

Living Income Community of Practice

Topic Specific 2021 webinar series

The Living Income Community of Practice



Photo © tea field Kenya Rainforest Alliance RA

An approach for aligning smallholder household incomes measurement

24th November 2021
14:00-15:30 BST (GMT +1)

Housekeeping Rules

THIS SESSION IS BEING RECORDED

- A link will be shared post this webinar
- A copy of the slide deck and recording will be available on our website within 2 weeks.

HOW CAN I ASK A QUESTIONS/COMMENT?

You will be kept muted throughout main session so,

- Raise your virtual hand (organizers shall unmute you)
- Type your question on the question box

TECHNICAL DIFFICULTIES ? Reach out to anja@isealalliance.org

Today's Facilitators



Sheila Senathirajah
Senior Manager, Innovations
ISEAL



Liliana Petkova
Project Support, Impacts and
Innovations
ISEAL

The Living Income Community of Practice



Living Income Community of Practice is an alliance of partners dedicated to the vision of thriving, economically stable, rural communities linked to global food and agricultural supply chains.

For more information and to join the community visit: www.living-income.com

Contact: livingincome@isealalliance.org

Main Discussion Agenda

- (5m) Intro to LICOP
- (40m) Income measurement FAQ
 - key points and considerations that influence income measurement approaches
 - Q&A with technical respondents
- (40m) Putting theory to practice: Baseline study for cocoa and cashew in Ghana
 - Explains why study was conducted, the measurement approach that was taken, and why. Explain also how that links with the FAQ guidance. Review results
 - Q&A
- • (5m) Wrap Up

Income Measurement FAQ - Presenter



Adam Romo

Senior Coordinator, Innovations

ISEAL Alliance

(Representing the Living Income Community of Practice)

The Living Income Community of Practice



giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH



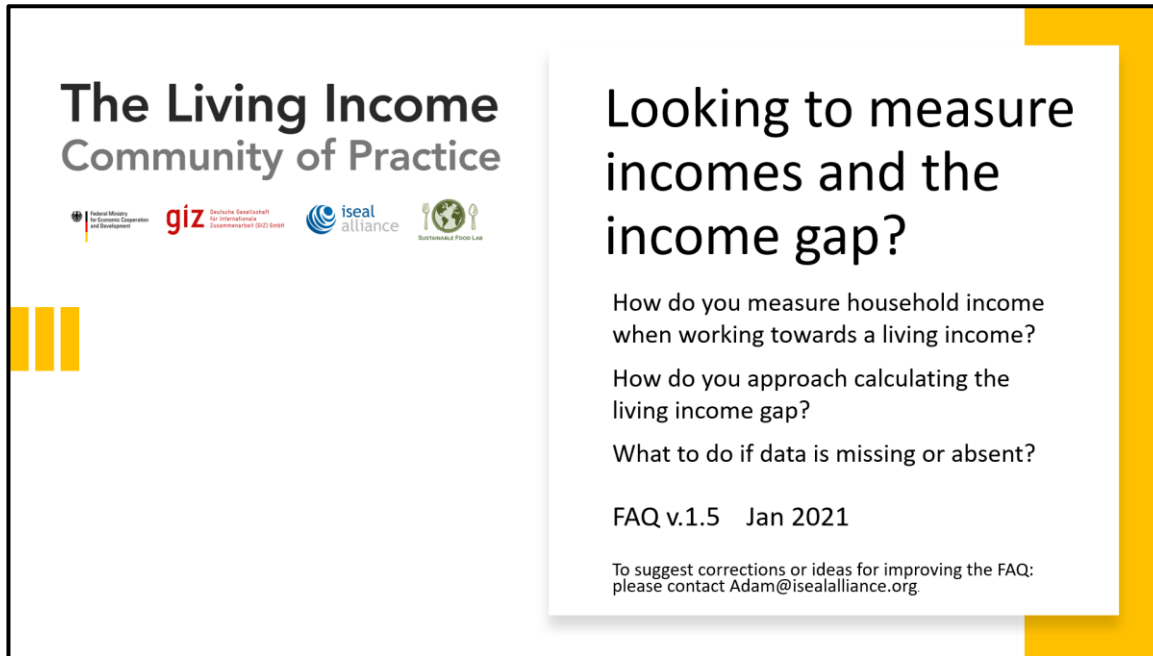
How to measure incomes relative to living income?

A summary of key concepts in the
income measurement FAQ

November 2021

To suggest corrections or ideas for improving the FAQ:
please contact Adam@isealalliance.org.

The Income Measurement FAQ



**Available NOW on the Living Income CoP
website**

**Developed in collaboration with the Living
Income CoP Technical Advisory Committee**

- Measuring smallholder incomes and the income gap is **fundamental for understanding** and **taking effective action** to improve livelihoods.
- **Smallholder incomes can be multifaceted and complex**, and knowing where to start around measurement can be challenging.
- **FAQ aims to support users on income measurement** by responding to key questions commonly asked within the CoP.
- Provides an **overview of key measurement concepts and principles** and links to **key guidance materials** and **other useful resources**.

Structure of the FAQ

Focusing
here
today

Part 1: Income measurement basics

- What is actual income in the context of living income?

Part 2: Approaching income measurement

- How do I define my income measurement approach?

Part 3: Collecting and sourcing income data

- How should I collect or source actual income data?

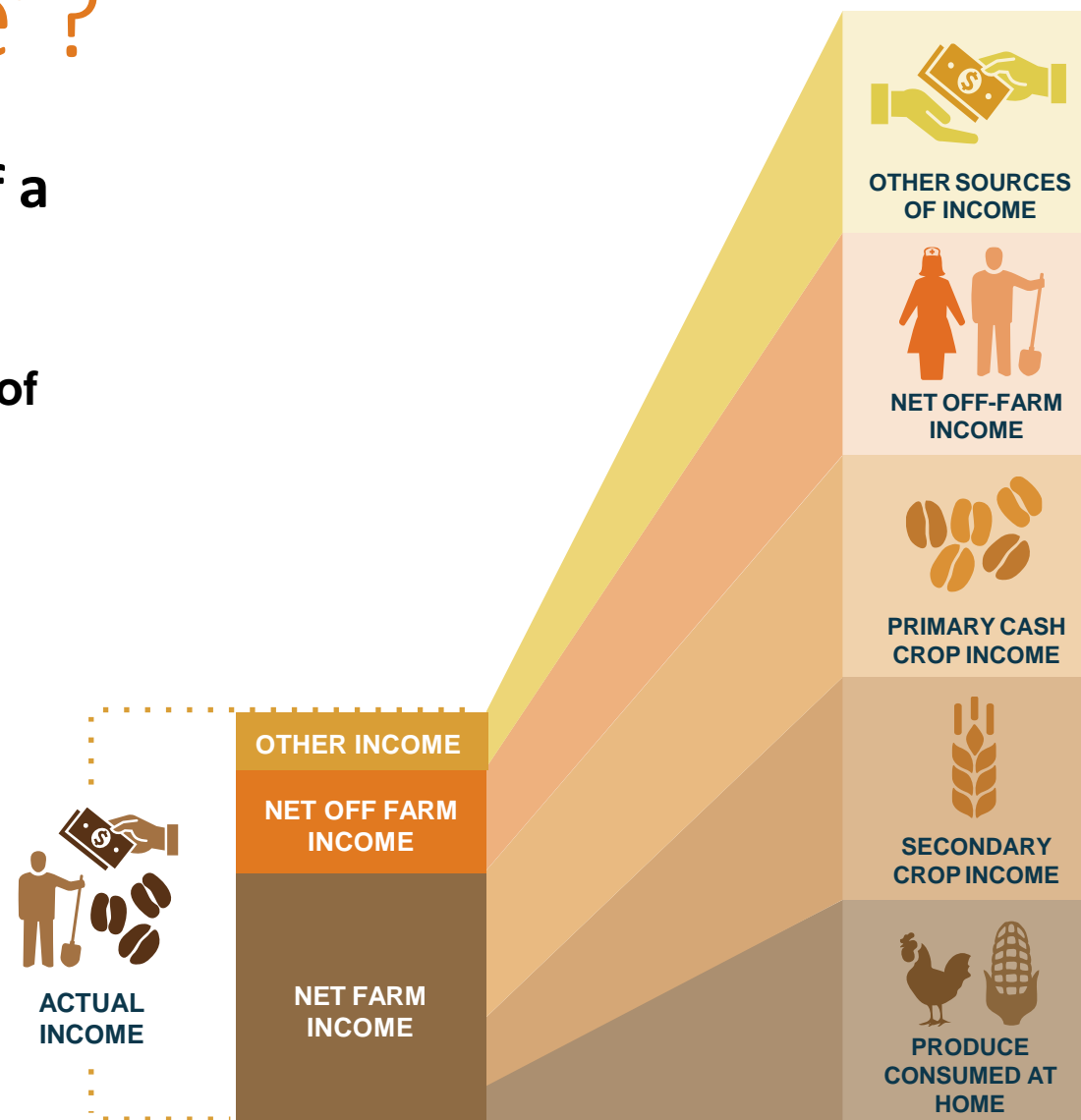
Part 4: Calculation, visualization and reporting

