



# Diversifying agriculture for balanced nutrition through fruits and vegetables in multi-storey cropping systems (NutriHAF – Africa)

Determinants of Farm and Non-Farm Engagement in Yayu Biosphere Reserve, South-West Ethiopia

TROPENTAG CONFERENCE, SEPTEMBER 20-22, 2017 Bonn, Germany



## Project partners



by decision of the German Bundestag

## Where does NutriHAF work?



In biodiversity hotspots: in the transitional zone of the Yayu Biosphere reserve, Ethiopia

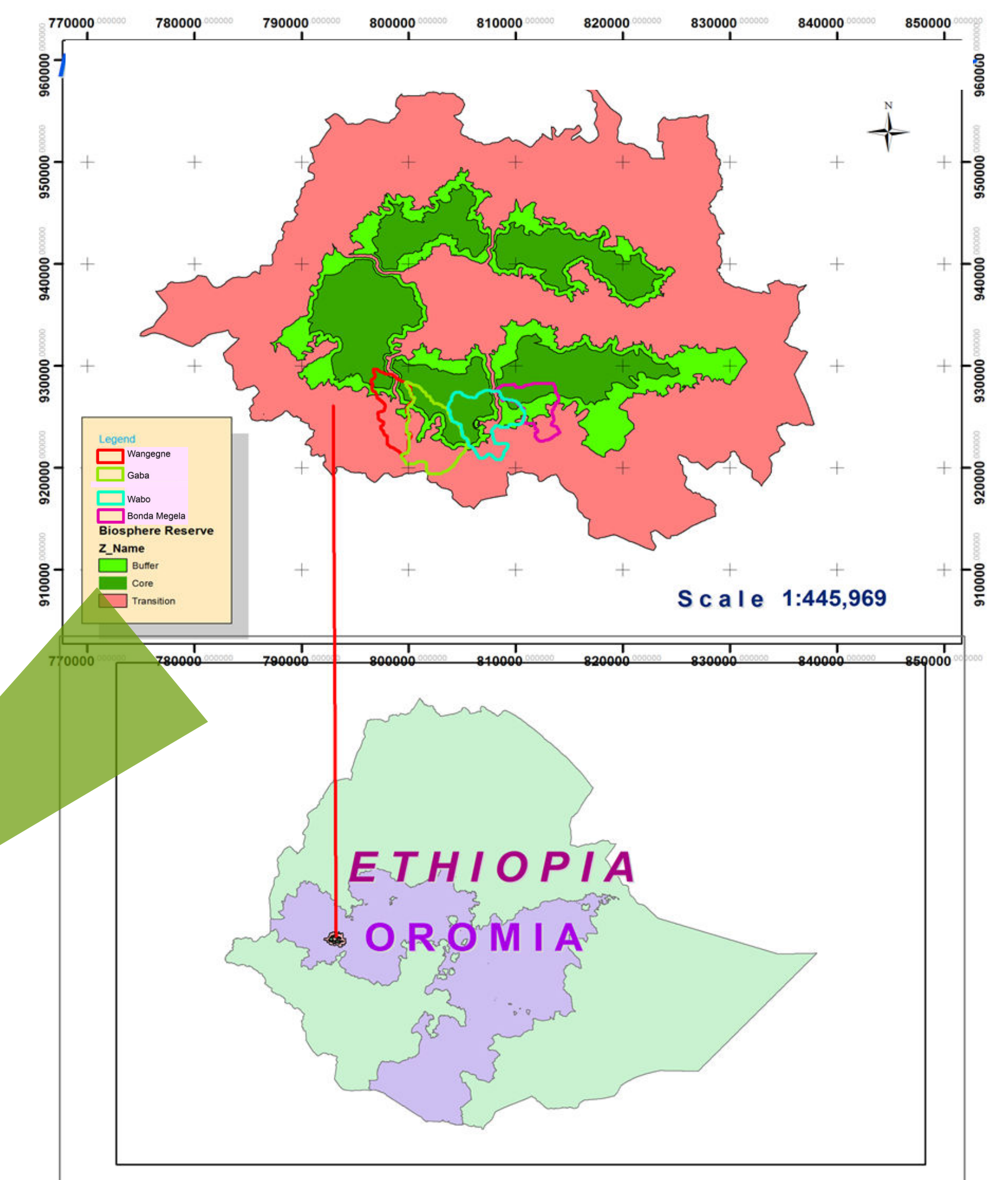
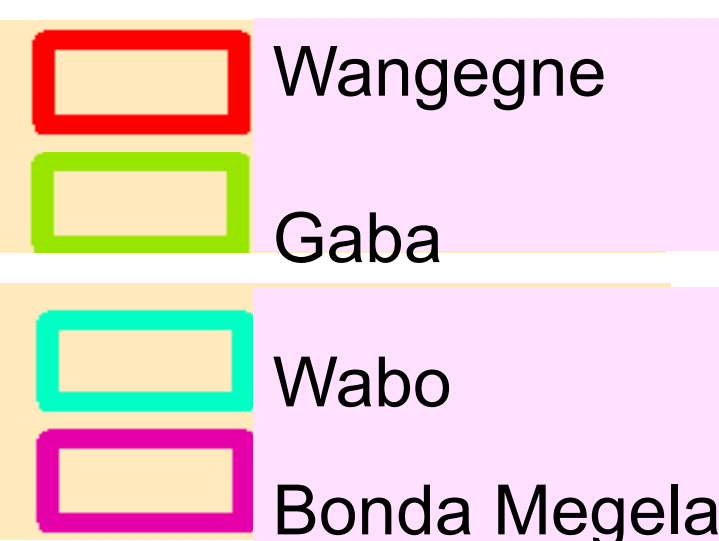


