

Living Income Berlin Workshop

Gathering Data on Actual Income

6th December 2017



Preliminary results, do
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Demystifying the cocoa sector in Côte d'Ivoire and Ghana

Living Income Community of Practice Workshop
Berlin, 6th and 7th of December



KIT



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Background

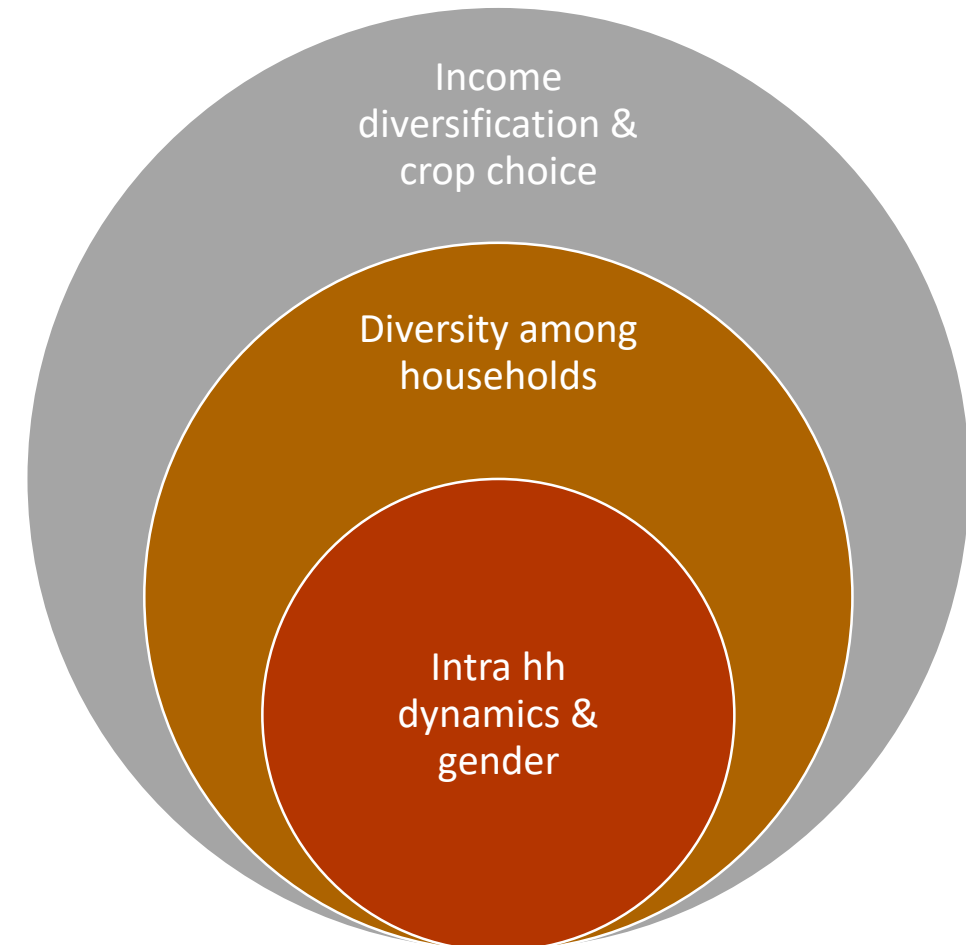
- Not a 'living income study', but a broad study to demystify common assumptions in the cocoa sector
- Data is often not shared, too narrow or based on small sample sizes
- Risk - programmes and policies are based on data that may be inaccurate, context specific, and not generalisable.
- The aim of our study is to close part of the knowledge gap and share this data in the public domain
- The final research report, including the database, will be made publically available early 2018.



