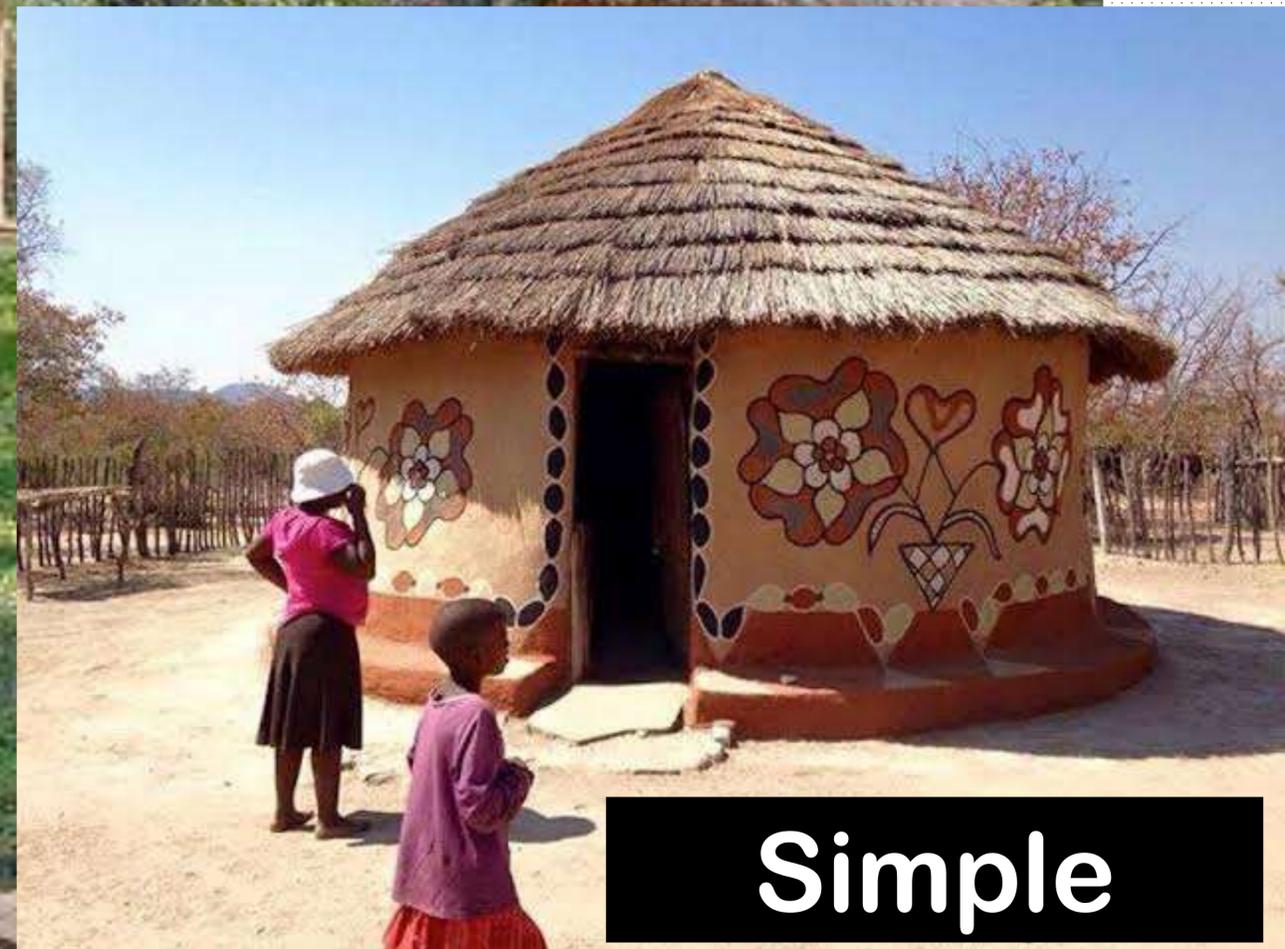
African Eco-village



Design with nature



Imagine this as the Inside



Simple

Living roofed resting hut



Walter from

www.waterworks.com



Cover- Herbs

Muhofa garden

Climber



Fish



Mushrooms

Borrow from wet system approach



3m high Ficus (1yr old)

Permaculture

✓ Design Principles

- Water
- Energy
- Biodiversity
- Preserve and Regenerate

✓ Strategic Principles

- Minimize negative environmental impact
- Ensure natural systems are safeguarded

✓ Attitudinal Principles

- Work with nature
- Value edge zones
- Solutions in Problems
- Produce no Waste
- Value People and their skills/work
- Respect all life
- Renewable energy and resources



