A capability approach to wellbeing analysis : A Case Study of NTFP producing households in Iseyin, Nigeria

Kazeem Akanni Jimoh,

Faculty of Tropical AgriSciences, Czech University of Life Sciences Prague, Czechia

Corresponding Author's Email: jimoh@ftz.czu.cz

Introduction

• Millions of people throughout the world have been reported to make extensive use of biological products from the wild (Lawes *et al.*, 2004).These products, which are commonly termed non-timber forest products (NTFPs), are harvested for both subsistence and commercial use, either regularly or as a fall-back during times of need.

• However, the assertions that a lot of NTFPs can fulfill an important safety net and gap-filling function to the poor doesnot automatically imply that they have potential to lift people out of poverty (Arnold and Ruiz Perez 2001; Belcher e*t al.* 2005)

• Amartya Sen capability approach used is widely recognised as a complete and comprehensive approach employed in welfare analysis, where plurality of well-being dimensions are considered, the relationships among them are investigated, and through which poverty, deprivation and inequality assume a new and clearer meaning (Pavia, 2000).

Plate 1: Pictures of some of the common NTFP in the study area (A-Snail, B-Bees, C-Sheabutter and D-Cane rat)

The objectives of this study were :
• to profile the households involved in collection of NTFP according to their capability wellbeing
• to examine the wellbeing status of NTFP producing household
• to analyse the factors influencing NTFP producers' wellbeing.

Methodology

Study Area
• The study was carried out in Oyo state. Oyo is an inland state in south-western Nigeria with its capital at Ibadan.
• The vegetation pattern is that of rain forest in the Southern part and guinea savannah in the Northern part.
• Collection, processing and utilisation of non-timber forest products such as locust beans, she abutter butter, apiary, medicinal plants, cane rats e.t.c.

Sources of data
• Primary data was obtained from a cross-sectional survey of rural households in the study area. The collection of data involved the use of structured questionnaires to obtain information on socio-economic and demographic characteristics such as household size, level of education, age of household heads, land holdings etc. as well as consumption expenditure, other indicators of wellbeing of the rural households were collected.

Sampling procedure and sample size
• Multi stage sampling technique was used for this study. The first stage was the purposive selection of Iseyin Local Government Area out of the thirty three Local Government Areas in Oyo State, based on the presence of large expanse of forest area as well as engagement of its inhabitants in NTFP activities (FRIN, 2004). The second stage, was a random selection of six (6) wards out of eleven (11) in the study area. The third stage was a proportionate random selection of households in the wards
• A total of 120 respondents constituted the sample size for the study.

Fig. 1: Map of Iseyin LGA (Map Hill, 2011)

