

The role of local biodiversity in meeting nutritional requirements for complementary foods of infants and young children, Southern Benin

FoodAfrica



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Key results

146 different edible plant and 148 edible animal species were documented in the project area, showing the richness of the local biodiversity for food and nutrition and opportunities for households to diversify and improve diet quality

However, 80% of surveyed HHs experienced some form of food insecurity over the past 30 days, and 59% of HHs lacked foods several times across the year. Reducing diversity (69%) and quantity (56%) of foods consumed, obtain foods with loan (50%) or wild food consumption, particularly wild vegetables (25%), are coping strategies used during food insecure periods.

Consumption of wild vegetables was positively associated with overall dietary diversity which was itself positively associated with the probability of adequacy in nutrients among 6-23 months old children. A positive association of mother/care giver education with wild vegetable consumption was found.

60% of the children surveyed met the minimum dietary diversity indicating generally a good quality of diet. However, none of the children surveyed reached the recommended nutrient intake on the basis of individual consumption of complementary foods. This suggests that, despite a relative diversity in diets, the quantity of foods/food groups consumed by the children are not sufficient to provide the necessary nutrients required to cover the gaps, particularly in calcium, iron and zinc where the gaps were very severe, even when taking into account the nutrient contribution of breast milk.

Significance of the Research results

The results confirm the richness of local biodiversity for food and nutrition and highlight the important role of wild foods for maintaining diversity of diets as well as resilience, particularly during periods of food scarcity. The association with care giver (mother) education levels furthermore suggests that awareness of the population, particularly women, through nutrition education and other dissemination means, would positively improve child nutrition and community diets.

Entry points on how to improve feeding practices in an affordable, safe and culturally-sensitive way were identified using the in-depth information on determinants of infant and young child feeding practices generated through this project. Innovative nutrition education tools incorporating use of local agrobiodiversity were developed (participatory videos and complementary materials such as posters and flyers) to promote good feeding practices and thus improve maternal and child nutrition and community diets.



Figure 1. Community based training on available food diversity and dietary diversity. Photo: J.Boedecker

End-users and impact

Community health workers and agricultural extension agents in the study communities have been trained and encouraged to continue to use the developed dissemination/education tools in their day-to-day work. Phase II will train a wider range of extension workers beyond project communities in Southern Benin

Policy makers and agriculture/nutrition program implementers will benefit from an enormous wealth of information generated on locally available foods and complementary feeding practices in Southern Benin. Detailed information on dietary intakes is very scarce in developing countries. Together with the identified entry points for improvements, this will allow them to make better informed decisions.

Finally, the mothers/care-givers, and the communities in general, will benefit from locally adapted information and knowledge on how to improve diets making the best use of the locally available biodiversity. Better knowledge and improved complementary feeding practices will contribute to better nutritional status of children and thus healthier and more productive communities.