Ethics & Design Principles



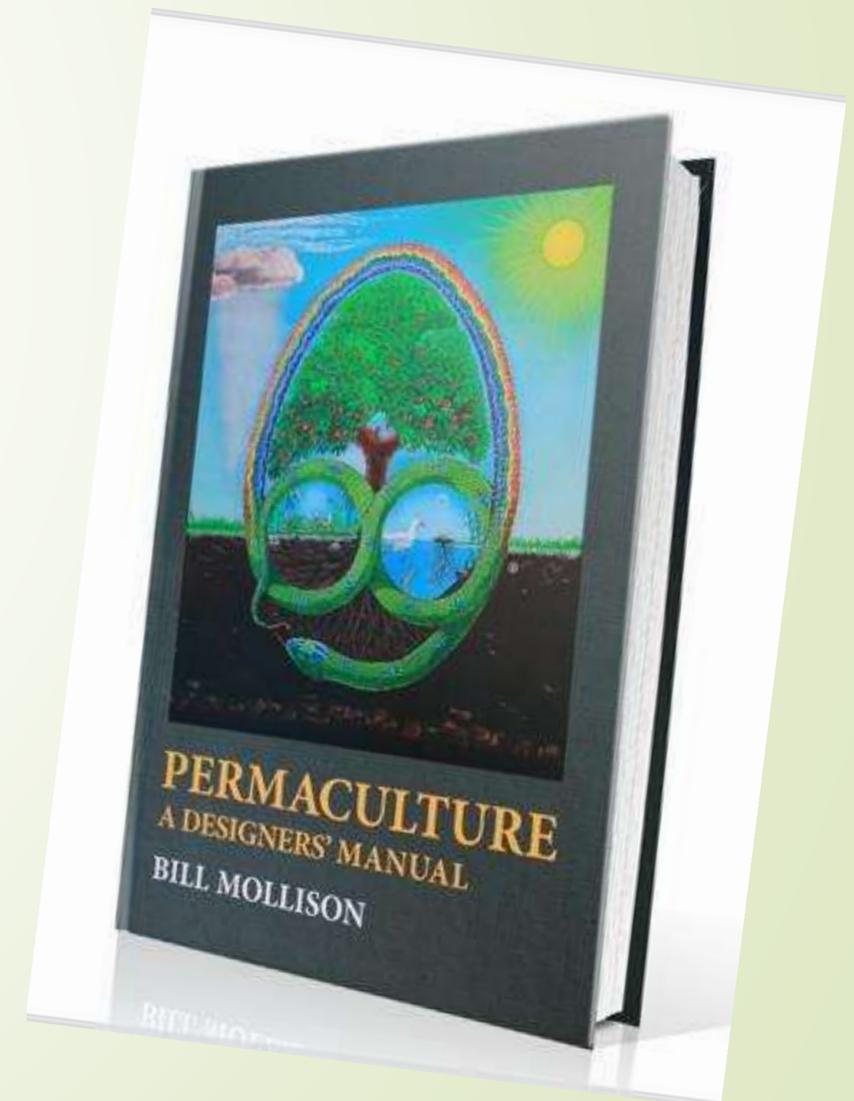
This clock can help you remember

1. Observe & interact
2. Catch & store energy
3. Obtain a yield
4. Apply self-regulation & accept feedback
5. Use & value renewable resources & services
6. Produce no waste
7. Design from patterns to details
8. Integrate rather than segregate
9. Use small & slow solutions
10. Use & value diversity
11. Use edges & value the marginal
12. Creatively use & respond to change