- How do I calculate, visualize and report the gap?

What is 'actual income'?

“The net income earned by all members of a household in a particular place.”

- “Household” = those **living together under one roof and sharing resources** (a shared economic pot).
- Typically **described annually** (a 12-month period).
- Smallholder households can draw incomes from a variety of sources, broadly categorised into:
 - **Farm income**
 - **Off farm income**
 - **Other income**
- Actual household income is **the sum of the net incomes across all of these sources.**



What is 'net farm income'? (1)

'The total value of farm production minus the total costs of farm production'. It is composed of:

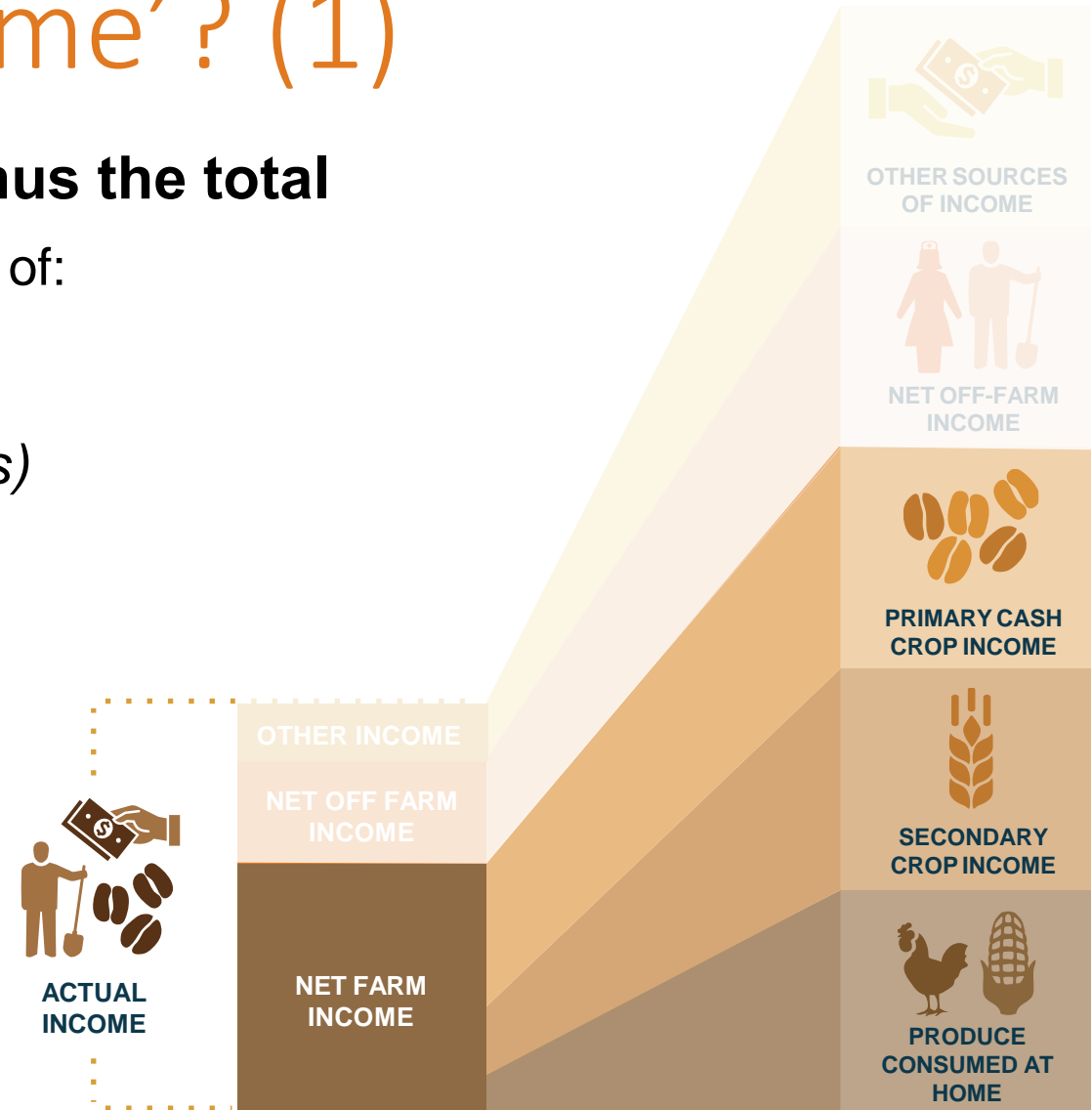
- **Total value of production**

(Total production x Av. price farmer receives)

Can come from:

- Primary crop (e.g. cacao, coffee);
- Secondary crops;
- Livestock; livestock products, and by-products

- **Note:** It is important to consider total value of production rather than the value of sales.

