

# Eco-Sustainable Garden empowering Mbororo Minority Women Project



## Contributions of Home Gardens to Vegetable Biodiversity: A Case Study of Eco-Sustainable Gardens Empowering Minority Women in Cameroon

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### Abstract:

The biodiversity of many communities is being threatened by many factors; one such factor is demand driven agricultural systems with an emphasis on high-value monocultures. This agricultural system has negatively affected the biodiversity of many communities thus fragilizing their ecosystems. With the loss of plant biodiversity in many communities, especially some indigenous vegetables, this study examined the potential of a home garden project to reintroduce some vegetables back into rural communities. Three groups of vegetables were grown in the gardens, i) marketable vegetables (fluted pumpkin, waterleaf, chili pepper), ii) nutrient-rich vegetables (aubergine, amaranths, okra, Chinese cabbage, sweet bitter leaves), and iii) indigenous vegetables (Lalo, Folere, Caricachee). The project reintroduced and increased the varieties of vegetables available within the Mbororo minority communities in the Northwest region of Cameroon, adding to the plant biodiversity in the communities.

### 2. Introduction:

Biodiversity and natural resource management are critical to a sustainable livelihood because these support their ecosystems.

However, the biodiversity is being threatened by many factors; one such factor is demand driven agricultural systems with an emphasis on high-value monocultures.

This agricultural system has negatively affected the biodiversity of many communities thus fragilizing their ecosystems.

The objective is to examined the potential of a garden project to reintroduce vegetables back into the communities especially indigenous vegetable

The Mbororo are agro-pastoralist from the Fulbe ethnic tribe constitute a regional minority with roughly 10% of the population of the Northwest region

### 3. Methods:

- Eco-sustainable gardens empowering Mbororo minority women is a home garden project designed to help reduce the dependency of the Mbororo women on their husbands for food and income, and also increase the vegetable biodiversity



Building nursery with the women

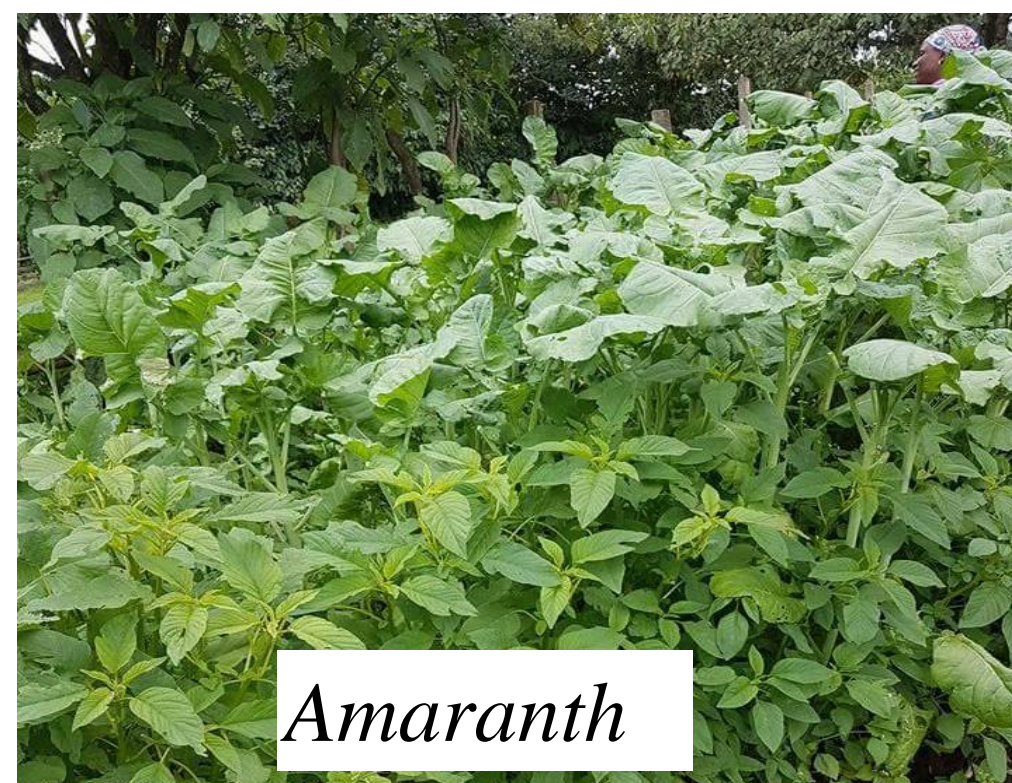
- Building of nurseries and gardens for the women
- Education on nutrition and good horticultural management practices.
- Planted three groups of vegetables: Nutrient rich, marketable, and indigenous vegetables.