Permaculture Design by Scale of Permanence

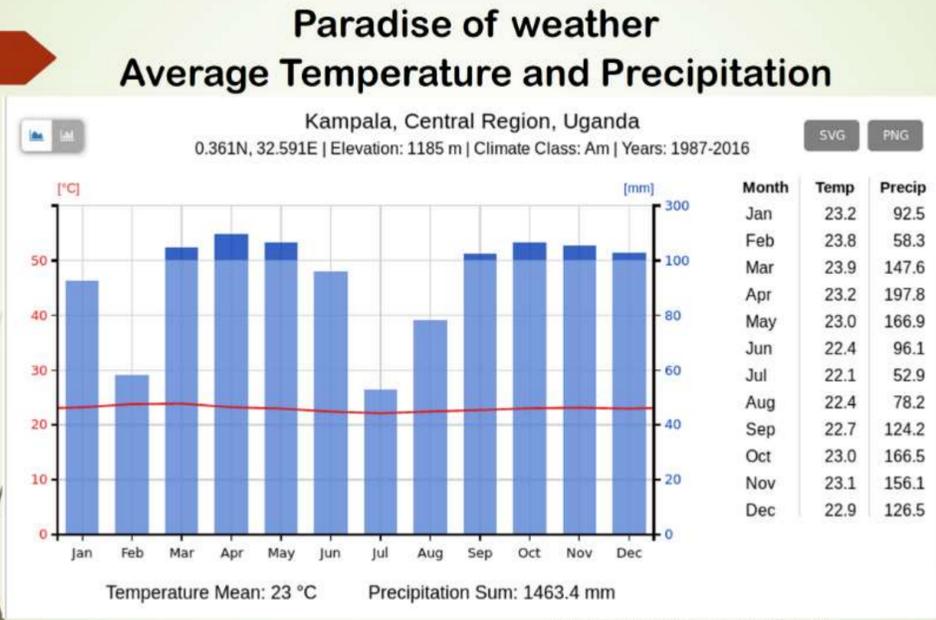
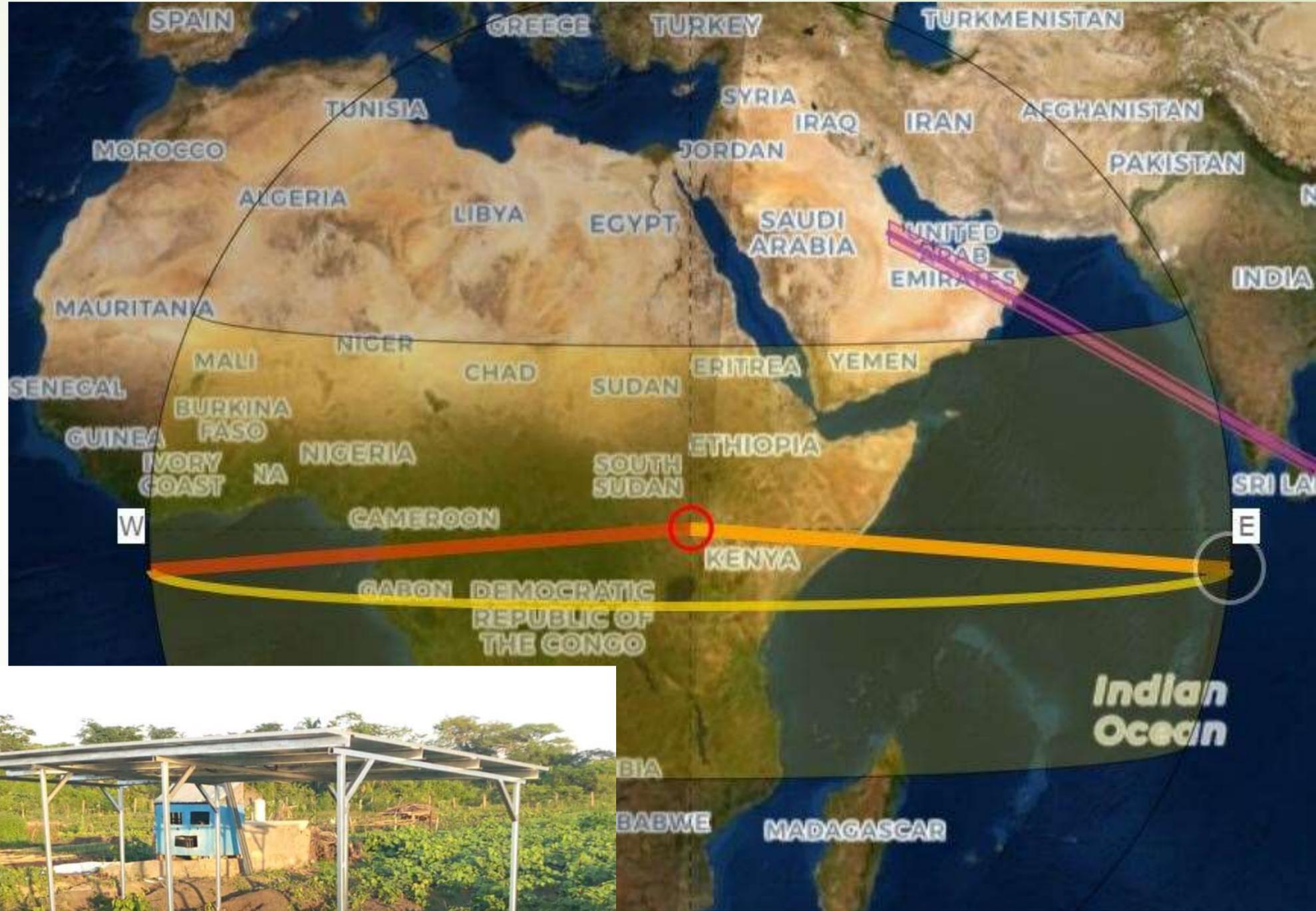
‘Design around those factors we have the least control, toward those we have the greatest.’

