

SUPPORT TO NATIONAL NUTRITION RESPONSE IN MALAWI PROJECT

EFFECT OF INTEGRATED HOMESTEAD FARMING ON DIET QUALITY IMPROVEMENT AND MATERNAL AND CHILD NUTRITION IN DEDZA DISTRICT

Bannet Gwaza, Beatrice Mtimuni, Zione Kalumikiza, Khumbo Mhango, Kingsley mologo, Lloyd Mmangisa, Alexander A. Kalimbira

Department of Human Nutrition and Health, Lilongwe University of Agriculture and Natural Resources—Bunda College, P.O. Box 219 Lilongwe, Malawi.

INTRODUCTION

To improve household food and nutrition security, the Malawi Ministry of Agriculture promotes Integrated Homestead Farming (IHF) as a comprehensive approach in place of single-strategy backyard gardens. The approach involves the growing of diversified crops, rearing of small livestock around the home and integration of aquaculture wherever possible.

This study was done to examine the effect of IHF in improving diet quality and child nutritional status among children and women.

OBJECTIVE

To assess the effectiveness of IHF in improving diet quality and maternal and child nutritional status.

RESEARCH METHODS

- ♦ A cross-sectional study of 216 children aged 6–23 months and 137 lactating women was conducted in Dedza district.
- ◆ There were four strata of comparison, namely Stratum 1: households without any IHF component, Stratum 2: households with fruits only, Stratum 3: households with fruits and small stock and Stratum 4: households with three IHF components (fruits, small stock and vegetables).
- ◆ Odds ratios with 95% confidence intervals (CIs) were calculated using binary logistic regression and multinomial logistic regression
- Table 2: Nutrition and diet quality indicators assessed

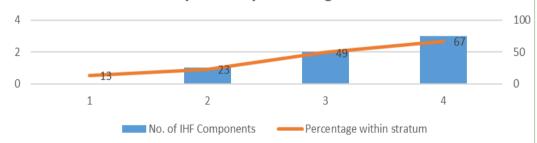
 CHARACTERISTIC
 WOMEN
 CHILDREN

 Minimum Dietary Diversity
 ✓
 ✓

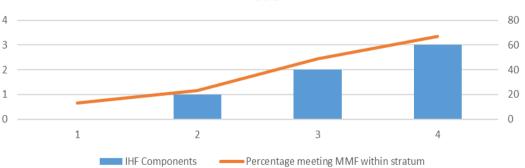
Minimum Dietary Diversity	✓	✓
Minimum Meal Frequency		✓
Minimum Acceptable diet		✓
Body Mass Index	✓	
Weight-for-age Z-Score		✓

RESULTS

Percentage of lactating women meeting minimum dietary diversity according to strata



Children aged 6-23 months old meeting MDD according to stra



- ⇒ Women from households with 3 IHF components were 13.50 times more likely to meet MDD than those from households without any IHF component (95% CI: 3.370, 54.078).
- ⇒ Children from households with 3 IHF components were 7.150 times more likely to meet minimum dietary diversity than those from households without any IHF component (95% CI: 1.968, 25.975).

CONCLUSIONS

Women and children who lived in households that practiced IHF were more likely to meet their dietary quality indicators but no effects on nutritional status outcomes were observed. Larger studies from diverse settings that control for confounding should be conducted to ascertain these effects.

IMPLICATIONS:

IHF as currently practiced, is not contributing to its intended purpose of improving nutritional status apart from improving diet quality. Therefore, there is a need to provide clear practical guidance on how to effectively practice IHF to achieve the intended purpose. Areas of focus may include land size allocation and required production quantities for all IHF components to contribute to improved nutritional status.

ACKNOWLEDGEMENTS

- 1. This study was made possible through a generous research grant from USAID through World Learning and Irish Aid through LUANAR's Support to National Nutrition Respone Project, which is hosted at Bunda College.
- 2. Funding sources: This poster is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the Feed the Future Initiative. The contents are the responsibility of the authors and do not necessarily reflect the views of USAID or the United States government.