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

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Abstract

Background: 800 million people go hungry and an additional 2 billion people suffer from micronutrient deficiencies. The main focus of agriculture to produce large quantities of a few, energy-rich staple food has led to the neglect of many highly nutritious species gradually disappearing from people’s diets. The paper presents diagnostic results on community knowledge around agricultural biodiversity, diets and nutrition as part of the HumidTropics/CGIAR-funded project ‘Participatory approaches to improve dietary diversity in Vihiga County, Western Kenya’ aiming at supporting communities in developing and implementing their own agriculture for nutrition interventions to improve dietary diversity.

Specific objectives: 1) characterize plant and animal diversity with potential to improve diet diversity and quality; 2) study seasonal dietary patterns and entry points for diversification; 3) assess child and women malnutrition.

Methods: Diagnostic surveys during plenty (September 2014) and lean (April 2015) seasons were organized in 10 randomly selected sub-locations in Vihiga County. In each season, 400 households with child aged 12-23 months were interviewed regarding farm species diversity, nutrition knowledge, attitudes and practices and dietary patterns of child and caregiver using two quantitative non-consecutive 24h recalls. Anthropometric assessment of children and caregivers was done in the lean season.

Results: On-farm, 105 plant species were documented. Maize, beans, bananas, cowpeas and avocado were most popular. Additionally, 45 wild plant, 13 domesticated animal and 14 wild animal species were documented. Caregivers are aware of what constitutes a diversified diet and the importance for health. However, lack of access to nutritious foods (through self-production or lack of money to buy them) and inadequate knowledge on preparing certain foods were cited as main barriers towards diversified diets. During the plenty (lean) season 49.6% (60.1%) of women and 23.3% (27.1%) of children did not meet the minimum recommended dietary diversity. Calcium, iron and zinc intakes were below the estimated average requirements (EAR) for more than two thirds of children and caregivers, while VitB12 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 and 27.2% of overweight or obese caregivers despite the abundance of agricultural biodiversity. Combined agriculture for nutrition interventions that reinforce and broaden community knowledge are necessary to improve dietary patterns.

Authors are willing to develop a paper for the conference proceedings