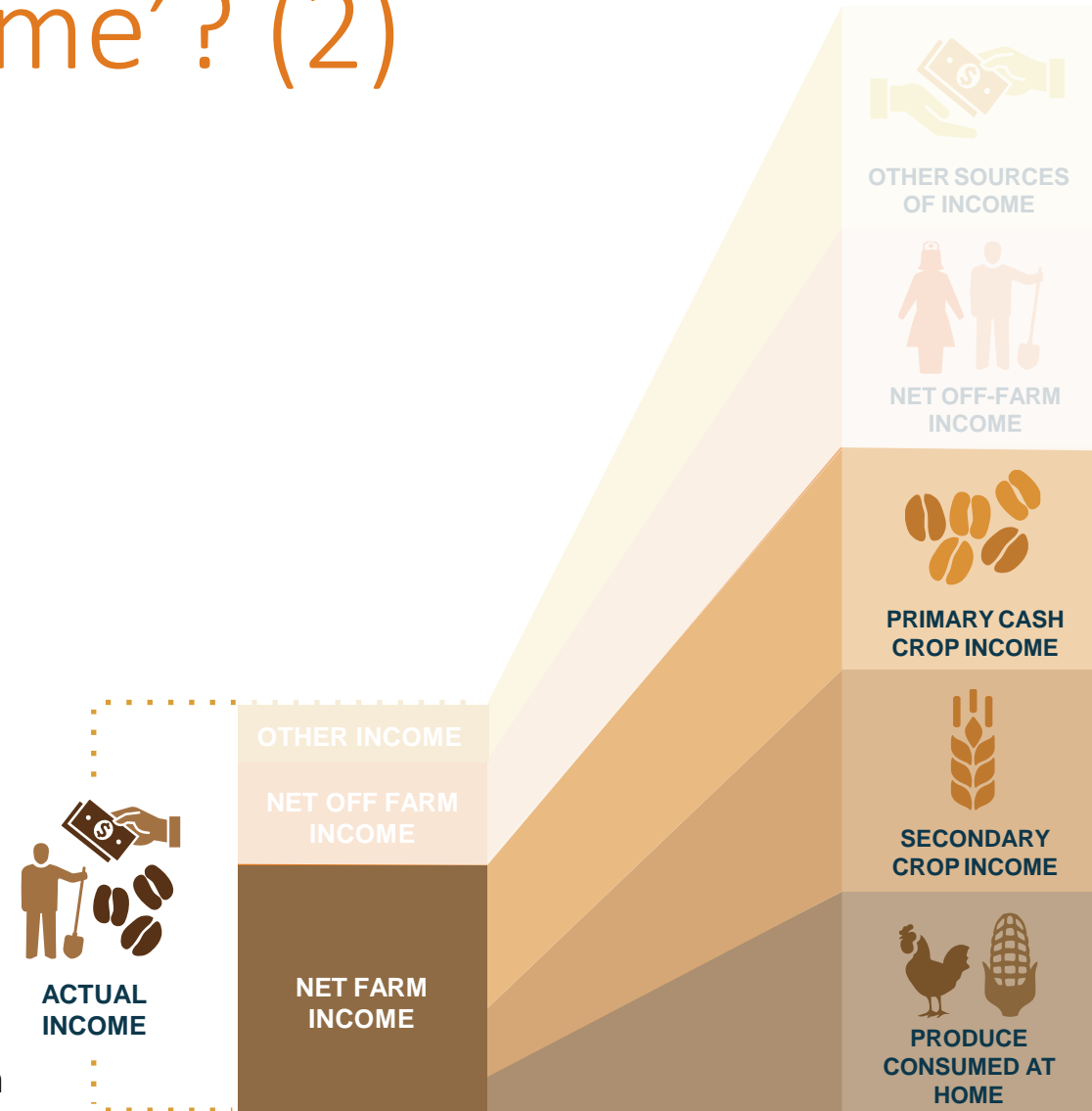


What is 'net farm income'? (2)

Total costs of production. The sum of:

- **Direct (input) costs** – Hired labour, fertilizers, pesticides, seeds, credit, production related transportation.
- **Indirect costs** – Taxes, security, cooperative membership fees.
- **Depreciation and costs of operation and maintenance** - for productive assets and vehicles.
- **Opportunity costs and amortized costs of establishment** – Cost of land and the establishment of perennial crops.

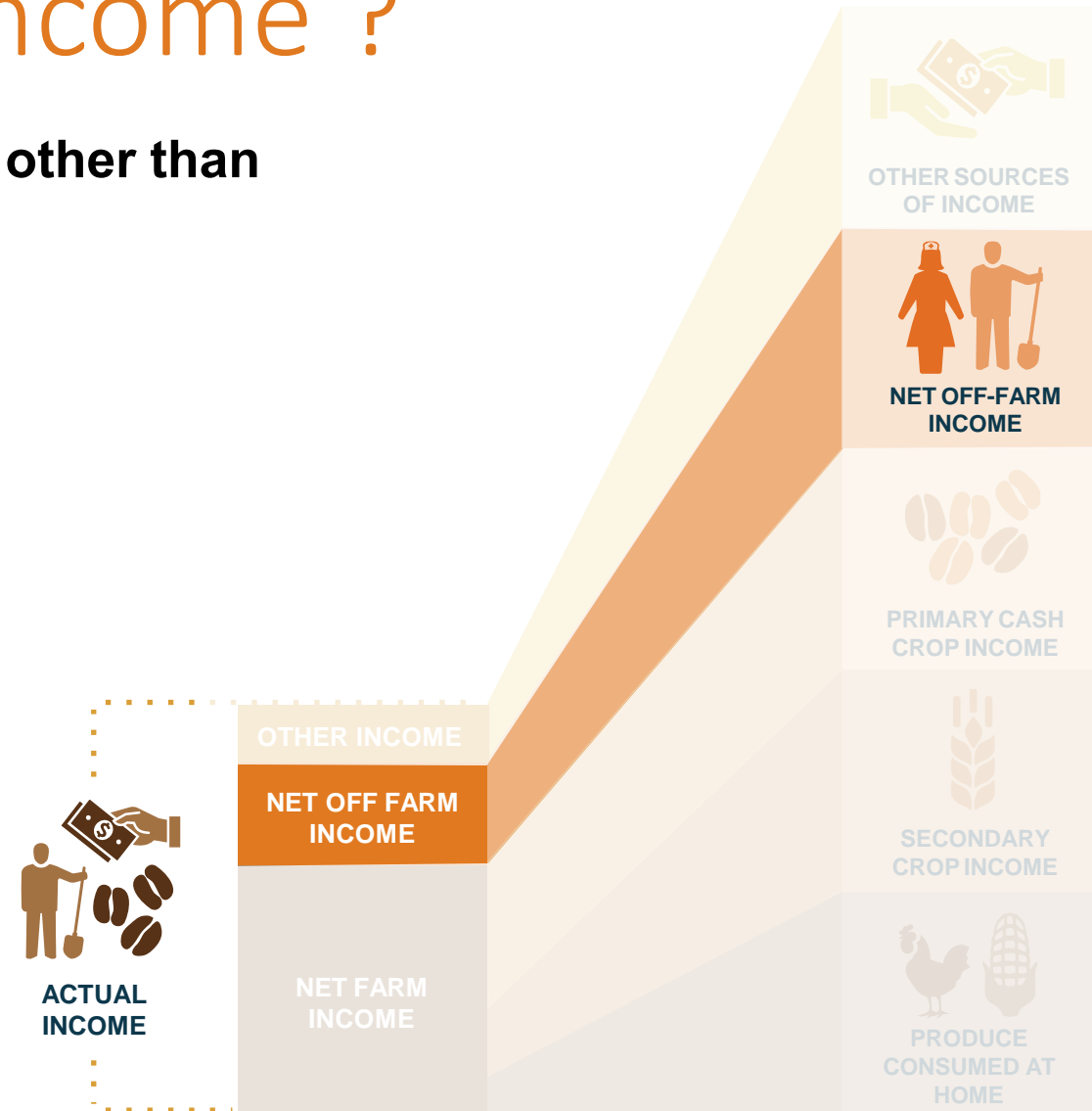
Note: Not all costs are relevant in all contexts. It is therefore important to understand the context in order to determine which are relevant and important to measure.



What is 'net off farm income'?

'Income coming from all economic activities other than the production of agricultural products'.

- This can come from a variety of sources and can compose a sizeable proportion of net income.
- Generally categorised into:
 - **Self-employment** - ownership of businesses that produce or sell goods or services.
 - **Wage employment** - income received from all household members for labour with third parties – formal or informal.



What is 'other income'?

'Income from non-farm and non-labour sources.'

Sources include:

- **Public and private transfers/transactions -**
 - E.g. From land rentals or sharecropping.
- **Gifts and remittances**
 - E.g. government subsidies, donations from non-profit organizations, and money sent by former household members or relatives.



What methods can be used to measure actual income?

Several methodological toolkits can be leveraged:

- Farm level household recall surveys
- Farmer field book assessments and record keeping
- Focus group discussions and expert interviews
- Secondary data sourcing, extrapolation, and modelling

Each has **different resource implications** and the **expected accuracy and precision** of data outputs **also varies**.

For pragmatism and flexibility, **a combination can be applied in a smart mix and modular approach** to enumerate different components of actual income.

A smart mix of methods can also be used to **triangulate** and **validate data**, and **fill data gaps** for individual income elements.



How do I decide which methods to use?

What income measurement approach is appropriate will depend on:



Your use case – What is your purpose for measuring incomes and the gap? Beyond the income gap, are you looking to explore anything else with the data?



The operational context – What incomes and related costs are typical and important in the measurement context? Are there any factors that might influence methods chosen?