Women working in their community garden

### 4. Results:

#### Nutrient dense vegetables from the garden



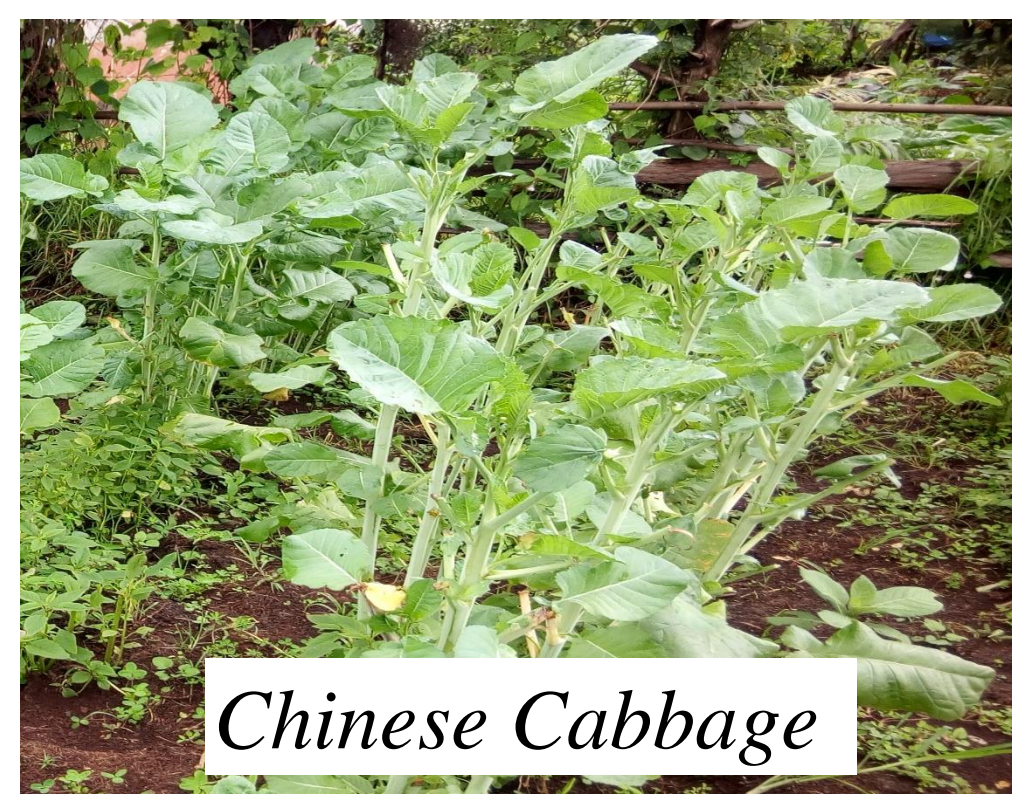
Amaranth



Garden egg



Okra garden

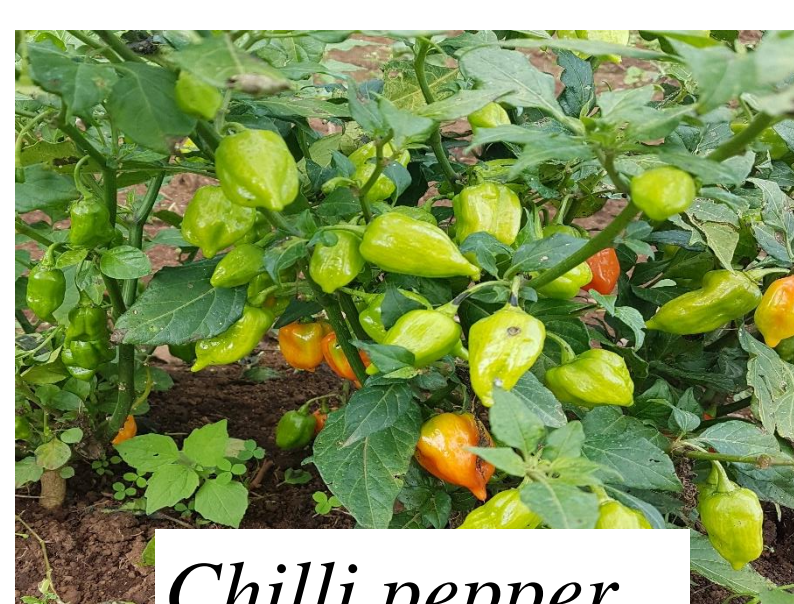


Chinese Cabbage

#### Marketable vegetables from the garden



Fluted pumpkin



Chilli pepper



Waterleaves



Fluted pumpkin for sale



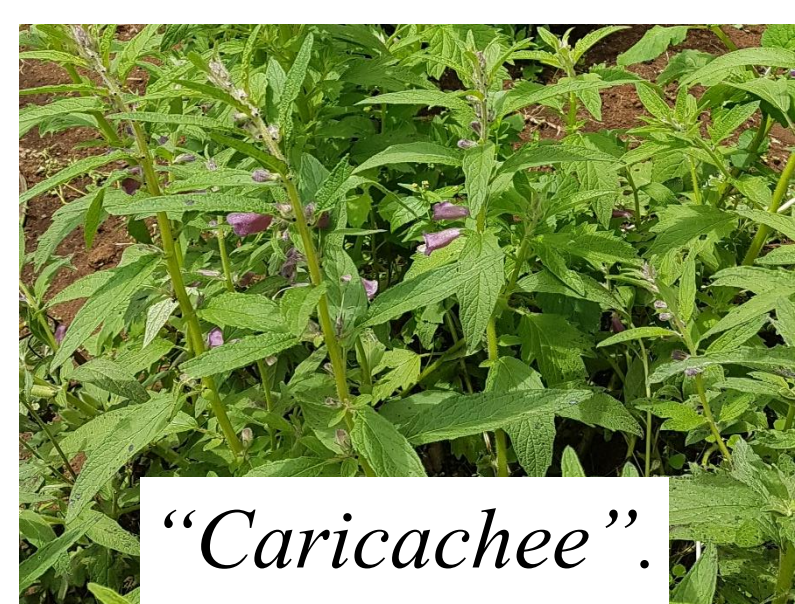
Pepper for sale



Harvested waterleaves

Vegetables ready to be sold

#### Indigenous vegetables from the gardens



"Caricachee".



"Lalo" :Jude leave



Folere" : hibiscus

#### Challenges



Bad roads



Irregular rainfall



Pest: smelling beetle

### Results Con't:

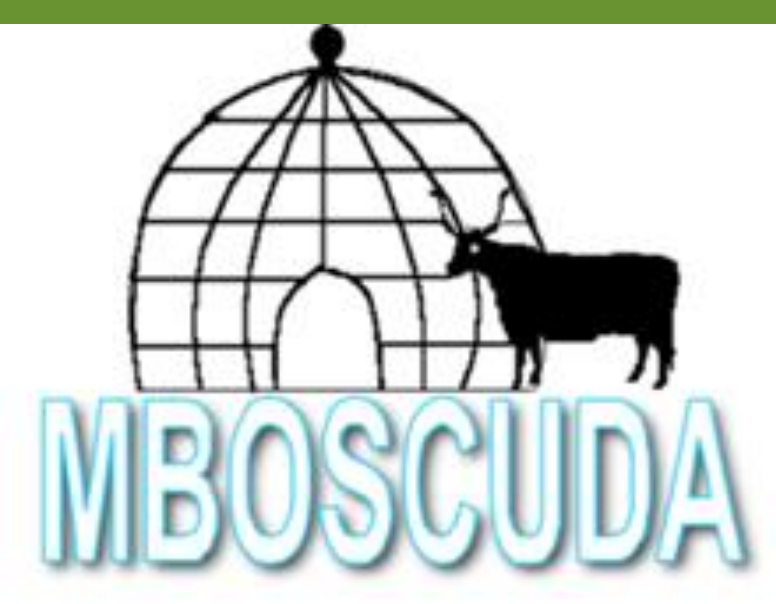
- Seven communities, 46 home gardens for 114 women as beneficiaries (community and individual gardens)
- Availability and accessibility to fresh vegetable like of Garden Egg, Green (Amaranth), Chinese Cabbage and Okra in the community
- Reintroduction of indigenous vegetables: "Lalo" Jude leave, "Folere" a hibiscus, and "Caricachee".
- They grow and sold pepper, fluted pumpkin and waterleaves.
- Irregular rains, poor road, and pest.

### 5. Conclusion / Discussion:

- The garden project increased the vegetable biodiversity of the Mbororo community.
- The reintroduction of the indigenous vegetables motivated the participants to grow more vegetables.
- The project provided an alternative source of income for the women.
- Infrastructural, climate, and biological challenges might hinder the potential for home gardens to be efficient.

### 6. Recommendations

- Home garden should be promoted because vegetables grow fast thus can easily help with resource management, and ecosystem.
- Home gardens should be encourage in rural communities as food base approach to fight nutrition insecurity.



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