ISSN 0970-9274

JOURNAL OF HUMAN ECOLOGY

International, Interdisciplinary Journal of Man - Environment Relationship

PRINT: ISSN 0970-9274 ONLINE: 2456-6608

J Hum Ecol, 31(2): 125-134 (2010)
DOI: 10.31901/24566608.2010/31.02.08

Home Gardens Contribute Significantly to Dietary Diversity in HIV/AIDS Afflicted Households in Rural Ghana

Susana Akrofi[1,3,4], Inge D. Brouwer[2], Lisa L. Price[3] and Paul C. Struik[4]

[1]Plant Genetics Resources Research Institute-CSIR, P.O. Box 7, Bunso, E/R Ghana
[2]Division of Human Nutrition, Wageningen University, Wageningen, The Netherlands
[3]Department of Sociology of Consumers and Households, Wageningen University, Wageningen, The Netherlands
[4]Centre for Crop Systems Analysis, Wageningen University, Wageningen, The Netherlands

KEYWORDS Dietary. Diversity Score. Shannon-Wiener Index. Plant Species Diversity

ABSTRACT The study assessed the biodiversity in home gardens and evaluated its contribution to dietary diversity among HIV-positive and HIV-negative rural households in Eastern Region, Ghana. A cross-sectional survey of 32 HIV-positive and 48 HIV-negative households was conducted. Plant species cultivated in the home garden of each household and their abundance were documented. Shannon-Wiener index was estimated for each home garden. A dietary diversity score (DDS = a count of food groups consumed) was determined with $DDS_{(+HG)}$ and without $DDS_{(-HG)}$ home garden products for each household using a 24-hour qualitative dietary recall. HIV-positive and HIV-negative households were compared using Student's *t*–tests and Fisher's exact tests. HIV-positive households showed a significantly higher $DDS_{(+HG)}$ than HIV-negative households (6.8 vs. 6.0). The $DDS_{(-HG)}$ did not differ between groups but there was a significant difference between $DDS_{(+HG)}$ and $DDS_{(-HG)}$ within groups. A higher *DDS* in HIV-positive households was not associated with a higher Shannon-Wiener index. The contribution of food items from home gardens to *DDS* was significantly higher in HIV-positive (14.9%) than in HIV-negative households (9.1%). Home gardens contribute significantly to dietary diversity in HIV-positive rural households, although no significant change in plant species diversity was observed compared to HIV-negative households.