Your starting point and capacity – What income related data do you have/ already exists? Do you have capacity to collect the data? What is your budget and timeline?

As most organisations will respond to each consideration differently it is unlikely that any two measurement approaches will be the same. **Be transparent about choices to allow data comparability to be assessed.**

What is my use case and why is it important?

- Your use case is your **intended purpose** for measurement, or in other words your **objectives and key intended uses** for the data.
- It affects your **data needs** (accuracy, precision, and level of detail), **sample size**, **the calculation process**, and the **reporting indicators** and **visualisations**.
- It will in-part **determine the methods** and **attention to detail** you apply when enumerating each of the elements of **net actual household income**.

Understanding the size of the gap (Magnitude)	Monitoring progress (Directionality)	Designing interventions (Strategy definition)
Living income gap hotspot analysis	Progress towards closing the gap	Program design
A one-time estimate	Progress of specific farmers	Profit/production costs
	Effect of programs	Reference price estimate

Generally level of data detail required increases*

How to define use case and use it to inform measurement?

- **Consult relevant stakeholders** who could receive value from the data (incl. smallholders). **Be specific** – use goals and objectives to frame conversations.
- Once defined, **think about the level of data detail that might be required** for the **different elements of household income**. This can be used to **propose a combination of sourcing methods**.
- To reduce costs, **more intensive methods** can be proposed for **income elements that require deeper consideration**, and **less intensive methods** for others.
- Also **discuss what other information may be needed beyond income data** to satisfy the use case (e.g., income rate, yield, and qualitative data for understanding why).



“Which elements of actual income might I need to pay more attention to in relation to my use case?”

Why understand the measurement context?

- **Household income compositions vary across contexts. Norms and practices that determine income revenues and related costs can differ** (crops, conditions, culture, geography etc.)
- **Understanding which income elements are relevant** in your focus context, **and their relative importance**, will help to:
 - **Shape a contextually appropriate measurement approach,**
 - **Better understand measurement resource requirements,**
 - **Ensure you are not wasting resources trying to collect irrelevant data.**
- Building contextual understanding is also useful for:
 - **Identifying and accounting for factors that might require methodological adjustments** (e.g. low literacy rates, limited availability of financial records).
 - **Identifying data sources that might already exist.**



‘What are the key determinants of income and associated costs for your farming households?’

How do I understand the measurement context?

To understand context, some form of pre-assessment is required. Below are examples applied in the Living Income community:

- **A short household context survey** – e.g. COSA
 - **A community focus group exercise** – e.g. Household Economy Analysis
 - **A review of secondary data and interviews with local experts**– e.g. KIT
 - **A combination of the above** – e.g. LI CoP Cote D'Ivoire and Ghana pilots
-
- Pre-assessment need not be exhaustive. What is important is that it is able to identify the norms and what is typical within the context of concern.



“Are there any significant costs (e.g. tools or vehicles), secondary income sources, or land expenses that are typical for households in your measurement location?”

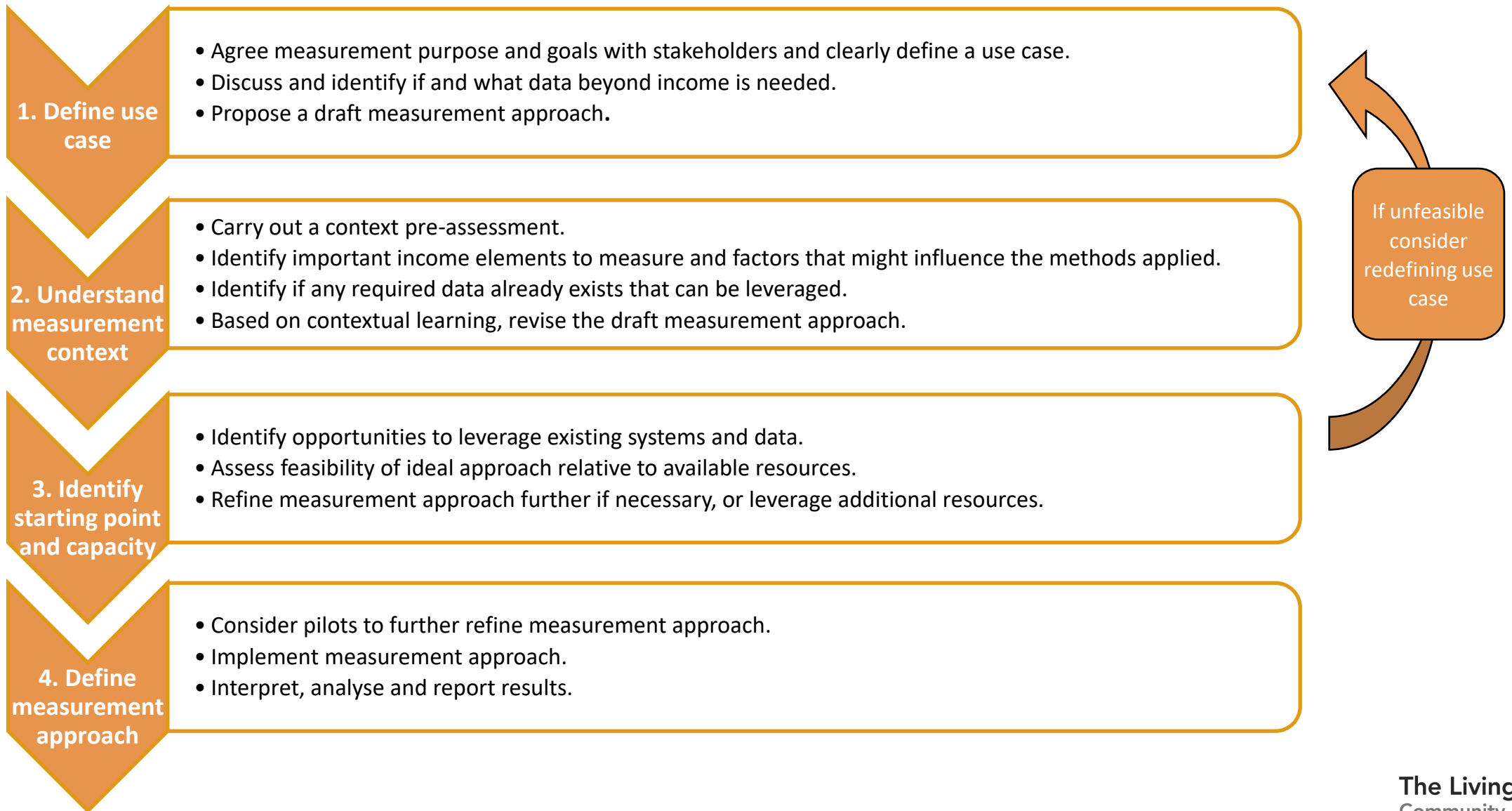
How starting point and capacity frames measurement

- Collecting data **costs time and resources** - It's important to **balance pragmatism and feasibility** with **diligence and accuracy** when undertaking measurement.
- **Methods proposed based on use case** and **refined for contextual appropriateness** should be assessed relative to relevant **ongoing data collection efforts** and **available resources**.
- **Where can efficiencies be built in, or existing data be leveraged?** Is the proposed measurement **approach feasible** with **available resources**?
- **Most important is that you have the capacity to satisfy the data granularity requirements for your use case.** If you lack the capacity to do so, you may need to leverage additional resources, consider collaborating with other actors, or **rethink your use case**.



*“What data do we have or already exists?
Do we have the resources to collect the
data needed for our use case? Within what
timeline do we need results?”*

Process for deciding how to measure



Thank you!

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Questions?

