





Value Chain Analysis for Development: providing evidence for better policies and operations in agricultural value chains

Brussels 18-19 January 2023

## PATHWAYS FOR REDUCING THE SMALLHOLDER

## LIVING INCOME GAP IN AGRICULTURAL VALUE CHAINS



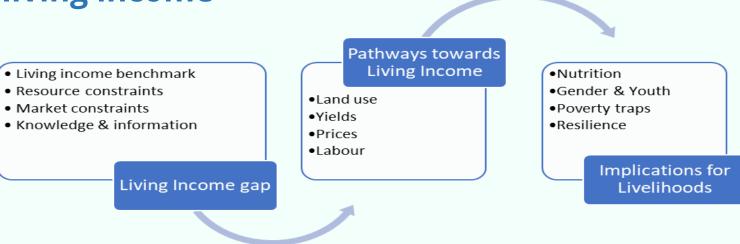
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## **Question and issues**



Pathways towards living income

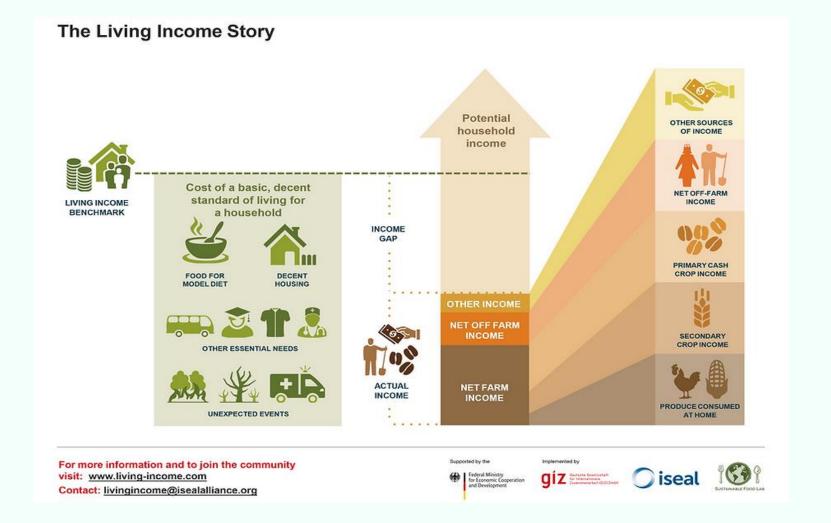


## **Key research questions:**

- a) How far do current production and trade conditions enable smallholder farmers to earn a living income?
- b) What are the different strategic opportunities for reducing the living income gap?

## Living income - the concept





### Living Income includes

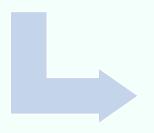
- Food
- Housing
- Essential needs (health, education, energy)
- Communication
- Childcare
- Unforeseen events

## Model approach



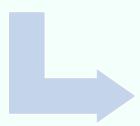


Plot Area \* Yield (= total volume) \* Price -/- Costs
Assumptions made for income from non-focus crop sources to
estimate Net total household income



Living income gap

Living income benchmark -/- Net Income



Marginal factor returns

Living income gap / factor rewards (for land, yield, price, labour)