In village sites in close proximity to Manombo and Agnalazaha special reserves in South Eastern Madagascar

## Study areas in South-West Ethiopia

Hurumu Woreda

Yayu Woreda



Map: study site in transitional zone, Ethiopia © GIS sketch by Demisse, ECCCFF

## Introduction

• Farming has remained to be one of the major means of livelihood for the rural majority in the study area, engaging 94% and 89% of male and female sampled households, respectively.

• However, the productivity of the sector in the area remained poor despite its huge potentials and it becomes a 'push' factor for rural household to seek additional non-farm livelihood options.

- Non-farm livelihood diversification has long been considered as coping or risk management mechanism.
- Non-farm livelihoods are also the main livelihoods for the poor and the landless.
- Identification of determinants of livelihoods is a key step in designing effective livelihood policies and strategies
- The study was conducted with an objective of identifying determinants of farm and non-farm engagements in Yayu Biosphere reserve of South-West Ethiopia

## Methodology

- Household survey was conducted selecting 334 small holder farmers to collect gender disaggregated quantitative data
- In addition, 28 FGDS and 6 key informant interviews were conducted.
- Mean comparisons were made to identify the mean differences of demographic and socio-economic variables between male and female headed households.

• In addition, gender disaggregated tobit regression analysis followed by marginal effect computations were employed to analyze the probability and extent of determinant variables in predicting farm and non-farm engagement

## Results

• Male headed households were found to have higher farm engagement, greater possession of production factors including physical capital, land and labor along with better education level and greater access to credit than their female counterparts, resulting for increased agricultural productivity and income.

• Augmented production factors particularly farm physical capital and coffee land ownership have been found to increase the probability and intensity of farm engagement by 2.2% & 2.45%, respectively both in male and female headed households. As a result, non-farm engagements were reduced significantly.

• Access to credit and labor support system practiced in the area have also increased farm engagement by 3.8% and 0.34% respectively, and reducing engagement in non-farm activities significantly.

• On the contrary, a higher level of incidence of crop damage by wild animals as well as crop pests and diseases were found to increase burden on farm engagement, and simultaneously reduced engagements in non-farm activities.

• Non-farm livelihoods are in general considered as "low-paying activities" and mainly practiced in off-seasons and when alternative job opportunities are limited.

