Project Green Challenge – Day 15 Greener

Submission Name: AWUNGAFAC_ASONGU_DAY15_GREENER_2025

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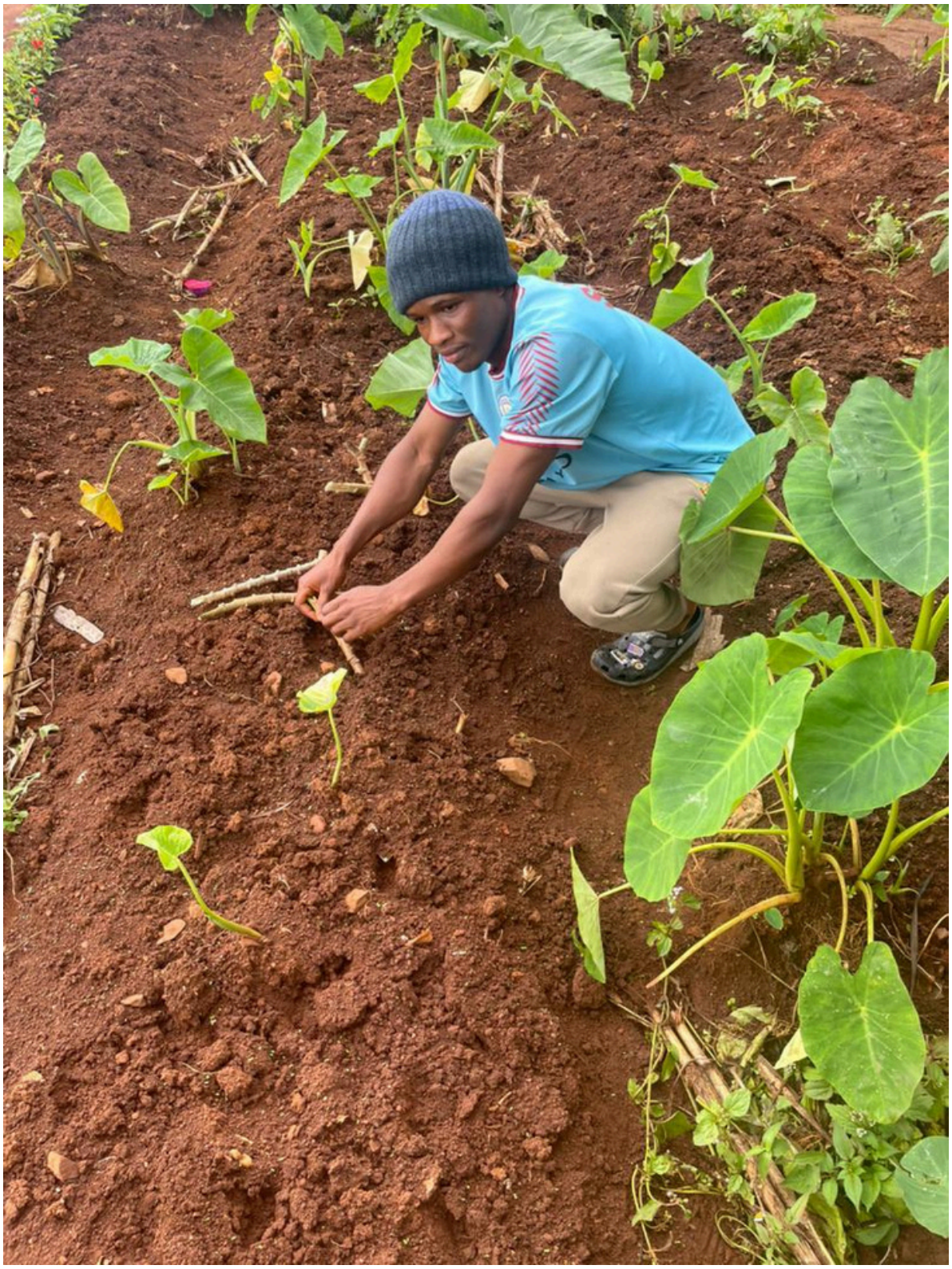
LINK TO INSTAGRAM ACCOUNT:

Greenhouse on Instagram: "Growing up as a farmer’s son, I often saw soil as something …

1. Garden Context

The space I selected is a small plot of family farmland in **Lebialem**, a hilly area in Cameroon known for its fertile red-brown soil. I grew up watching my parents cultivate these slopes, and through my sustainability lessons gotten from PGC25, I now see how regenerative farming can heal our soils while feeding our people. My garden will blend traditional crops with regenerative techniques that restore nutrients, capture carbon, and support biodiversity.