Research Approach & Questions

Large and reliable dataset (quantitative + qualitative) of households in cocoa producing areas

1. Income diversification & crop choice
2. Diversity among households
3. Intra household dynamics, gender, nutrition



Methods and Sampling

- Desk study
- 74 FGDs (37 per country)
- 3000 surveys (1500 per country)

- Rural households in cocoa growing areas
- 2 stage random sampling:
 - Allocate 37 locations to regions, proportional to cocoa production (per country)
 - At village, transect walk, 40 HH, 1 respondent per HH, 34% women respondents
 - Survey and FGD are the same sample



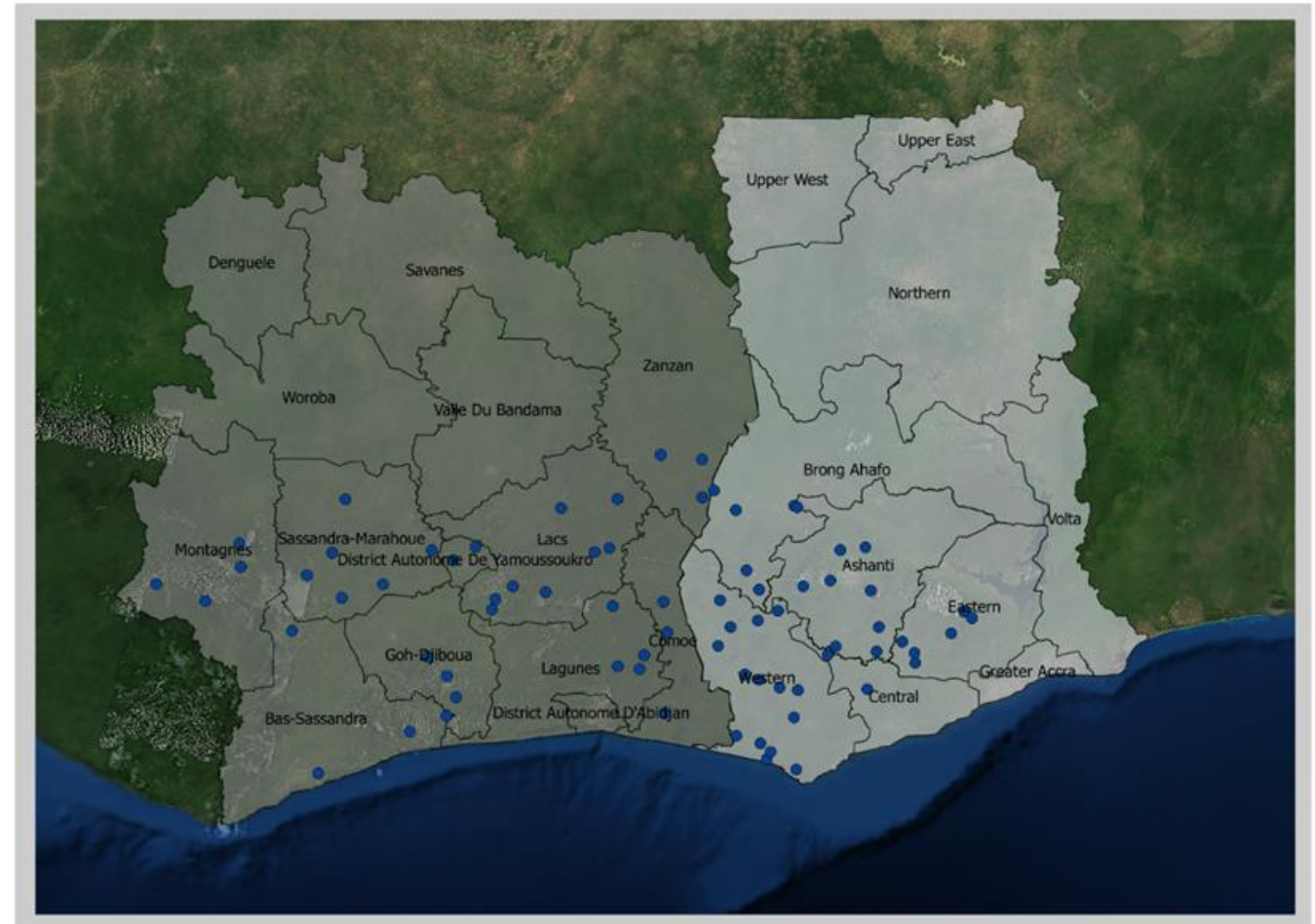
Fieldwork locations

Ghana

- Nov. 2016 - Jan 2017
- KIT + ALC

Côte d'Ivoire

- Jan 2017 - March 2017
- KIT + ALP



Survey data useful for living income

- Household members: income activities of all members
 - Cocoa, other agric, livestock, small business, salary, remittances etc.
- Estimate, % of household income from each income activity
- Inventory of all crops produced, sold, 1+2 most important
- For 1+2 most important, detailed data collection (7 crops)
 - Land size, costs
 - Labour days, costs per farm activity
 - Inputs used and costs
 - Production, yield, price
 - Amount and proportion marketed
 - Profit model developed



