



Tropentag, September 20-22, 2017, Bonn

“Future Agriculture:
Socio-ecological transitions and bio-cultural shifts”

Participatory Approach to Increase Dietary Diversity through Agricultural Activities and Nutrition Education in Western Kenya

JULIA BOEDECKER¹, FRANCIS ODOUR ODHIAMBO², CÉLINE TERMOTE³, GINA KENNEDY⁴

¹*Bioversity International, Healthy Diets from Sustainable Food Systems, Kenya*

²*Bioversity International, Healthy Diets from Sustainable Food Systems,*

³*Bioversity International, Healthy Diets from Sustainable Food Systems, Kenya*

⁴*Bioversity International, Healthy Diets from Sustainable Food Systems, Italy*

Abstract

This research examines the suitability of a community-based participatory approach to increase dietary diversity through agricultural activities and nutrition education in Vihiga County, Western Kenya. It arises from a project that is part of the nutrition cross-cutting cluster work within Humidtropics, a CGIAR research programme. The project consists of a baseline survey covering agricultural biodiversity and nutrition of women and small children, a phase of participatory development and implementation of community activities to improve nutrition and an endline survey.

During the baseline survey, data was collected in 10 randomly selected sub-locations in Vihiga County. After pair-matching, five (intervention sub-locations) of the 10 sub-locations took part in participatory workshops to develop community activities to improve nutrition, while the other five served as control. During the first year of implementing the chosen activities, the communities received agricultural training and nutrition education. The endline survey covered the 10 sub-locations surveyed at the baseline. Within the five intervention sub-locations, households were further stratified as beneficiaries (participating in development and implementation of activities; receiving agricultural training and nutrition education) and non-beneficiaries (receiving nutrition education).

Even though Vihiga County is rich in local food biodiversity (67 cultivated and 38 wild edible species), diets lack diversity. In the participatory workshops the communities decided to do kitchen gardening and poultry raising to diversify diets. Children and women from the control group had significantly lower mean dietary diversity scores (4.0 and 4.8, respectively), compared to the non-beneficiaries (4.5 and 5.3, respectively), and beneficiaries (4.6 and 5.5) ($p = 0.000$). A much higher proportion of children and women of the control (28% and 30%, respectively) than in the non-beneficiary (10% and 15%, respectively) and beneficiary group (12% and 13%, respectively) did not meet minimum dietary diversity.

Looking at dietary diversity and the measures applied to improve it, it can be assumed that nutrition education had the greatest effect, before participatory agricultural activities and agricultural trainings. This assumption however only derived from the endline data analysis. Baseline and endline survey data still need to be compared in order to verify which of the measures worked toward the improvement of dietary diversity.

Keywords: Agrobiodiversity, community-based participatory approach, dietary diversity, nutrition, nutrition education