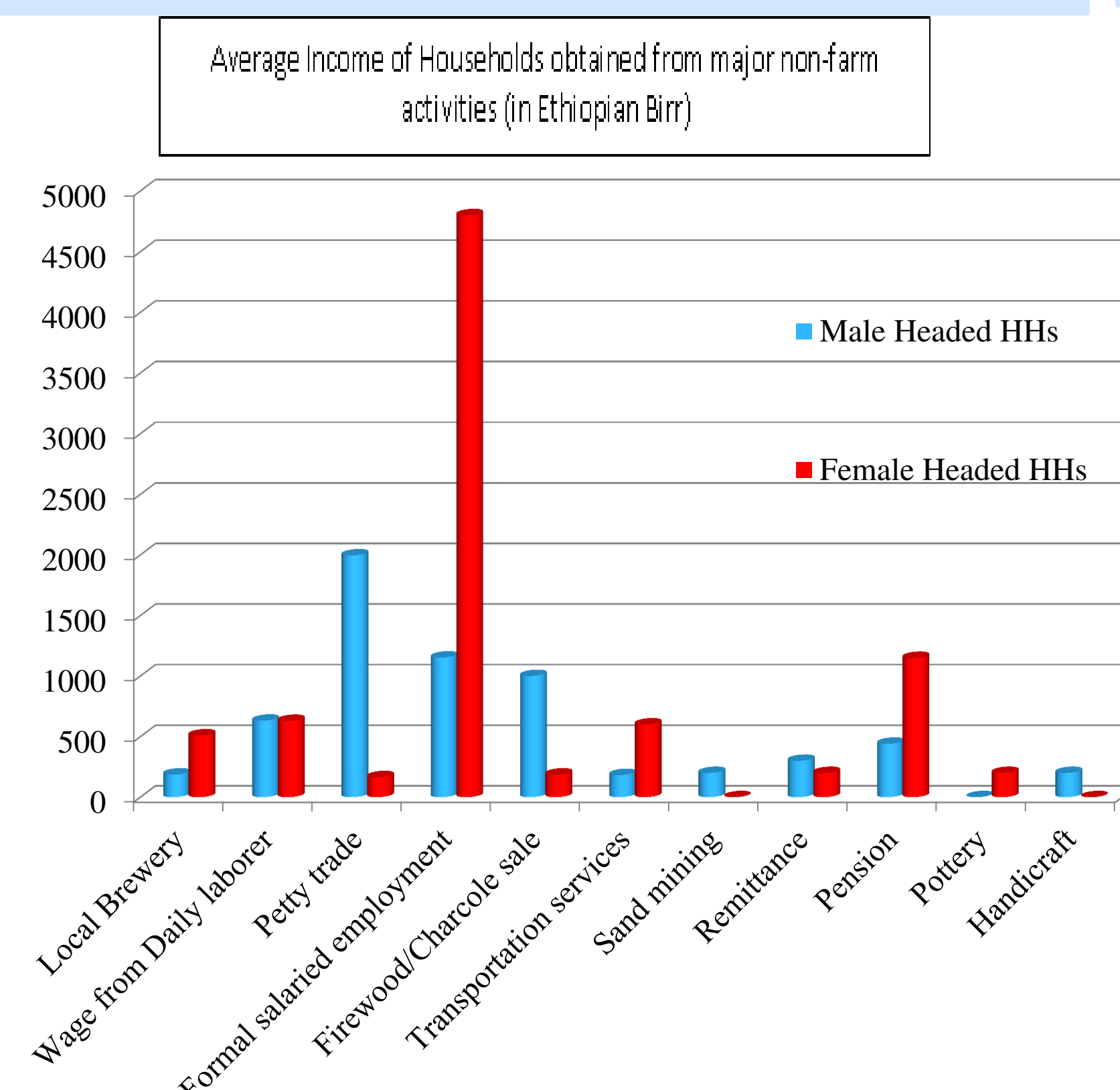
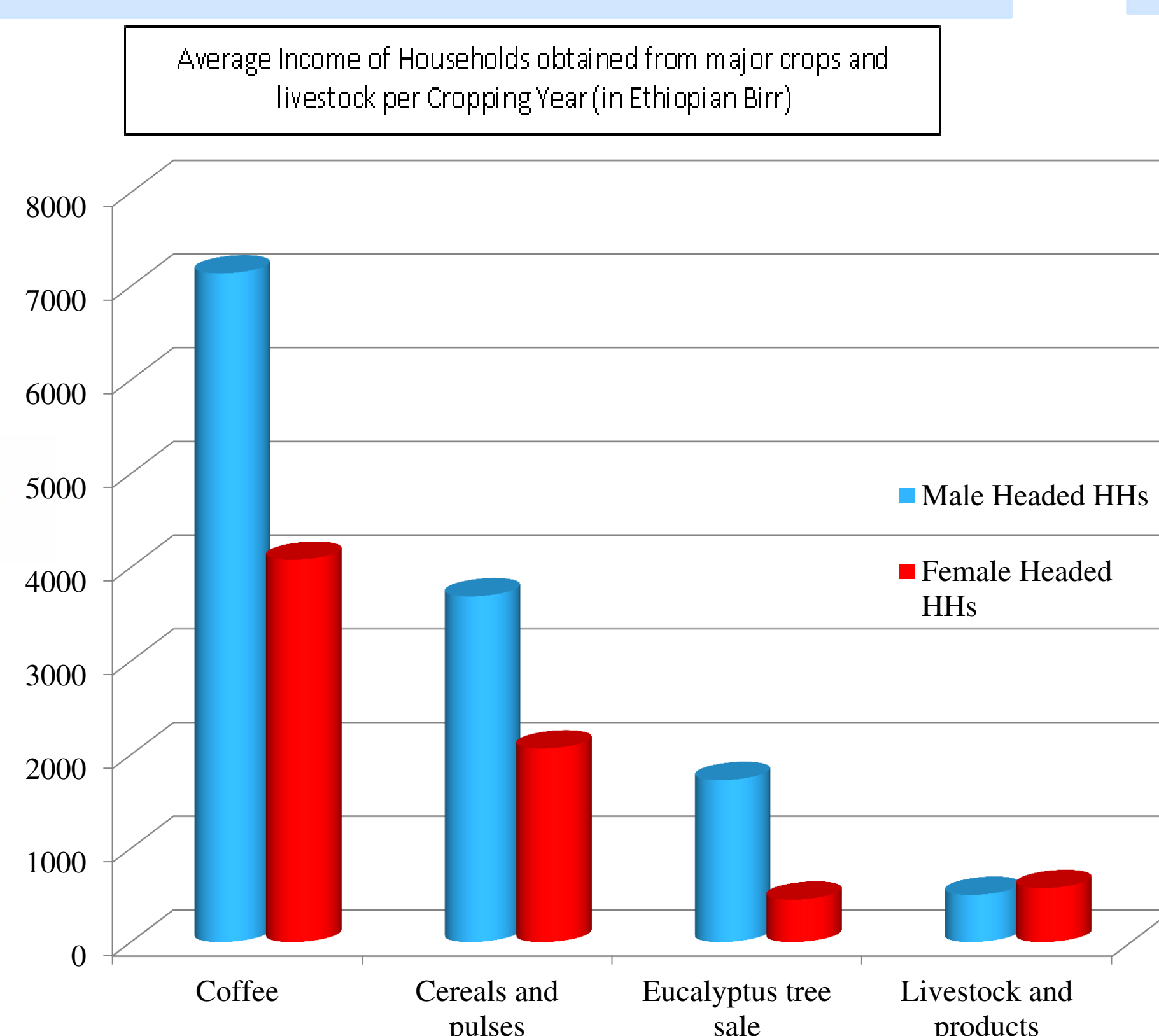
• The findings confirm that female headed households could engage in farming in the same way with that of male headed households despite the fact that the former have more responsibility and burden with household activities.