Survey & FGD data useful for living income

- Survey other: All standard asset data (PPI, DHS based)
- Focus group discussions:
 - Income: importance ranking and reasons for choices
 - Expenditure items: identification, ranking availability + affordability, seasonality
 - Discussion on access to productive assets, ownership (gender)
 - Crop budgets qualitatively constructed and described

Challenges and limitations

- Reliability of recall data
 - Intensive training, supervision, and checking
 - Use of tablets, programmed with live calculations and error reporting
 - Use of 'do you know' questions before asking details
- No expenditure data on household living costs
- No detailed data on non-agric income sources
- Land sizes not GPS measured



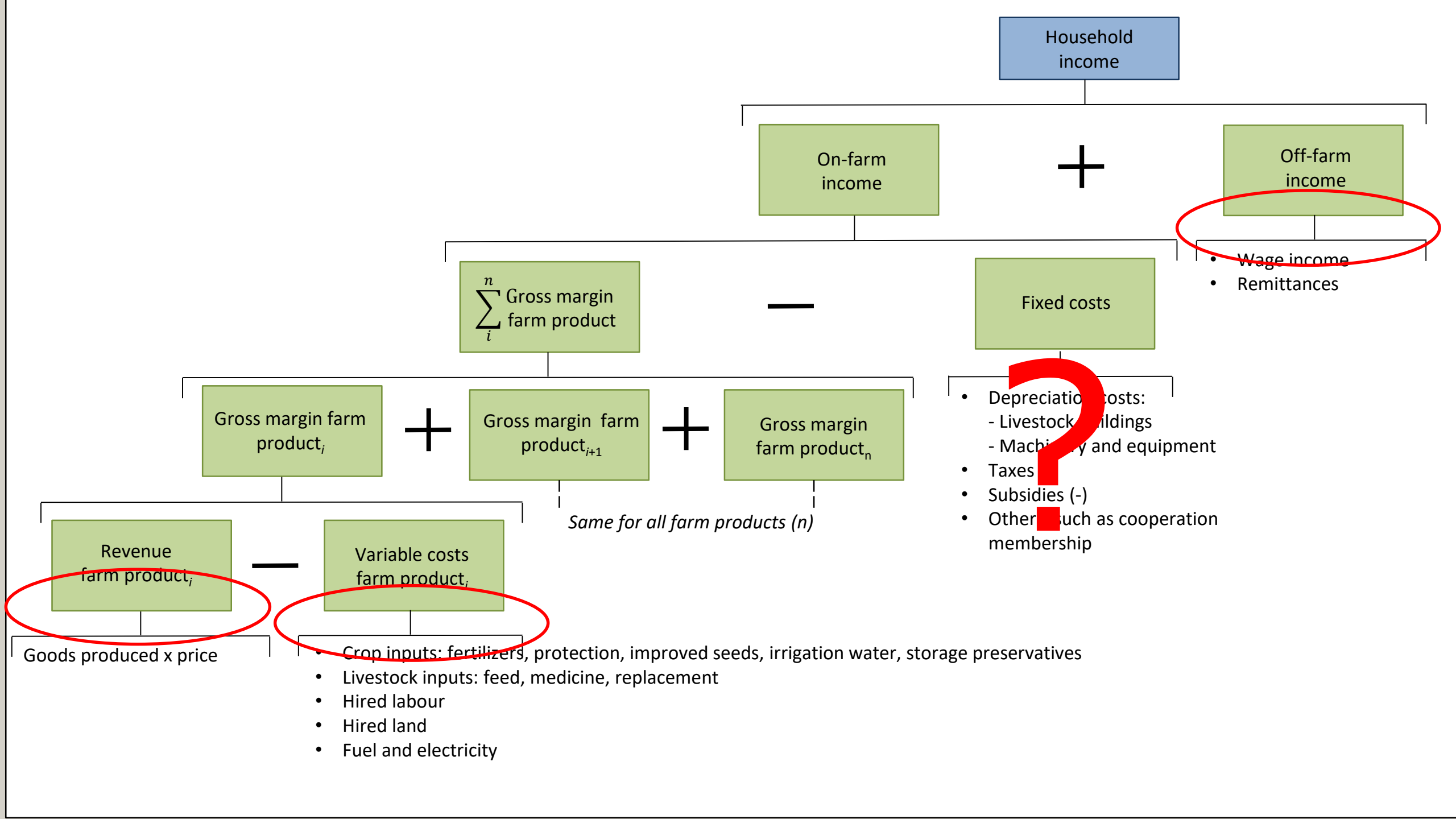
Gathering and reporting data on household income - An example from Nyando, west Kenya