Putting theory to practice - Today's guest speakers



Dr. Eberhard Krain
Consultant



Ignatius Pumpuni
Consultant



Martin-Kuntze-Fechner
GIZ-ComCashew

Baseline Study for a Living Income (and Other Benchmarks) in Cashew and Cocoa Growing Regions of Ghana

Competitive Cashew Initiative (ComCashew)
Sustainable Agriculture Supply Chain Initiative (INA)



Main content of the presentation

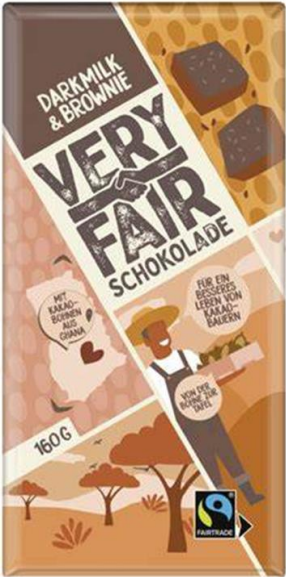
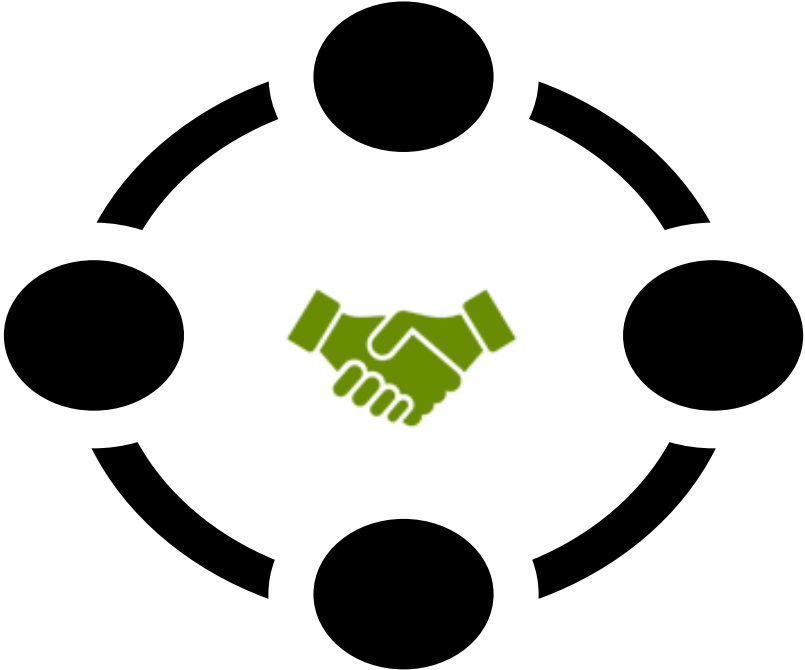
- „Living Income & Tree crops“ project in Ghana
- What was the purpose of the study?
- Which data was required and how was it further processed?
- Recommendations and Conclusions

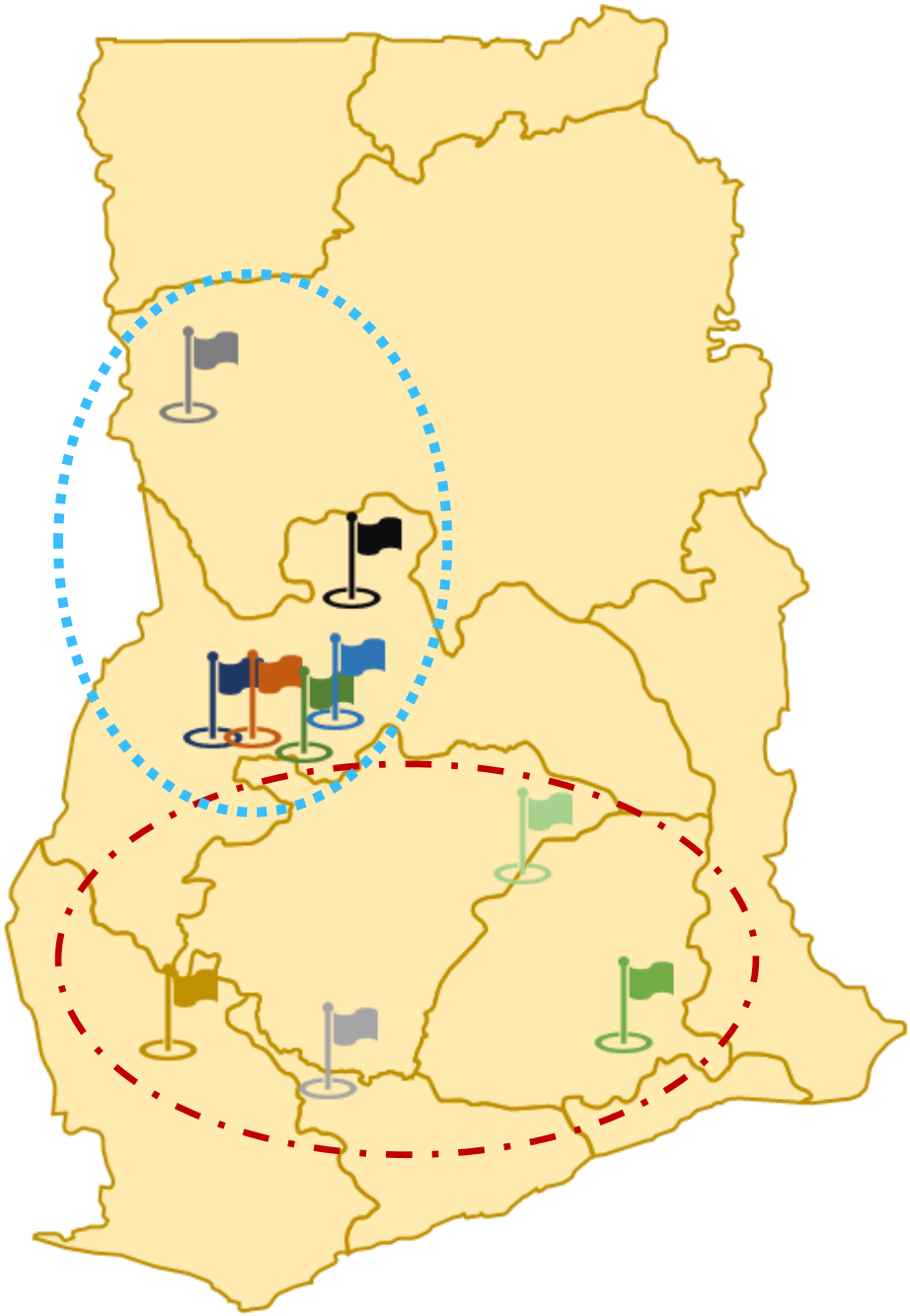


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„Living Income & Tree crops“ project





Cashew cooperatives

-  Gbankuluso
-  Techiman
-  Agosa
-  Wenchi
-  Kintampo
-  Sawla

Cocoa cooperatives

-  Fanteakwa
- 
-  Dadieso
-  Dunkwa-on Offin
-  Sefwi-Wiawso



Study Questions

A. Adjusting benchmarks or target Incomes:

How much should cashew and cocoa smallholders earn?

B. Actual incomes:

How much do cashew and cocoa smallholder households currently earn if one assumes?

C. Living Income Benchmark/ Reference Price:

How high would be the prices for cashew, cocoa and other key crops to earn a living income (or another benchmark) income?

D. Living Income Differentials:

how big is the difference between current (actual income) and desired income, especially?