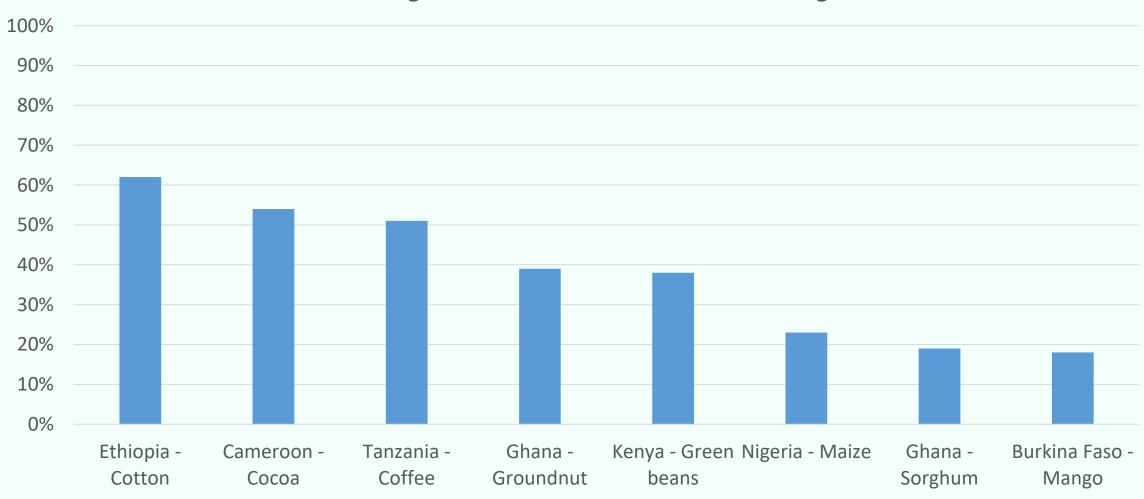
Assumptions [ to enable <u>aggregation from plot level to farm-household level analysis</u>]:

- Land share devoted to the commercial crop varies between 25 and 60% (depending on specific local conditions)
- Net crop income contribution to total household income varies between 30 to 80%

## Average living income gap (proportion)

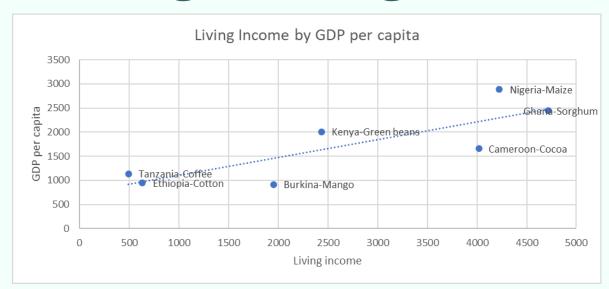


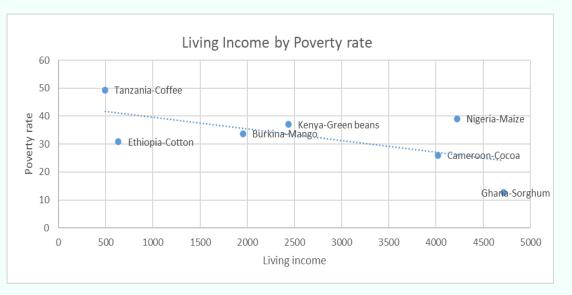
% of living income benchmark earned on average

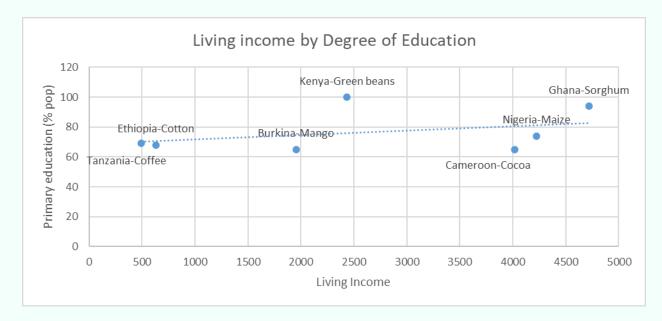


# Finding 1: Living income benchmark levels







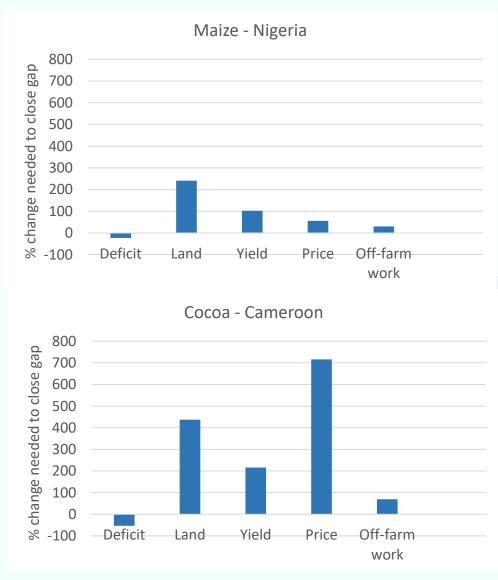


Higher Living Income Benchmark in countries with:

- Higher GDP growth
- Lower poverty rate
- Higher education

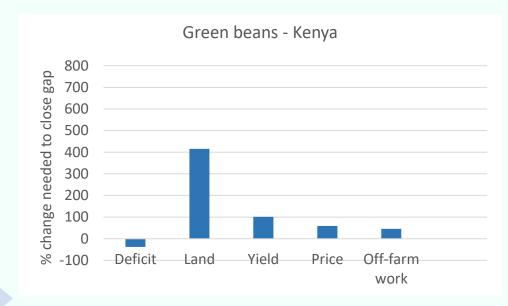
# Finding 2: Different constraints & opportunities

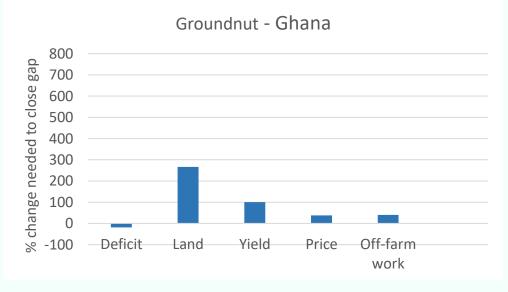




#### Constraints

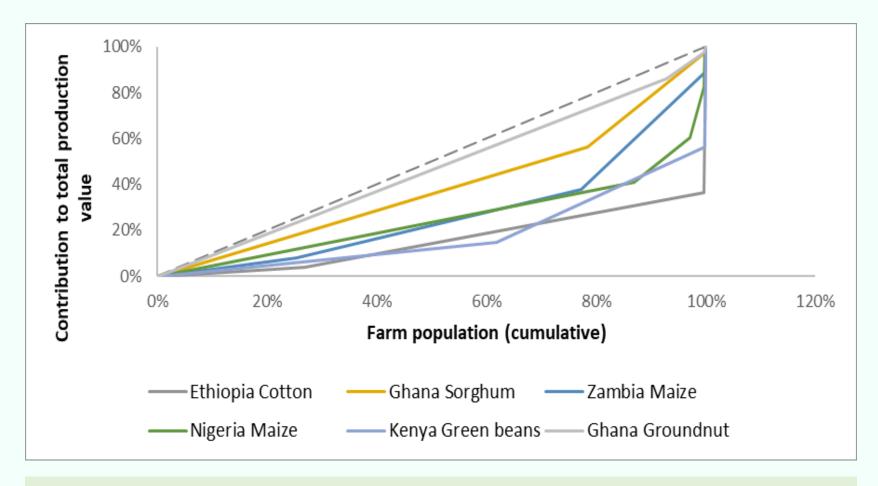






## Finding 3: Land distribution





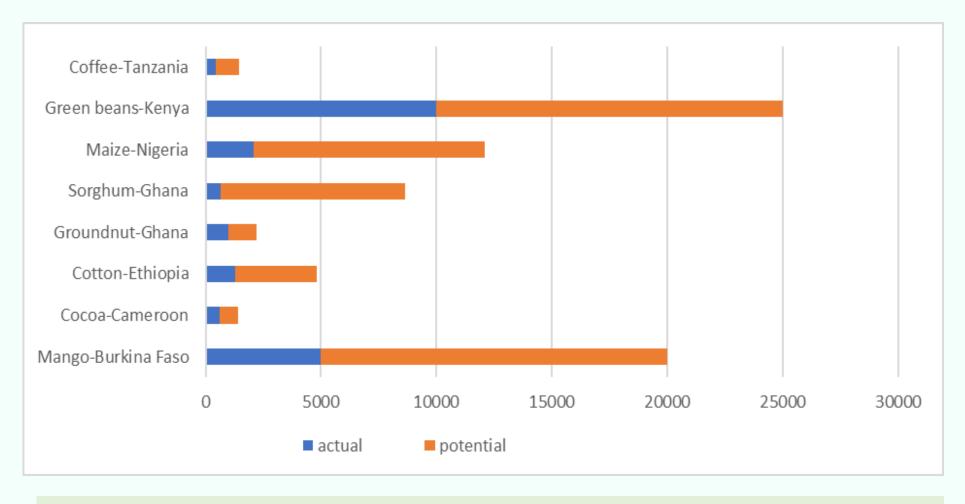
Land constraints lead to higher Inequality (Gini Ratio > 0.6)