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Dec. 6 2017





Gathering farm economic data

- Rural Household Multiple Indicator survey (**RHoMIS**)
 - Household survey @ 161 smallholder farmers, Nyando 2015
 - Farm productivity, value of farm produce, off farm income
 - **On-farm income: revenues of farm produce**
 - **Off-farm income**
- Farming costs survey
 - Key informant interviews
 - Farming input costs, fixed costs
 - **On-farm income: variable costs of farm produce + fixed cost**

Calculations

- On-farm income: **revenues** farm produce_{maize}

$$= \text{yield}_{\text{maize}} * \text{price}_{\text{maize}}$$

- On-farm income: **variable costs** farm produce_{maize}

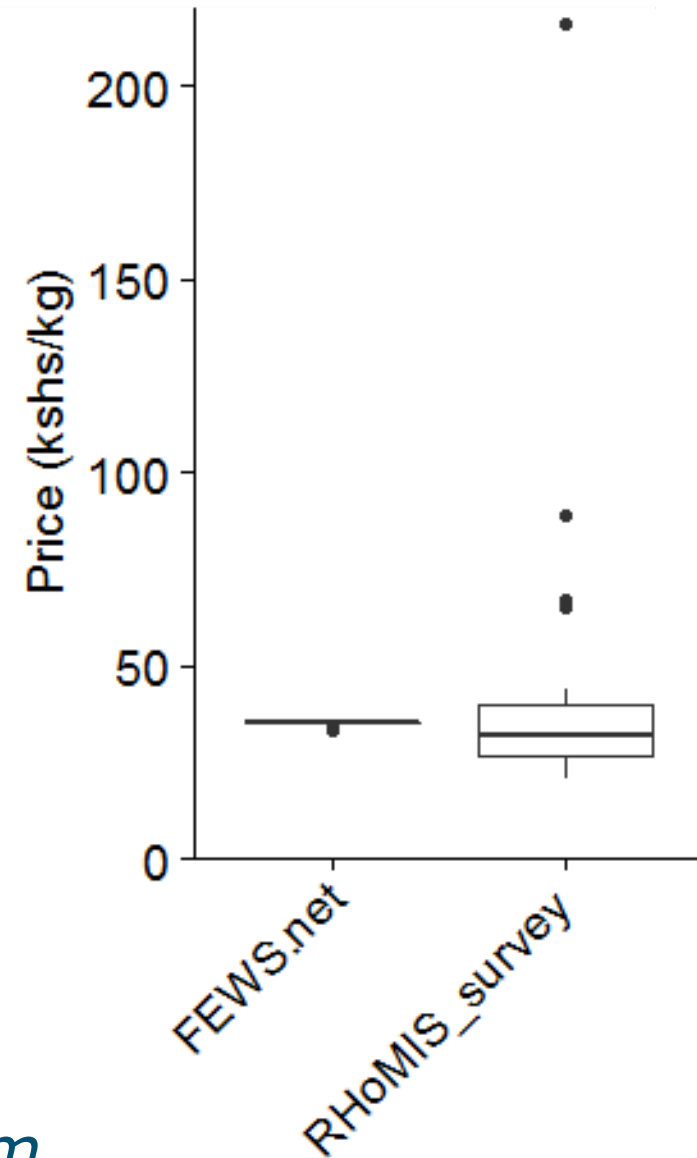
$$= (\text{amount fertilizer applied}_{\text{maize}} * \text{fertilizer price})$$

