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## Book of Abstracts

Editors: Dionysious Kiambi, Jane Ambuko, Hannah Gentle, Teresa Borelli,  
Mary Abukutsa, Maurice Oyoo, Lusike Wasilwa, Céline Termote, Victor  
Wasike, Giulia Rota Nodari



## **What has our landscape to offer for community's food and nutrition security; a case of Vihiga County, Kenya**

Francis Odhiambo Oduor<sup>1</sup>, Céline Termote<sup>1</sup>, Gina Kennedy<sup>2</sup>

<sup>1</sup>*Bioversity International Kenya,*

<sup>2</sup>*Bioversity Initiative on Healthy Diets, Bioversity International, Rome, Italy*

A diagnostic study on agricultural biodiversity, diets and nutrition was carried out in Vihiga County. This constituted the first phase of the project 'Participatory approaches to improve dietary diversity in Vihiga County, Western Kenya', and aims to support communities in developing, implementing and monitoring their own sustainable agriculture for nutrition interventions intending to improve dietary diversity for families, with focus on the special nutritional needs of women and young children. Ten sub-locations in Vihiga County were randomly selected for diagnostic surveys. In each sub-location, 40 households with children aged 12-23 months were randomly selected. Interviews were conducted with household heads answering questions regarding farm species diversity; and care-givers performing two non-consecutive 24h food intake recalls for themselves and the children aged 12-23 months and a knowledge, attitudes and practices (KAP) assessment. Another set of two non-consecutive 24-h recalls and an anthropometric assessment of children and caregivers was completed. A total of 647 households, with mean household size of 6.28 and dependency ratio of 1.6 participated in the study. 105 plant species were identified in the farms, 64% of which were edible staples, fruits, vegetables or spices and condiments. The most popular species on farms were maize (*Zea mays* L.), beans (*Phaseolus vulgaris* L.), bananas (*Musa* spp.), cowpeas (*Vigna unguiculata* (L.) Walp.) and avocado (*Persea Americana* Mill.). There are 45 wild plant species in the community, 59% of which are eaten as vegetable relish. In addition, 13 domesticated and 14 wild animal species were inventoried in the farms. In general, caregivers are aware of what constitutes a diversified diet and the importance of diversified diets for health. However, lack of access to nutritious foods (through self-production or lack of money to buy them) and inadequate knowledge on how to prepare certain foods were cited as main barriers towards diversified diets. During the plenty season 49.6% of women and 23.3% of children did not meet the minimum recommended dietary diversity. These figures were higher (60.1% and 27.1% respectively) during the lean season. During the plenty season, calcium, iron and zinc intakes were below the estimated average requirements (EAR) for more than two thirds of children, while Iron, zinc, calcium, Vit. B12 and folate intakes were below EAR for more than two thirds of caregivers. A double burden of malnutrition was found with 28.3% stunted children (low height for age, chronic malnutrition) and 27.2% of overweight or obese caregivers.

**Key words:** Nutrition sensitive landscapes, biodiversity, dietary diversity, farm diversity