- 1. Climate**
- 2. Landform**
- 3. Water**
- 4. Access**
- 5. Vegetation**
- 6. Microclimates**
- 7. Structures**
- 8. Zones of use**
- 9. Soil**
- 10. Aesthetics** (beauty and artistic taste)



Rainfall (35-60 Inches)

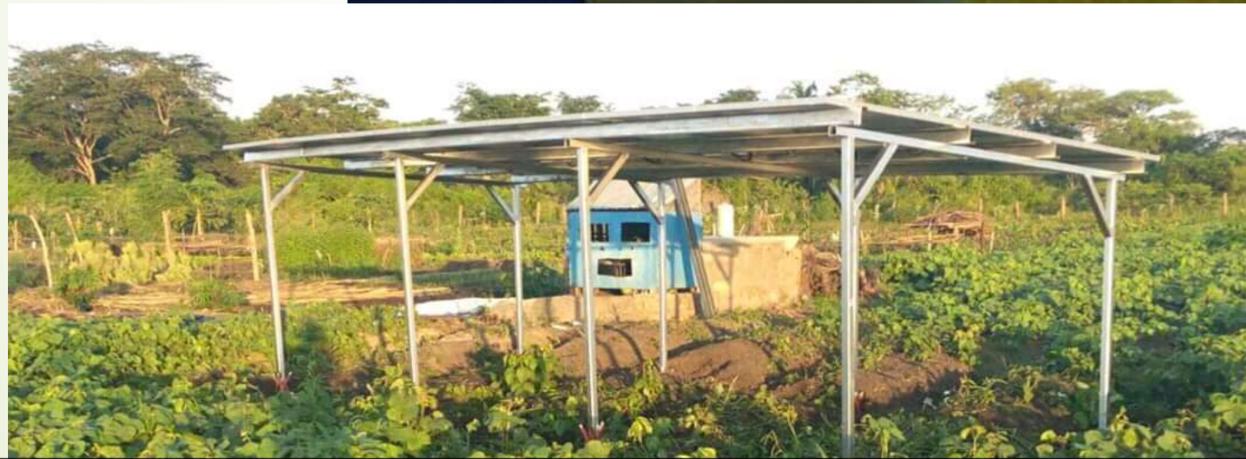
Sun -12 hours all year round



Plant Hardiness Zone: 11
57.6Inches/year thus 4.8 Inches/month



4 Inches
monthly



Solar @ Ark Farm
6m³ / hour @40m head

Temperatures
(20-25°C)

Soil

Rock in different sizes

- Silt
- Clay
- Sand

Life in the soil - Organic Matter

Build top soil

Brings biodiversity – humidity & temperature are balanced. Sustainable production

Forests

(World's forest report 2014,FAO)

(in 2011)

- ✓ Contributed £88 billion from NWFPS
- ✓ Produced 76 million tonnes of food
- ✓ Products provided Shelter for 1.3 billion people
- ✓ Provided medicines for 2.8 billion people

This is underestimated

“Food is supposed to grow in a forested or semi-forested environment to be sustainable. Some will survive & other will die out but it will be health food. The monoculture wave that started in early 1900s is a crazy move”

- Isaac Muhofa, 2019.

November , 2018



November , 2019



A tropical tree can sequester a minimum of 22.6 KGS of carbon a year.

- ✓ **Most carbon in tropical forests is in plants not the soil. Without plants, you have deserts.**
- ✓ **110 tonnes of carbon per acre.**
- ✓ **Huge biodiversity.**
- ✓ **Income Core: Non- wood forest products (NWFPs)**

Using indigenous knowledge, am developing the African methodology for tropical food forests using 40 tree species with over 10 edible fruit trees & unlimited NWFPs.

Akiri Miyawaki's methodology (Won the Blue Planet Prize, 2006) was developed using his community's available knowledge in Asia.

Our people have done the same for centuries though not recorded.

Food forests

Imagine what we can create in 10 years.

Regenerate tropical rainforests in 10 years instead of 100 years using food forests approach

- **5 trees per Square metre.**
- **20,000 trees per acre**
- **At a cost of UGX 6m (\$1,667) per acre**
- **No maintenance after 2 years**

If we worked with forest communities rather than chase them out of reserves, we could become the leading producers of tropical fruits, spices and herbs yet with a sustainable income for the government & people while preserving nature.

**Sustainable farming
&
Permaculture
design solutions**

**Presented
by**

Consultant

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Woman And Girls Empowerment

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