Data requirements

A. Adjusting benchmarks for calculating target Incomes:

Primary benchmark: Living Income

- Living Income Report (Smith and Sarpong, 2018)
- Ghana Statistical Services (GSS) for **CPI** and **inflation rate**
- GSS: Labour Force Survey
- GLSS7: Ghana Living Standard Survey, Round 7

Secondary benchmarks: Poverty Lines

- World bank website
- GSS website

Additional information

- Exchange rates
- Inflation rate
- typical household size (5 persons for cocoa and 6 persons for cashew)

Data requirements

B. Actual incomes:

a. Secondary data: Thorough review of studies, national and regional data, Triangulation data for cocoa: KIT-study (Bymolt et al. 2018), internal consultations

b. Deciding on study approach

c. Primary data: surveys with household interviews (number and age of household members, labour capacity per household, total farm size, land size of focus crops, productivity and revenue from focus crops, importance of secondary crops)

d. Gross Margin of focus crop and two secondary crops:

- 2 FBS handbooks with GMs,
- **FGD in 4 villages,**
- own expert knowledge, secondary food crops, even if auto-consumed, are valued as an opportunity income at farm gate prices.


e. Assumptions:
Using model data based on two surveys (size of household, size of farm, size of land under secondary crops), Experts, FDG

f. Model HH income calculation
(for typical households)

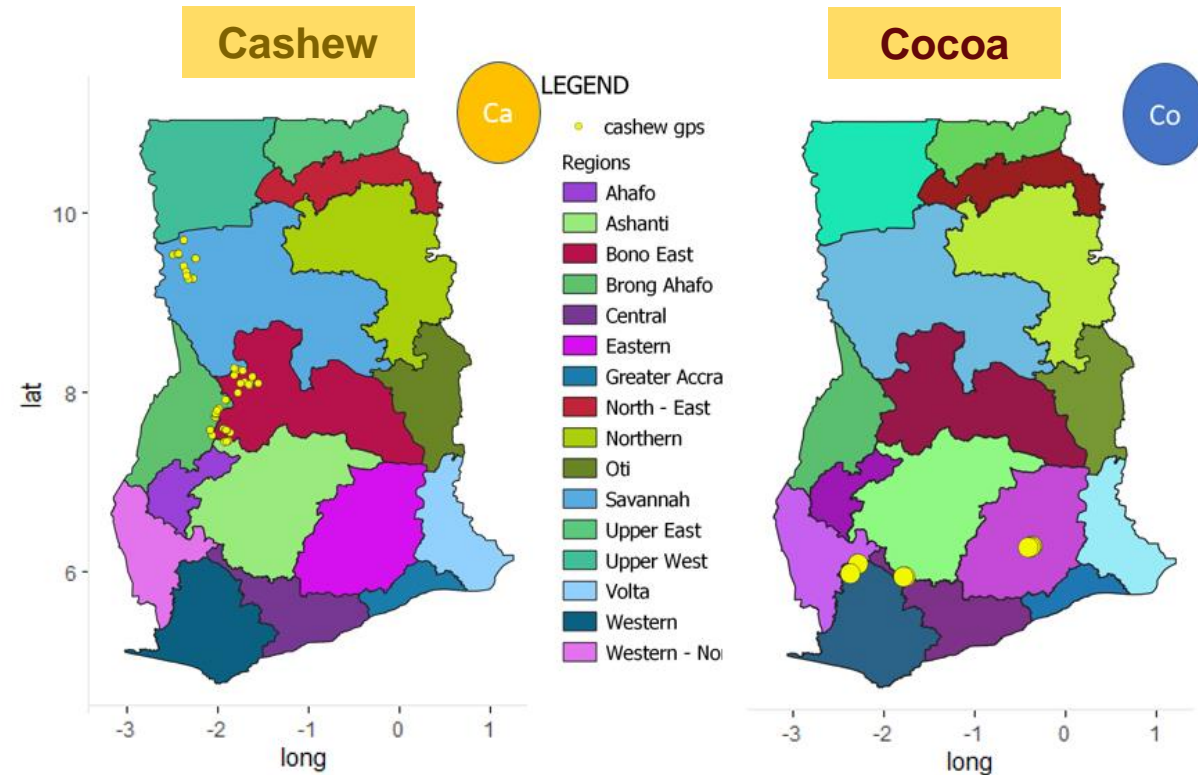


Primary data collected during the project?

Primary data collection:

- **Partial farming income:**
 - **2 surveys** among **372 cashew** and **153 cocoa households** (4-8/2020)
 - **Focus Group Discussions** with cashew and cocoa farmers in **4 villages** (12/2020-1/2021)
- **Data processing**
 -  open source data science programme
 - Excel
- **Data alignment: to Jan. 2020**

Primary Data Study Locations





**Focus group discussion
(Ignatius Pumpuni)**

Objective of FGD: Establish a gross-margin calculation

Purposively sampling (selected farmers that were already trained in GAPs and FBS)
FDGs were guided by “empty” gross margin templates were not leading.

1st step: Present approach to broader producer audience

2nd step: Built three subgroups for focus and secondary group

3rd step: Each group develops crop budget for “current” and “improved” production

4th step: Discuss and consolidate results of group work in plenary



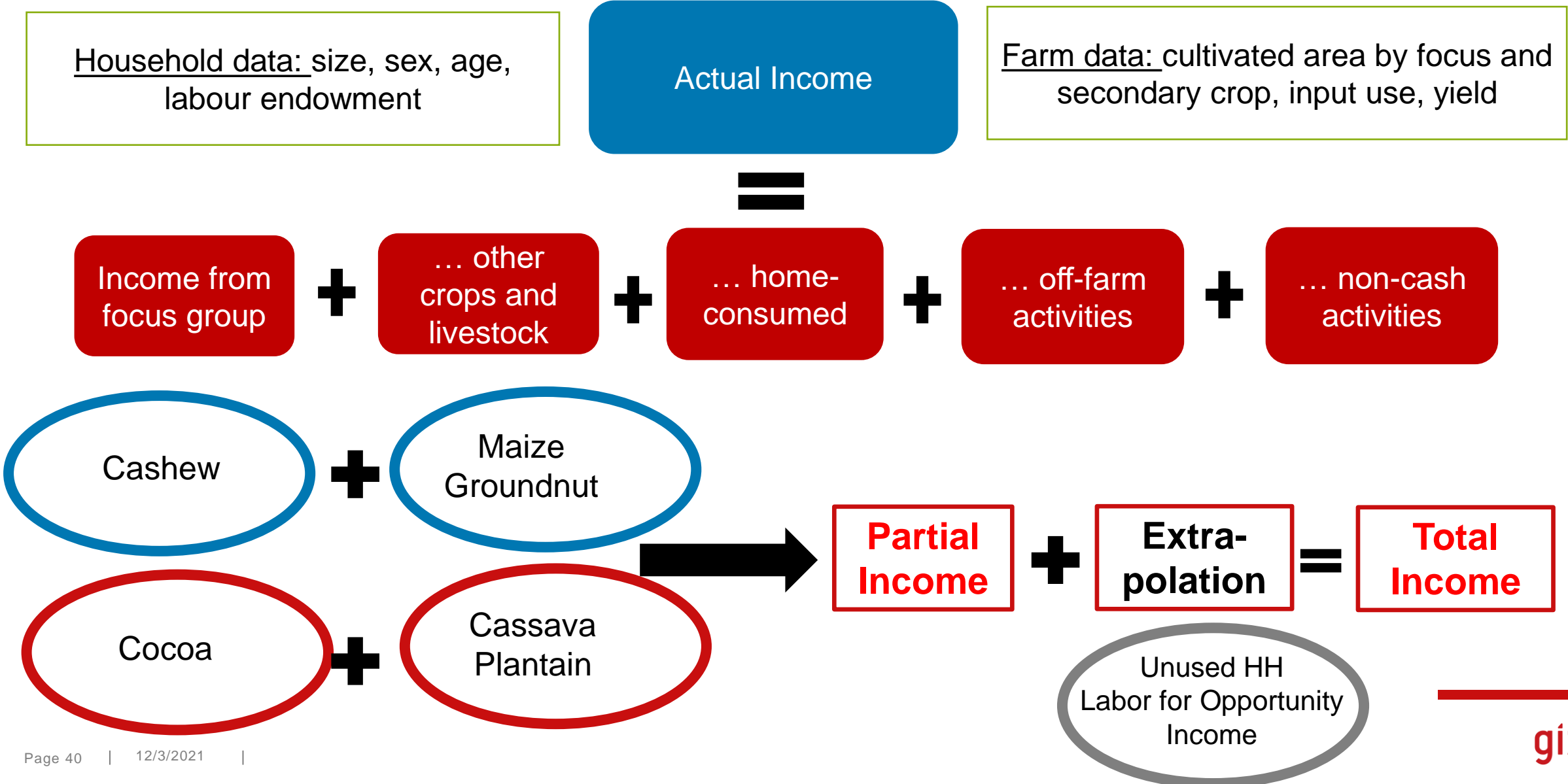
Role of moderator: Introduce approach and provide background information to producers, plausibility check of present results