$$+ (\text{improved seeds used}_{\text{maize}} * \text{seed price})$$

$$+ \text{land preparation costs}_{\text{maize}} + \text{etc.}$$

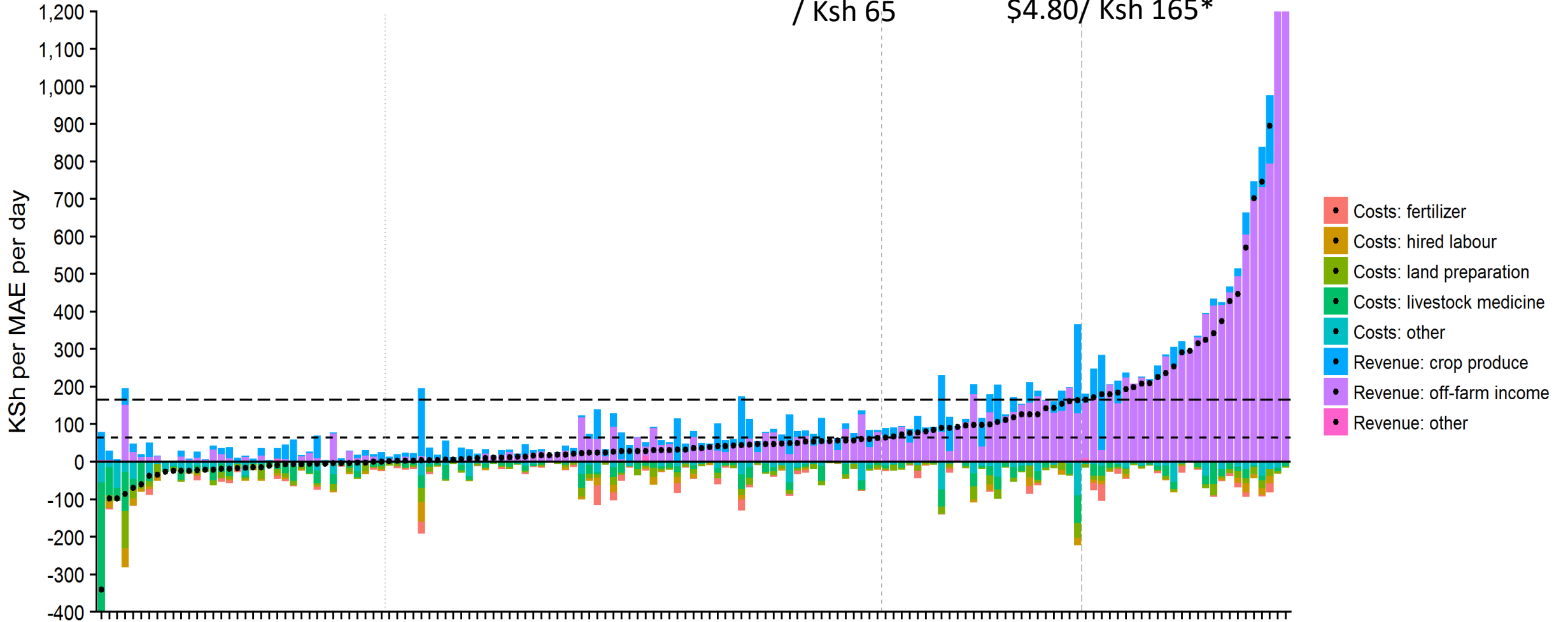
- **Off-farm** income

$$= \text{proportion of income from off-farm sources} * \text{on-farm income}$$

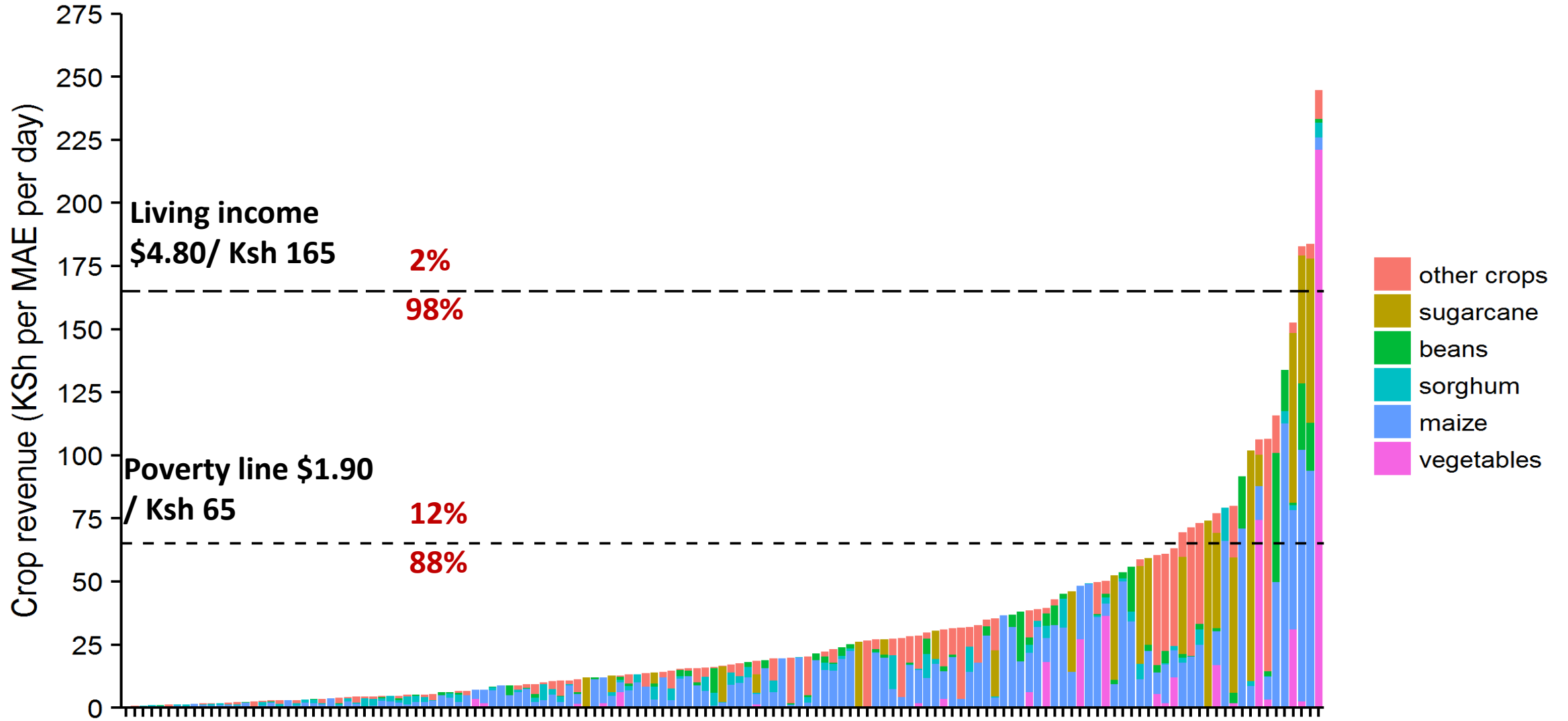


Revenues – variable costs + off-farm =

Poverty line \$1.90 / Ksh 65
 Living income \$4.80 / Ksh 165*



Crop revenues



Points for discussion

- What is the appropriate way to include variable (and fixed) farm costs?
 - Much care is needed with farm reported data and assumptions
- What are reliable sources for general data such as prices?
- How to balance user-friendly surveys and reliable data output?
 - RHoMIS is on a good track but could still use refinements

Thanks to my colleagues

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Living and Actual Income, Learnings from Tea Sector, Malawi Experiences

Gathering and handling data for actual farm incomes of smallholder tea farmers in Malawi

