Eco-Sustainable Garden empowering Mbororo Minority Women Project



Constraints of Home Gardens to Impact Nutritional Anemia: A Case Study of Eco-Sustainable Garden Empowering Mbororo Women in Cameroon

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Abstract:

Malnutrition is a severe public health challenge as it leads to increase mortality. Iron deficiency anemia has several consequences on the immune and mental function, as well as general wellbeing of every individual. The cheapest intervention used to improve nutritional intake and outcome has been food-based approaches like home gardening, bio-fortification, and keeping of small animals. The project, "Eco-sustainable Gardens Empowering Mbororo Minority Women" is a home garden project in the North West region of Cameroon designed using the concepts of nutrition-sensitive agriculture to help the Mbororo women. A case-control study design was used in the study to assess nutritional anemia amongst Mbororo women with similar socio-economic characteristics in home gardens and non-home gardens communities. There was no significant difference between hemoglobin levels of the Mbororo women with the home gardens and those without home gardens.

Introduction:

Results:

Results Con't:

- Malnutrition is a severe public health challenge as it leads to increase mortality and morbidity
- \succ Deficiencies in iron contribute to maternal deaths, and maternal iron deficiencies are associated with babies with low weight (<2500 g) at birth.
- > The Mbororo minority people are agro-pastorals that are marginalized in the northwest of Cameroon.
- Eco-sustainable Gardens is a home garden project to empower Mbororo women with nutrient rich vegetables.
- \succ This work aim at assessing this home garden project impact on nutritional anemia



Nutritional anaemia

- There was no significant difference between hemoglobin levels of the Mbororo women in the home gardens communities and those in communities with no home gardens.
- 59.5% of the women in the garden communities were anemic with 16.2%, mild, 35.1% moderate, and 8.1% severe anemia.

Nutrient dense vegetables from the garden



- The women with home gardens harvested, sold and consumed fresh vegetables from their gardens.
- (Amaranth), Garden Egg, Green Cabbage, Chinese Okra, and indigenous vegetables
- Not all gardens had all the vegetables
- Fresh vegetables were not available during dry season.
- Pest was a problem in some gardens Availability did not always translate to regular consumption

5. Conclusion :

The gardens did not have any effect on nutritional anemia of the garden women



Women preparing vegetable from community garden

Methods: 3.

Urit 12 hemoglobilometer was used to measure hemoglobin levels depicting iron deficiency.

Hemoglobin levels were measured for a garden and non-garden community



Doctor measuring iron level in the blood of the women

Garden full with Amaranth and Chinese cabbage





Indigenous vegetable: "Caricachee"









- non-garden community had no significant difference in the anemic level
- The women in the garden community did consumed dark green vegetables.
- Quantification is a problem challenges like dry season and pest might have hampered the impact

6. **Recommendations**

- Animal based nutritional interventions should be combine with garden projects for better impact on nutritional anemia.
- Home garden projects should be

In-depth interviews and focus group discussions were carried out

The data was collected from women with similar socio-economic characteristics.

Family harvesting vegetable

implemented for a long time before evaluation

Home garden should be promoted with nutrition-specific interventions for better outcome

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