Opportunities/Challenges:

- + Rapid and economic approach
 - + Peer dynamic, control of group
 - + Empowerment of producer, though knowledge sharing and active involvement development of crop budget
-
- / + Experienced moderator with strong technical background
-
- Limited representativity



Partial and Total Household Income Calculations

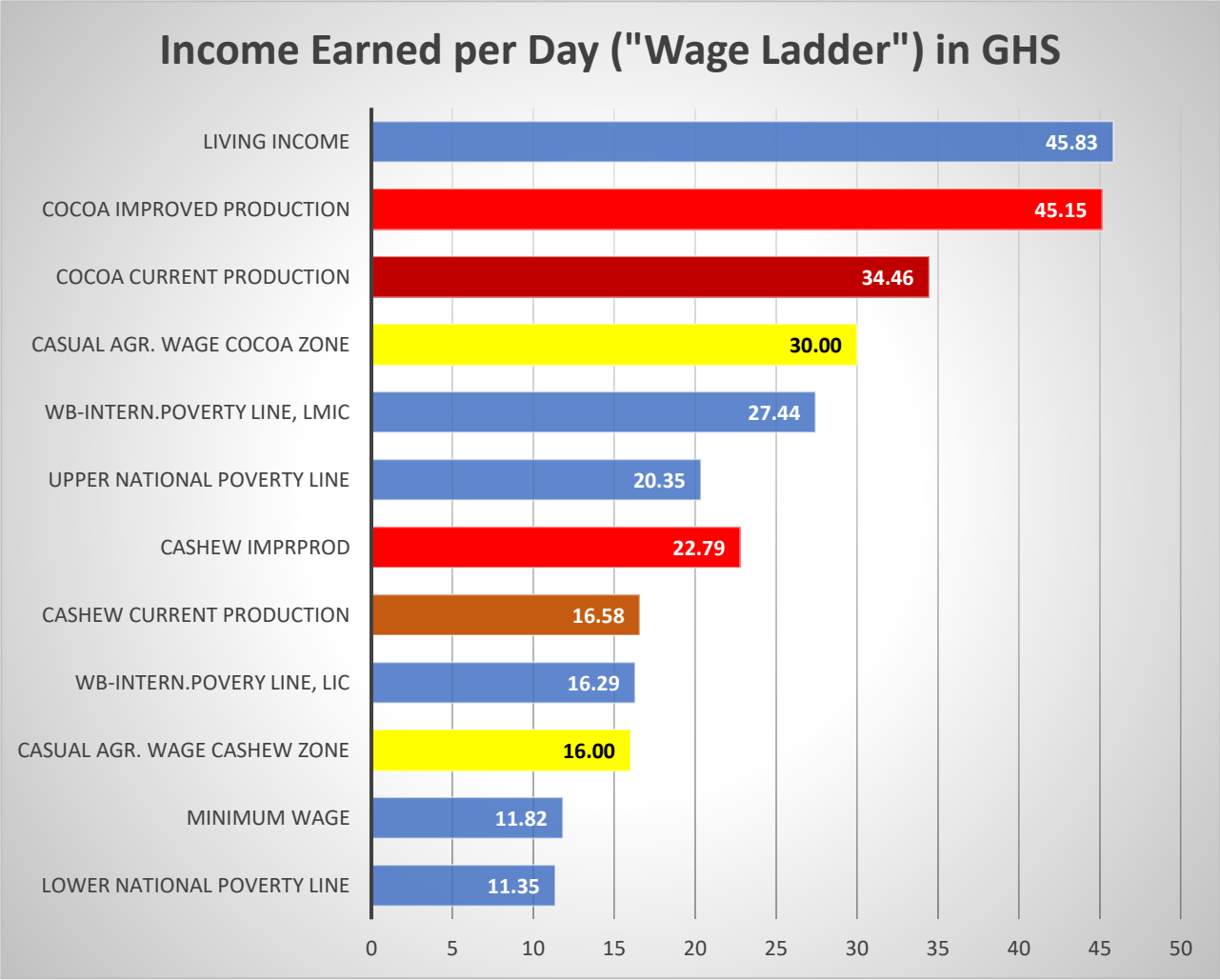


Income ladder

Actual **annual income** of cashew and cocoa HH in comparison to a Living Income (and other benchmarks)

Total Household Income Compared to Benchmarks and Gap Against a Living Income		Unit	Cashew Smallholder Households		Cocoa Smallholder Households	
	Production System		Cur.Prod.	Impr.Prod.	Cur.Prod.	Impr.Prod.
Row	Column		1	2	3	4
0	Total (extrapolated) Income	GHS	8,538.13	11,738.93	14,781.72	19,371.24
	Income Benchmarks					
1	Lower GH Poverty Line	GHS	5,881.19	5,881.19	4,837.89	4,837.89
2	Minimum Wage	GHS	6,084.94	6,084.94	5,070.78	5,070.78
3	World Bank LIC Poverty Line	GHS	8,387.16	8,387.16	6,989.30	6,989.30
4	Upper GH Poverty Line	GHS	10,543.27	10,543.27	8,672.94	8,672.94
5	World Bank LMIC Poverty Line	GHS	14,125.75	14,125.75	11,771.45	11,771.45
6	Annual Living Income	GHS	23,591.79	23,591.79	19,659.82	19,659.82
7	Gap Against a Living Income	%	63.81	50.24	24.81	1.47

Benchmarks against Household and Sector Earnings per Workday ("Wage Ladder")



- Benchmarks
- "Wages", improved production
- "Wages", current production
- Casual agr. wages

Results: Living Income (and Other Benchmark) Reference Prices

C. Benchmark/ Reference prices :

GM-data and labour income benchmarks

- **Input into formula:**
 - Benchmark (BM_w) per labour force unit (WD)
 - **No of labour units (NoWDs) (difficult!!!)**
 - Cost of production (CP)
 - Yield (Y)
- **Output of formula**
 - Benchmark reference price (BM_{rp})

Linnert Steffens Reference Price Formula (per unit area, e.g. ha)

$$BM_{rp} = \frac{\left(\frac{BM_w}{WD} * NoWDs \right) + CP}{Y}$$

Example calculation

LI-ref.price for cocoa, current production

$$BM_{rp} = \frac{(45.83 * 110.1) + 700.2}{457.8}$$

➔ For more reference prices see Annex 1

= GHS **12.55** /k g

Result: Price/Living Income Differential (LID)

D. Income differentials:

Difference between benchmark reference price and actual price

Formulas for nominal and relative price differentials

Example for Cocoa Current Production

- **Input into formula:**
 - Benchmark reference price (BM_{rp})
 - Actual price (AP)
- **Output of formula**
 - Price differential (PD)

$$PD \text{ (nominal)} = BM_{rp} - AP$$

$$PD = 12.55 - 10.00 = GHS 2.55$$

$$PD \text{ (\%)} = \frac{(BM_{rp} - AP) * 100}{BM_{rp}}$$

$$PD \text{ (\%)} = \frac{(12.55 - 10) * 100}{12.55} = 20.32\%$$

→ For more benchmark differentials see Annex 2 & 3



Recommendation

Data collection:

- Duly check of secondary data to identify data gaps

Primary data collection (mix of methods):