More land constraints in more commercially-oriented systems

Continued land fragmentation in many contexts

## Finding 4: Closing yield gaps (kilogram/ha)

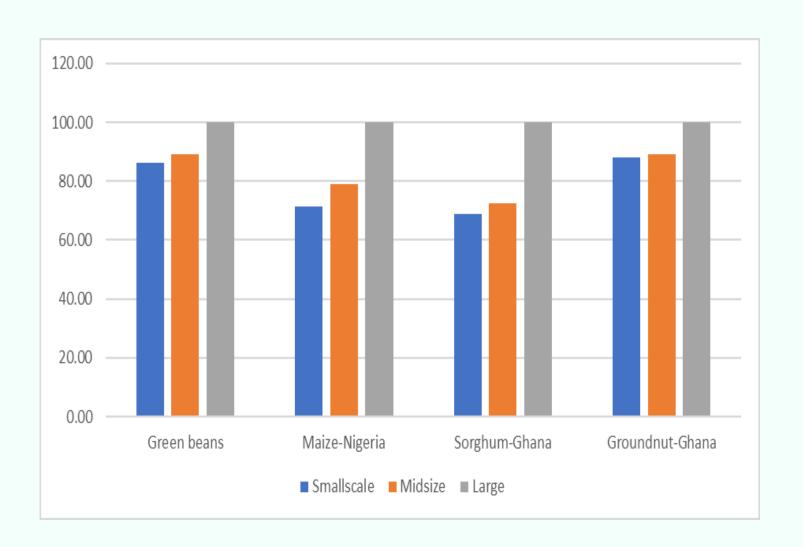




Yield gaps vary between 20-30% (green beans) and 60-70% (cotton, maize, sorghum) Many reasons why yield gaps are not closed easily (investment time and money, knowledge, access to inputs and technology)

# Finding 5: Reducing price differences



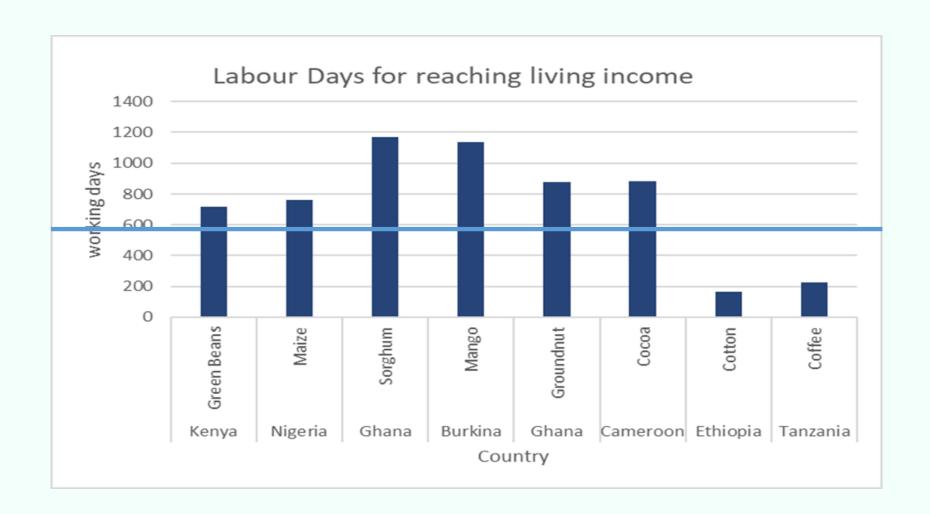


## **Price differences**

Smallholder farmers receive 25-30% lower market prices

# Finding 6: Employment creation





At current wage rates, many smallholder farmers need to engage > 600 days (= 2 full persons) in off-farm wage labour