Data Analysis
• Fuzzy set analysis was used to examine the wellbeing status of the respondents. It is a useful tool in the analysis of the treatment of "inexact knowledge" and approximate reasoning which was firstly introduced by Zadeh (1965). In order to identify the drivers of wellbeing in this study, logistic regression was employed.
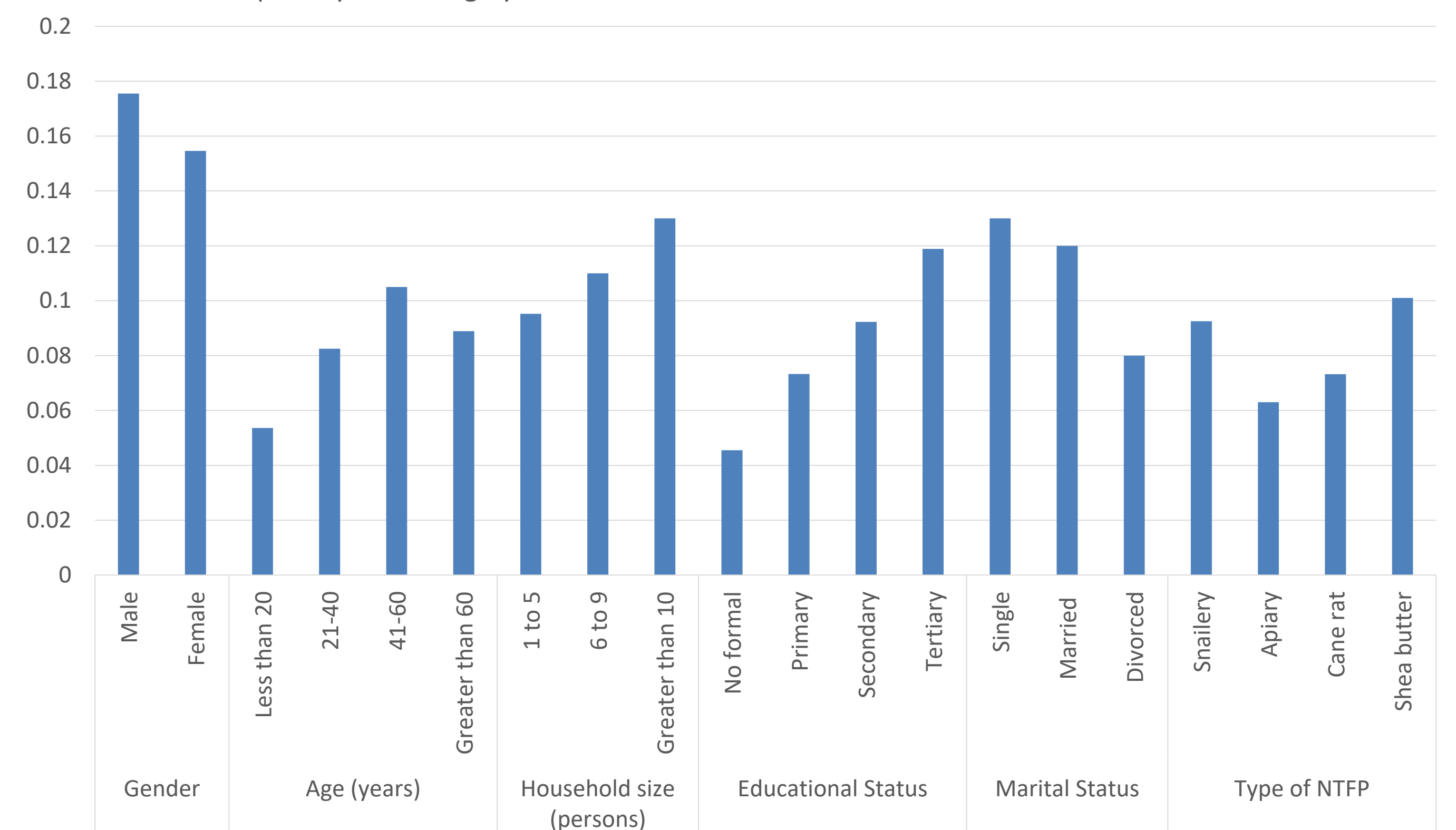
Result

Socioeconomic Distribution of Household's Capability
Capability wellbeing of NTFP households reveals the alternative combinations of functioning's that are feasible for the respondent to achieve.

