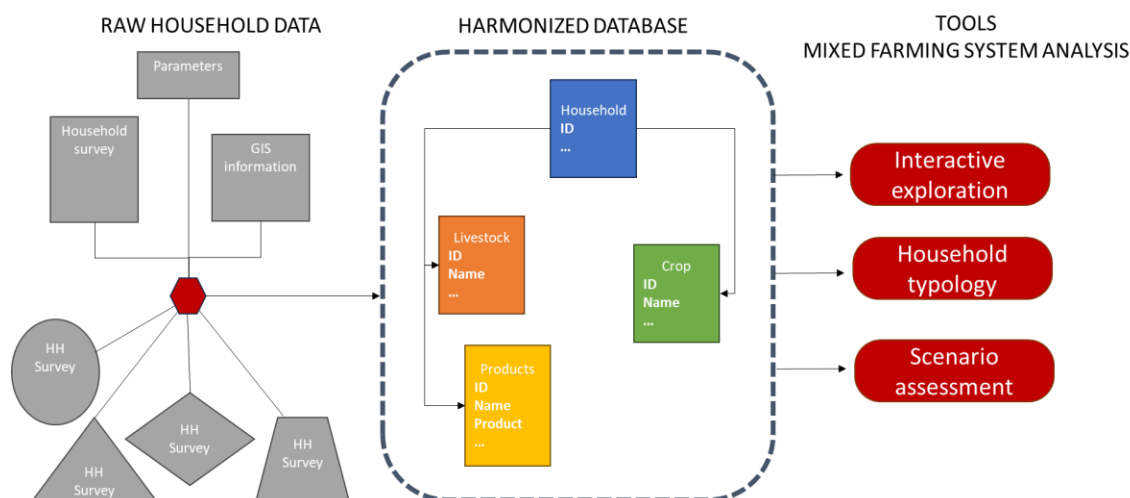


# Farmhousehold: A New Data Environment For Mixed Farming System Analysis

Farmhousehold is a flexible data environment that provides tools for mixed farming system analysis. The data platform helps explore farm household survey data with built-in interactive visualization dashboards. Household typologies, or ex-ante scenario assessment, are now only a few clicks away.



## HOW DOES IT WORK?

The data is organized as a four-table relational database recording key information on crop, livestock herd, livestock production and household composition and diet. The structure of the database ensures fast computation and maximum compression of the dataset. A degree of flexibility allows user to keep extra details that are locally important.

With the data organized in such a harmonized format, an R-package called 'farmhousehold' will read the dataset and provide interactive dashboards for 1) exploring your dataset, 2) making farm household typology, or 3) assessing scenarios of interventions.

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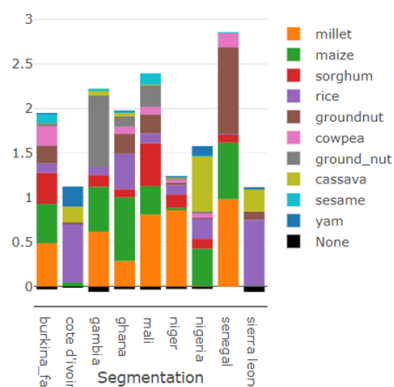


<https://github.com/rfrelat/farmhousehold>

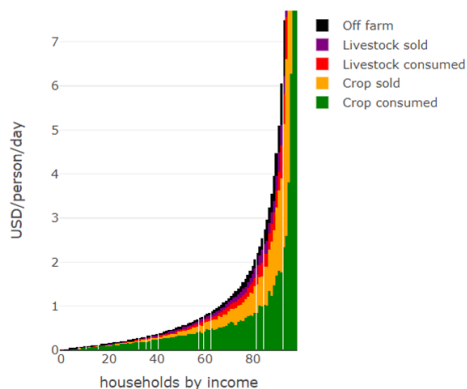
## FARM EXPLORATORY DASHBOARD

[https://startistic.shinyapps.io/farmhousehold\\_explo/](https://startistic.shinyapps.io/farmhousehold_explo/)

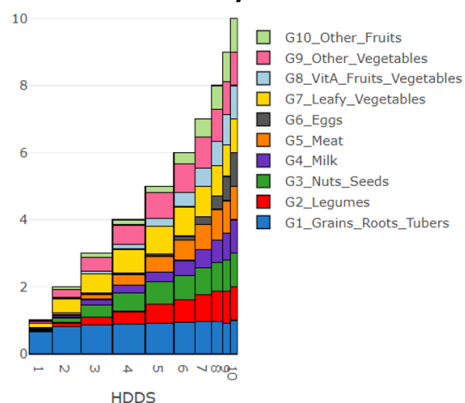
### Crop popularity



### Value of activities



### Diet diversity



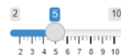
## FARM HOUSEHOLD TYPOLOGY DASHBOARD

[https://startistic.shinyapps.io/farmhousehold\\_cluster/](https://startistic.shinyapps.io/farmhousehold_cluster/)

Farm household typology Dataset Analysis

### 5. Multivariate analysis

Number of PC



x-axis

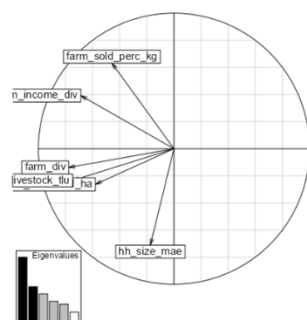
PC1

y-axis

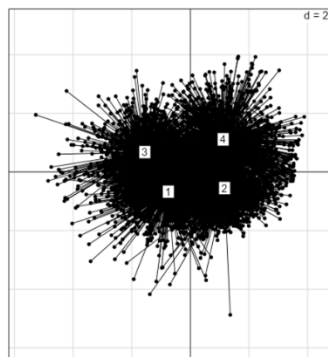
PC2

grouped

cluster



Selected PC axis explain 94 % of variations ( PC1 37 %, PC2 20 % )

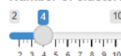


### 6. Cluster analysis

Clustering

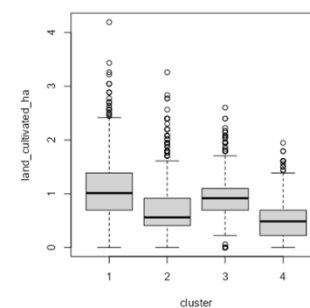
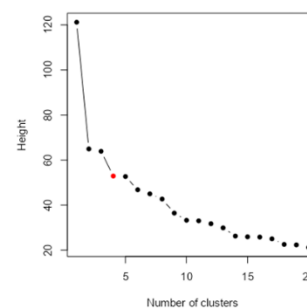
Hierarchical

Number of clusters



Variable

land\_cultivated\_ha



<https://github.com/rfrelat/farmhousehold>