# Implications for policy strategies



Policies	Land	Yield	Price	Labour	VC cases
	constrained	constrained	constrained	constrained	
Land registration and					Cotton (Ethiopia),
tenancy					Groundnut (Ghana)
					Green beans(Kenya)
Rural extension &					Green beans (Kenya),
training					Cotton (IEthiopia)
l danii 19					Mango (Burkina Faso)
Public investment in					Cocoa (Cameroon),
Market Infrastructure					Cotton (Ethiopia)
Warket minastractare					Maize (Nigeria) ,
					Groundnut (Ghana)
Rural credit & crop					Groundnut (Ghana),
insurance					Cotton (Ethiopia)
Vocational Education					Mango (Burkina Faso) ,
Vocational Eddodtion					Sorghum (Ghana)
Coolel ergenization					Cotton (Ethiopia), Coffee
Social organization					(Tanzania)
					Mango (Burkina Faso)
Certification &					Cocoa (Cameroon),
					Coffee (Tanzania)
labelling					Mango (Burkina Faso)

## Implications for policy & research



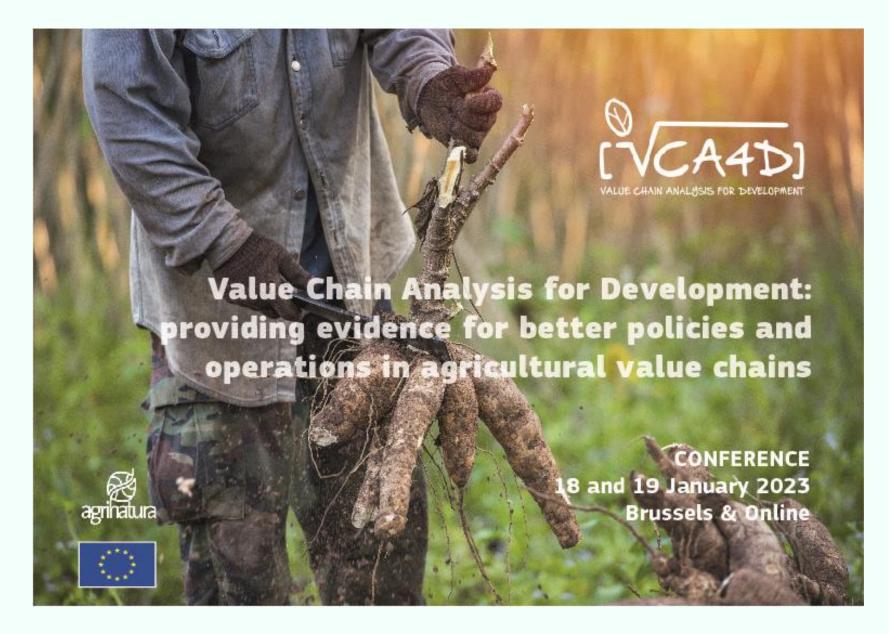
- Important to look at costs and realistic impacts of different interventions to increase incomes for different segments of households
- Farm income increase through increasing yield or diversification may not be as relevant as often assumed for certain household segments if they require much investment in terms of money or time, or if they require a certain amount of land
- Price increases increase incomes for all farmers but the poorest households benefit least because they sell low volumes
- Important prospects for improving employment options and increasing wages outside of agriculture with repercussion for the agriculture sector.

## Implications for policy & research



- Opportunities for reducing the gender wage gap as a strategy for pursuing living incomes because of differences in income gap between men and women.
- Smallholders producing commercial crops are better able to reduce nutritional deficiencies and improve labour productivity.
- Important prospects of (long-term) delivery contracts and collective action as mechanisms for reducing living income gaps.





# Thank you for your attention!

https://europa.eu/capacity4dev/value-chain-analysis-for-development-vca4d-/events/conference-value-chain-analysis-development-providing-evidence-better-policies-and-operations