Plant	Reason for Choice & Benefits to Soil, Climate, and People
Okra (Abelmoschus esculentus)	Deep-rooted crop that helps aerate compact soil and increases infiltration. Its leaves can be composted easily, and it provides high-fiber vegetables rich in vitamins A and C for local diets.
Maize (Zea mays)	A staple food in Cameroon that grows quickly and produces biomass for composting. Its tall structure offers natural shade for smaller crops like beans, reducing evaporation.
Cassava (Manihot esculenta)	Drought-tolerant root crop; its thick canopy protects soil from erosion and intense sun. Cassava residues enrich organic matter when left to decompose.
Cocoyam (Colocasia esculenta)	Excellent for water retention on sloped land; broad leaves slow rainfall impact, reducing surface runoff. A reliable local food rich in minerals.
Beans (Phaseolus vulgaris)	Nitrogen-fixing legume that restores fertility by feeding beneficial soil bacteria. Acts as a “living fertilizer” for maize and cassava while offering protein-rich food.
Groundnut (Arachis hypogaea)	Another legume that fixes nitrogen, improves soil structure, and covers the ground to prevent erosion. Nuts supply essential oils and plant protein for households.

Together these six crops demonstrate a **diverse, circular ecosystem**: legumes feed the soil, root crops hold it, and tall crops protect it — a natural model of regeneration.

🌱 3. Regenerative and Climate-Friendly Practices

a) Intercropping and Companion Planting

- Inspired by *Kiss the Ground's* principles, I will plant **beans and groundnuts** between **maize and cassava rows**.
- This creates a living network of roots that fix nitrogen, reduce pest pressure, and ensure year-round ground cover.
- **Soil benefit:** prevents erosion, balances nutrient use, increases biodiversity of soil microbes.

b) Composting and Mulching

- Following *Beginner's Guide to Gardening* advice, I will recycle organic matter — maize stalks, okra leaves, and kitchen waste — into **compost** and use **mulch** from dry grass.
- **Soil benefit:** feeds earthworms, retains moisture, adds organic carbon, and suppresses weeds without chemicals.

c) Minimum Tillage and Natural Pest Control

- Based on the *Regenerative Living Guide*, I will disturb soil as little as possible to protect its structure and living microorganisms.
- I will use **ash, neem leaves, and lemongrass extracts** instead of chemical pesticides to support beneficial insects and pollinators.
- **Soil benefit:** keeps carbon stored underground, promotes fungi–bacteria balance, and enhances long-term fertility.

🌻 4. How It Regenerates Life

Each regenerative step turns the garden into a carbon sink and habitat. Covering the soil and planting legumes rebuilds microbial life; compost re-creates humus; and diversified planting revives pollinators. The garden becomes not only a food source but also a **climate-action space**, proving that regeneration can begin anywhere — even on a small family farm in Lebialem.

🖋️ 5. Instagram Caption

📸 *Lebialem Regenerative Garden Plan — blending tradition with climate innovation.*
Okra, maize, cassava, cocoyam, beans & groundnut work together to feed both people and the planet. 🌱
Every compost heap, root, and worm is part of the healing.
#PGC2025 @TurningGreenOrg @KissTheGround @EOProducts @RewildYourCampus