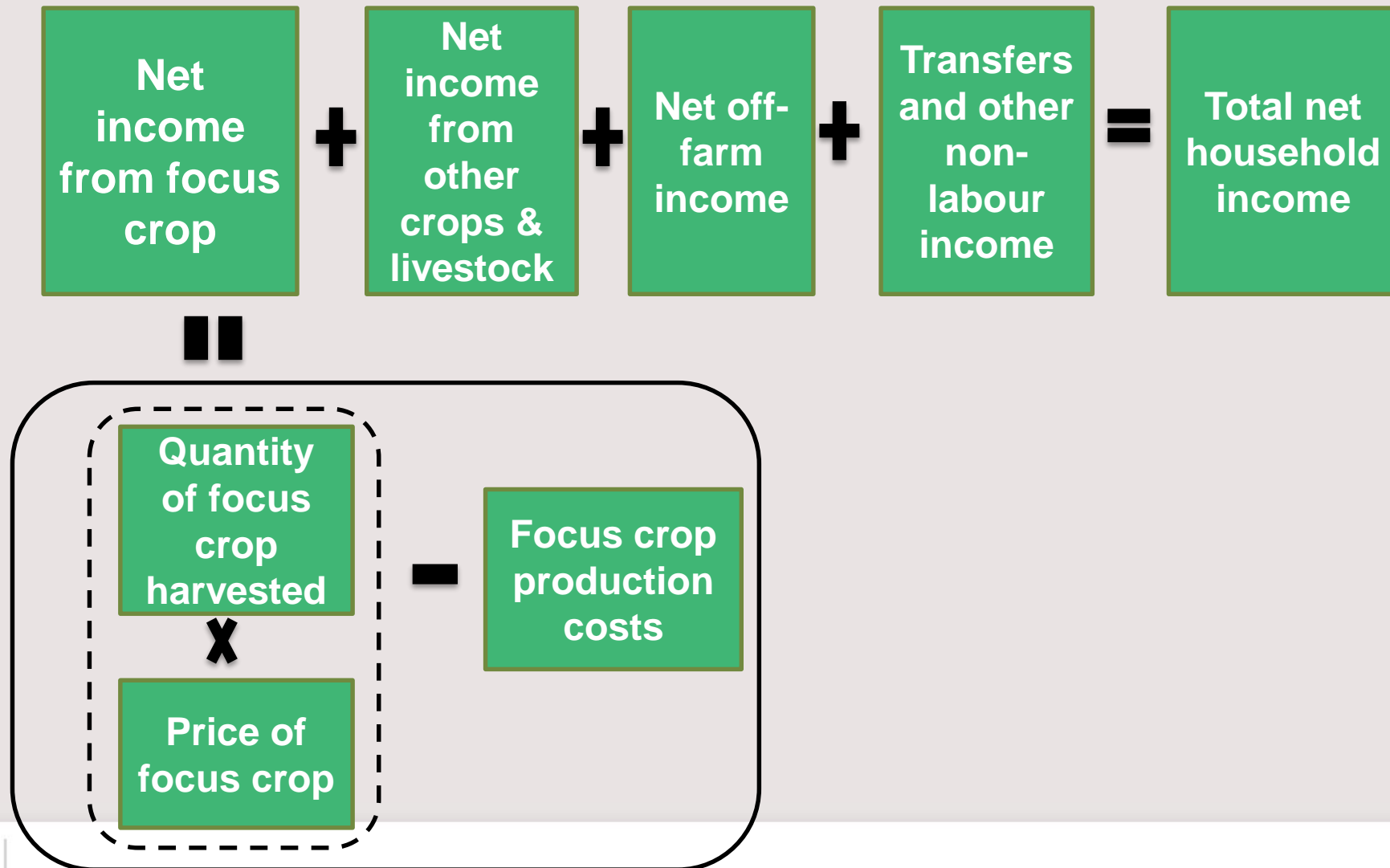


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PURPOSE AND SCOPE OF STUDY

- Measure actual income of smallholder tea farmers in Malawi
- Compare actual incomes and living incomes of smallholder tea farmers
- Identify levers for bridging the gap between actual income and living income
- Actual income estimated for a typical smallholder tea farm household

Components of Household Income



Data collected

Household survey

- 211 households
- Production data
- Productive characteristics

Key informant interviews

- 14 key informant interviews
- Annual household labour supply

Market survey

- 7 markets
- Price information

Secondary data

- Supplement primary data – labour supply

Deriving crop income estimates

Harvested area

- Median land allocated to crop

Yield

- Mean yield of third quintile of land holding size

Price

- From tea estates for tea
- From market for maize & pigeon pea

Labour inputs

- Proportional to land, harvest, etc

Other inputs

- Mean level of third quintile of land holding size

Deriving income estimates from other sources

Median estimates calculated from households that received income from these sources only

Livestock

- Value of livestock & livestock products sold and consumed minus costs

Other income generating activities

- Value of gross output of the self-employed off-farm activities minus cost

Wages, Transfers, & pensions

Based on direct recalls

Challenges and open questions

- Recalls are not reliable for crops that are harvested throughout the year
- Handling outputs that are presented in non-standard units is a challenge.
- How do we apportion land and inputs in cases of mixed cropping?
- Do we use market prices or farm gate prices to value crops?