• All of the household (100%) selected were engaged in collection of NTFP as their primary occupation, 75% in farming, 82% in off-farming activities and 13% in salary paid job.
• Gender of household head showed that male headed households were more capable of improving their wellbeing
• It was discovered that households being headed by people in the age range of 41-60, have higher wellbeing capability greater than the other age groups
• With regards to household size, the result of fuzzy logic showed that household with larger family size tends to have higher wellbeing capability which will transform to improved quality of the household lives.
• For educational status of household head, the wellbeing index is highest for households with tertiary education
• For marital status of household head, household heads that are single have higher wellbeing than the married househeads
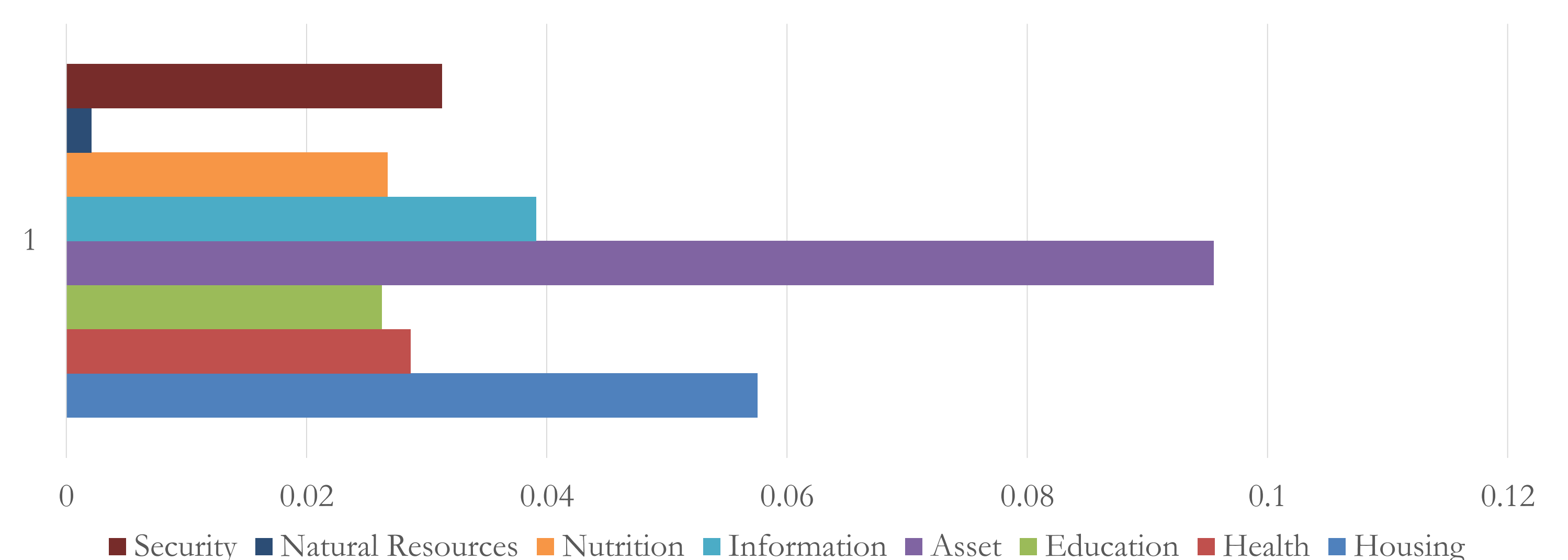

Capability Wellbeing By Socioeconomic Distribution

• Source: Field survey, 2019

Distribution of wellbeing index by dimensions
• The figure below revealed the distribution of wellbeing index by dimensions measured in the study:

Capability Wellbeing Of Households According To The Dimension Measured

Source: Field survey, 2019

• It was revealed that NTFP based households has the highest capability wellbeing when assessed based on asset ownership
• This implies that since ownership of economic assets and improved economic activities are not just in themselves well being indicators, they also proffer the ability to attain higher levels in other well being dimensions.
• In descending order, the capabilities with the lowest level of achievement by NTFP based household were housing, Information, Security, Health, Nutrition, education and Natural resources
• The composite capability wellbeing for the households in this study area revealed that the quality of life in the dimensions examined is quite low at 0.33 which is in accordance with the study of Adeyemo and Oni (2012).

Identifying the factors influencing household wellbeing index by dimensions

• The log odds of wellbeing index for age group greater than 60 years is 0.755 and also significant which indicates that being in that group increases the log odds of attaining wellbeing by 0.755 as well as revealing that older household heads tend to achieve better capability wellbeing than younger household heads
• The log odds of wellbeing index for the household heads with primary, secondary, and tertiary increases significantly by 0.5317 , 0.6142 and 0.5611 respectively. Higher level of education of household heads has been revealed to significantly increase the capability well being of the NTFP based households.
• It was further revealed that years of cooperative membership is a significant factor which also increases the households capability wellbeing by 0.4813.

Conclusion

In conclusion, the study established that NTFP based households being an agricultural based community has low wellbeing in terms of capability wellbeing. The reason behind this is that most of the people living in the rural area are vulnerable as they depend only on agriculture and forest related activities for their livelihood.

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