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“Filling gaps and removing traps  
for sustainable resource management”

## 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 as it leads to increase mortality and morbidity. 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. Though these home gardens grow vegetables rich in micronutrients such as iron and vitamin A, they most often do not often translate into the micronutrients of the beneficiaries.

Iron deficiency anemia has several consequences on the immune and mental function, as well as general wellbeing of every individual. Women, in particular, have increased iron demands due to menstruation, pregnancy, and lactation. This study aimed at assessing if the home garden project “Eco-sustainable Gardens Empowering Mbororo Minority Women” had an effect on anemia amongst the beneficiaries.

A case-control study design was used in the study to assess nutritional anemia amongst mbororo women with similar socio-economic characteristics. Hemoglobin levels of Mbororo women in the home garden project community ongoing for two years versus those without the home garden were measured (using a Urit 12 hemoglobinometer) to depict iron deficiency anemia and values compared.

There was no significant difference between hemoglobin levels of the Mbororo women with the home gardens and those without. Both communities were anemic. Although home gardens address the problem of food insecurity, other sources of micronutrients such as animal sources and supplements should be considered in these communities.

**Keywords:** Iron deficiency, malnutrition, nutritional anemia