**Draft Pseudo-Code Economic Module of PyOrator**

* Base version
* Extensions

**Base version**

Read in Data on Prices & Costs

Read in Parameter Values (e.g. alpha, beta, gamma - vectors) (estimated from other datasets)

For Each Farm

Read in Fixed Farm Characteristics (land, household demographics)

For Each period

Read in Farm output by Crop & Livestock, inputs used (labour, fertilizer, etc)

Calculate metrics (including)

Full Farm Income (FFI) = price\*output each element – price inputs\* quantity used

Predicted Dietary Diversity Score = alpha\*(Fixed Characteristics FFI)

Predicted Probability Food Insecure = logit (beta\*(Fixed Characteristics FFI)

Predicted Probability Food Insecure = gamma\*(Fixed Characteristics FFI)

Report Metrics – by period, for steady state?

**Extensions (still a bit vague)**

Base version plus

Read in Extra Parameter Values (theta)

For Each Farm

For Each period

Use Parameter values (theta) to apply rules/function which determine time allocation in household (off farm work, time spent colleting wood, water, etc)

Return time allocations for household back to rest of model