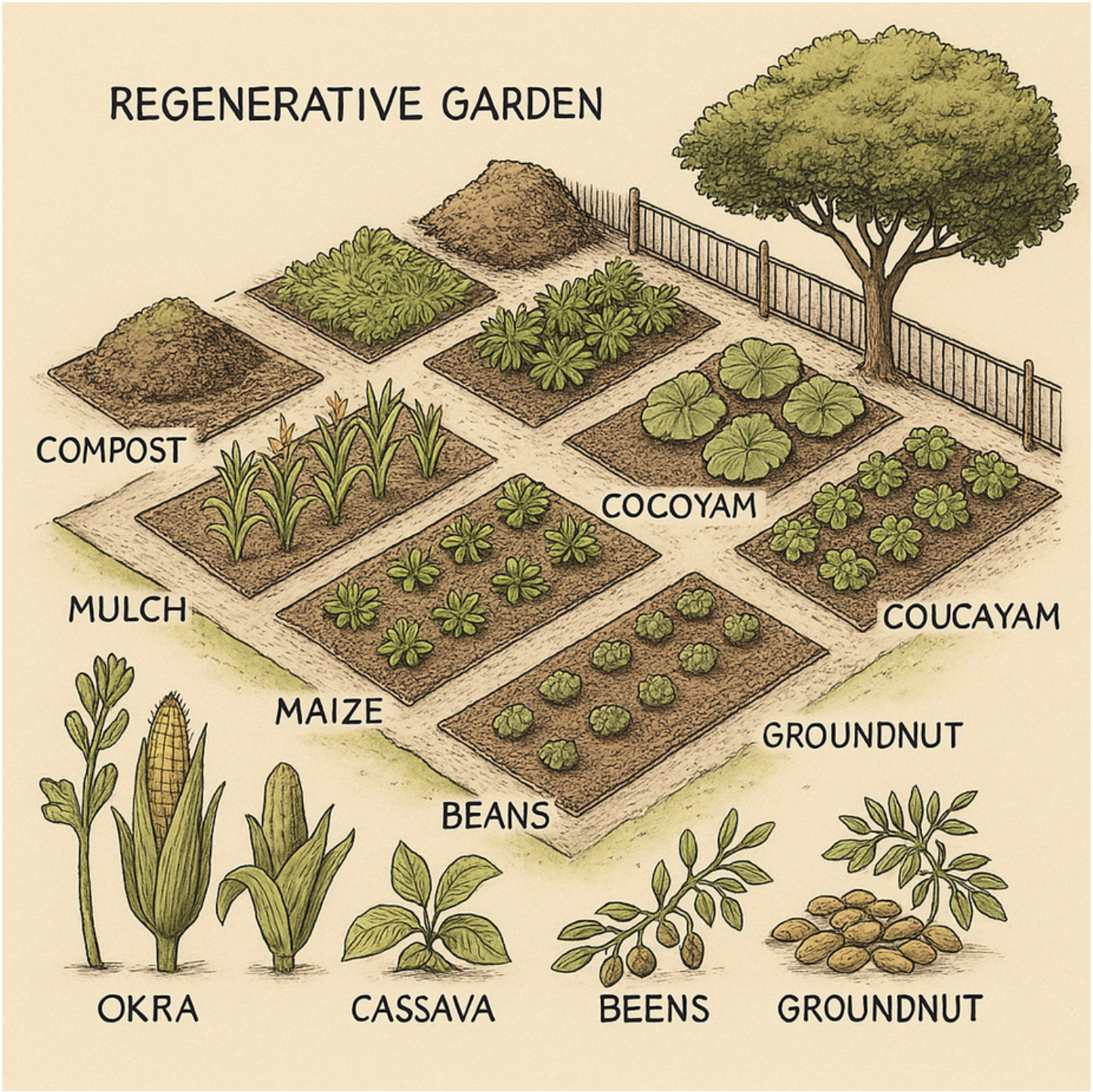
Lebialem, Cameroon | University of Buea | PGC2025

Top-View Garden Layout

Cassava	**Beans**	**Okra**
Maize	**Cocoyam**	**Cassava**
Groundnut	**Maize**	**Okra**

Cassava Rows (Erosion Control)
Maize Rows (Shade & Structure)
Legumes (Beans & Groundnut for Nitrogen Fixing)
Okra (Root Aeration & Nutrition)
Cocoyam (Moisture Retention)

This regenerative garden integrates six key crops — okra, maize, cassava, cocoyam, beans, and groundnut — positioned in alternating rows to maximize biodiversity and soil regeneration. The legumes fix nitrogen naturally, while the root and canopy crops prevent erosion and improve soil moisture. Compost piles are placed at the corners to recycle organic matter, and mulching covers the open soil to protect microorganisms. This layout mirrors both ancestral farming wisdom and modern regenerative practices championed by **Kiss the Ground** and **Turning Green**.


REGENERATIVE GARDEN
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