## Concluding remarks

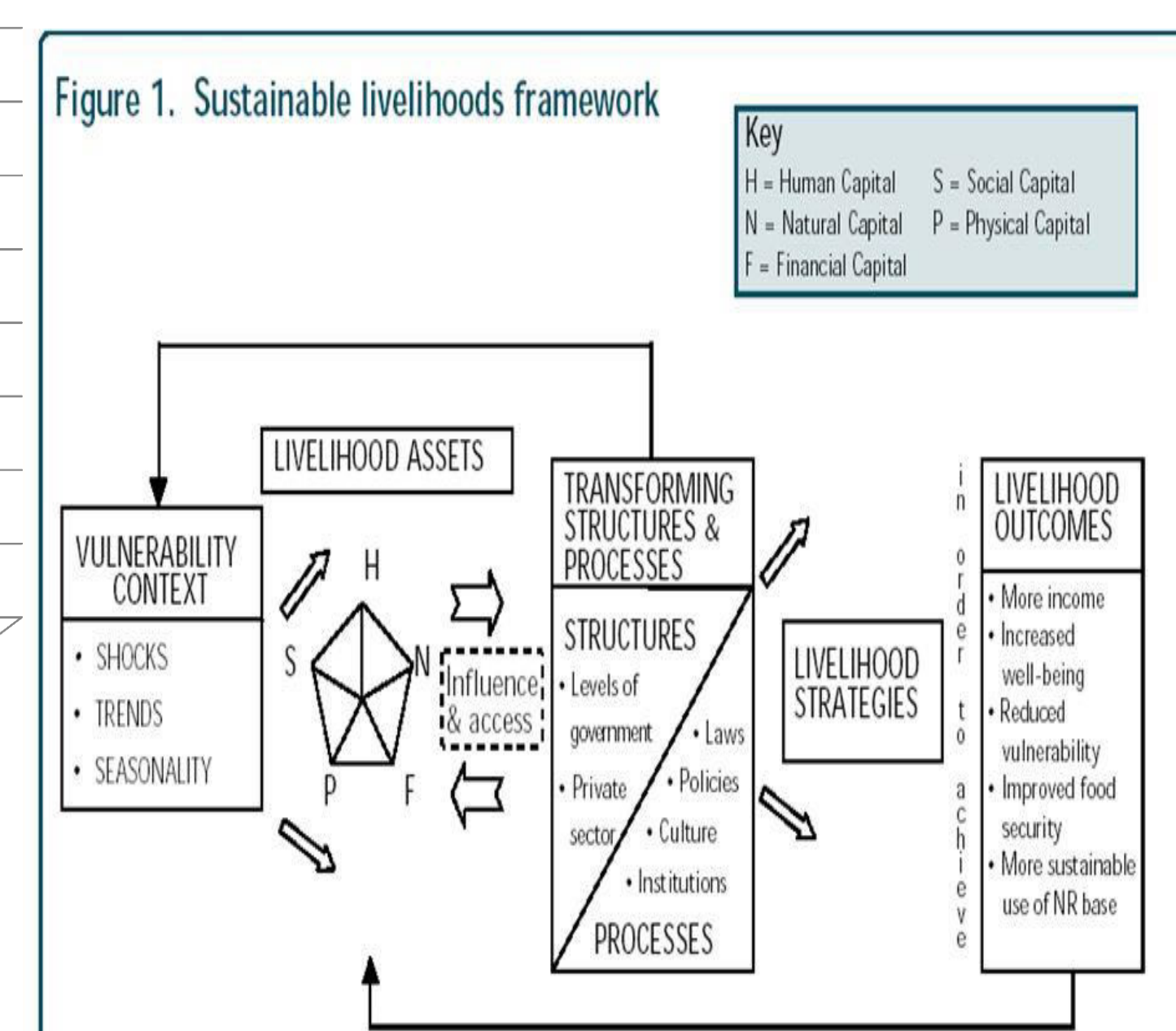
❑ The existence of limited resources and agricultural inputs bounded by the occurrence of various farm challenges have been influencing the motivation of farm engagement negatively and led the rural majority to diversify their livelihoods to non-farm activities.

❑ The overall findings suggest that male and female headed households prefer to engage in farming as their main livelihood option if they are equipped with the necessary farm production factors and the main farm challenges are resolved.

❑ The findings implied the need for sustainable, integrated and holistic approaches and institutional reforms to improve the future productivity of small holder agriculture, enhance the productive role of women and thereby improve the livelihood of the rural majority.



## Sustainable Livelihoods Research Framework (DFID, 1999)



## Contact:

Dr. Beneberu A. Wondimagegnhu, FANRPAN, NutriHAF project, Ethiopia. Dr. Sarah M. Nischalke, Center for Development Research, Bonn, Germany & Mr. Techane Gonfa Abebie, ECCCFF, Addis Ababa, Ethiopia

Correspondence email: [benassefa2006@gmail.com](mailto:benassefa2006@gmail.com)