- Survey among households (esp. for crop with limited information base or data on land size, area under cultivation by crop)
- Focus group discussions (especially to quantify **labour input, yields, prices and production costs**)
- Expert interviews (validation and triangulation of data)
- Crop cuts on-the-ground checks (actual yield measuring, cross-checking, progress monitoring)
- Further collaboration with farmer:
 - Training on record keeping

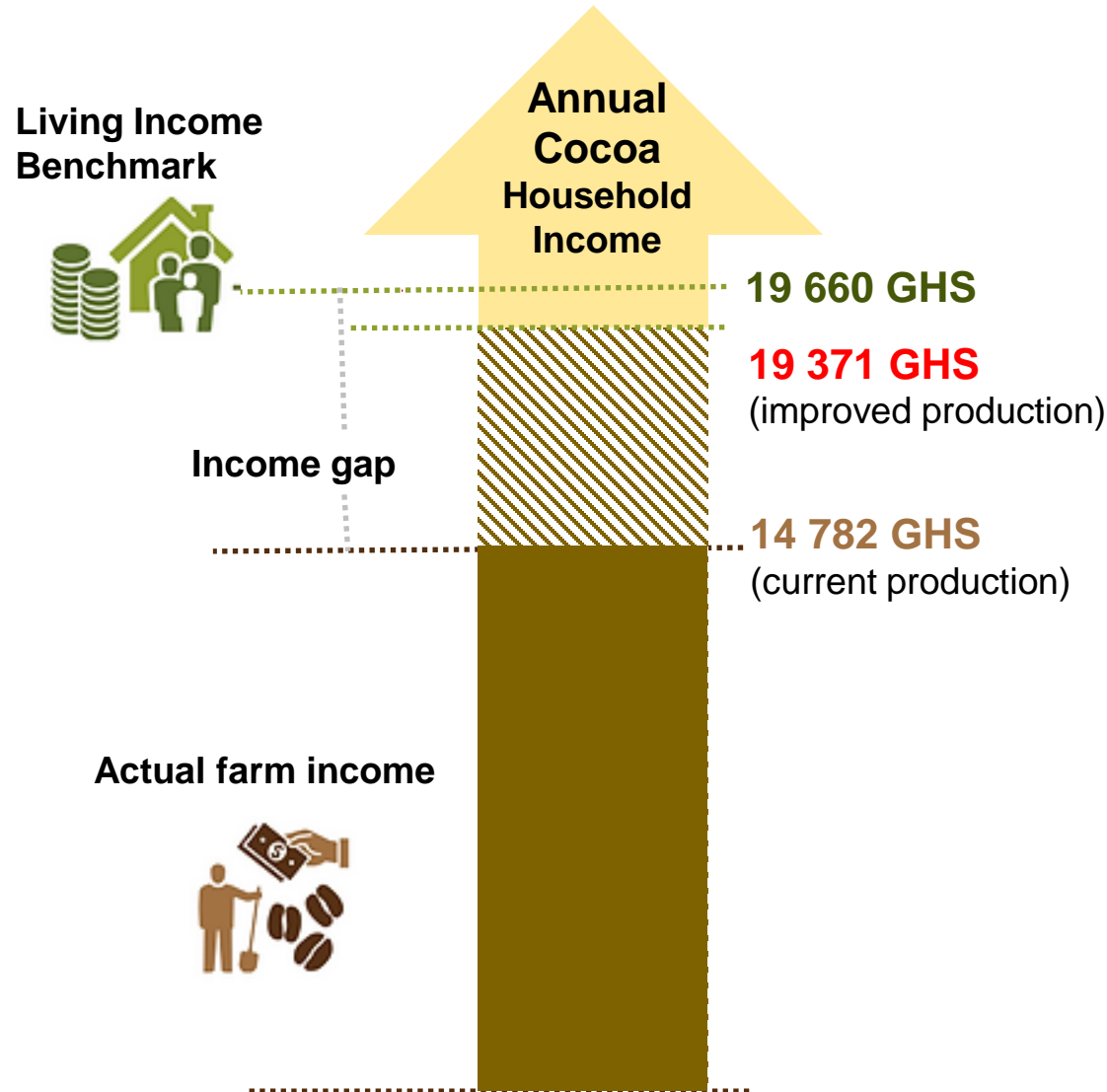
Outcomes:

- Annual **updated gross margin** calculations / crop budget for intervention area
- Develop **two budget scenarios** for „current“ and „improved“ farming practice
- **Improved labour input data** (triangulation with secondary data, FGDs and expert knowledge)

How can the study results be used?

Private Sector

1. How big is the gap currently?
2. Increase transparency on income situation of farming household
3. What measures work to close the gap?
 - HCD, improved varieties, etc.
 - Price increase
4. LI-advocacy, get discussion on “decent” income closer to consumer



Political actors

1. Informing and strengthening policy makers in Ghana and Cote d'Ivoire
2. Establish transparent method to calculate LID (*Are 400 USD per ton still up-to-date?*)
3. Introduce Living Income to other crops:
 - Cashew
 - Coffee
 - Rubber
 - Oil palm

Contact



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Meda mo'ase! Thank you!



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Annex 1: Living Income (and Other) Benchmark Price References

	All Values in GHS	Actual price per kg	Actual "wage"	"Wage" Benchmarks					
				GH-I-PL	GH-MW	WB-I-IPL	GH-u-PL	WB-Im-IPL	Living Income
Row	Column	1	2	3	4	5	6	7	8
1	Benchmark ("wage")			11.35	11.82	16.29	20.35	27.44	45.83
	Prices			Reference Prices					
2	Cashew, Cur.Prod.	4.00	23.06	2.67	2.72	3.23	3.69	4.50	6.59
3	Cashew, Imp. Prod.	4.00	25.14	2.50	2.55	3.04	3.48	4.25	6.25
4	Cocoa, Cur.Prod.	10.00	35.24	4.26	4.37	5.45	6.42	8.13	12.55
5	Cocoa, Imp.Prod.	10.00	43.29	3.97	4.06	4.90	5.67	7.01	10.48

Annex 2: Price Differentials for Cashew and Cocoa Against Benchmarks

	All Values in GHS	Actual price per kg	Actual "wage"	"Wage" Benchmarks					
				GH-I-PL	GH-MW	WB-I-IPL	GH-u-PL	WB-Im-IPL	Living Income
Row	Column	1	2	3	4	5	6	7	8
1	Benchmark ("wage")			11.35	11.82	16.29	20.35	27.44	45.83
	Prices			Reference Prices					
2a	Cashew, Cur.Pro.	4.00	23.06	2.67	2.72	3.23	3.69	4.50	6.59
3a	Cashew, Imp. Pro.	4.00	25.14	2.50	2.55	3.04	3.48	4.25	6.25
4a	Cocoa, Cur.Pro.	10.00	35.24	4.26	4.37	5.45	6.42	8.13	12.55
5a	Cocoa, Imp.Pro.	10.00	43.29	3.97	4.06	4.90	5.67	7.01	10.48
	Prices			Price Differentials					
2b	Cashew, Cur.Pro.	4.00	23.06	-1.33	-1.28	-0.77	-0.31	0.50	2.59
3b	Cashew, Imp. Pro.	4.00	25.14	-1.50	-1.45	-0.96	-0.52	0.25	2.25
4b	Cocoa, Cur.Pro.	10.00	35.24	-5.74	-5.63	-4.55	-3.58	-1.87	2.55
5b	Cocoa, Imp.Pro.	10.00	43.29	-6.03	-5.94	-5.10	-4.33	-2.99	0.48

$$2.59 = 6.59 - 4.00$$

$$2.55 = 12.55 - 10.00$$

Annex 3: Living Income Differential for Cashew and Cocoa

Living Income Differentials		GHS/kg	GHS/ton	US\$/ton
1	Cashew, current production	2.59	2,587	467
2	Cashew, improved production	2.25	2,254	407
3	Cocoa, current production	2.55	2,546	460
4	Cocoa, improved production	0.48	479	87

Annex 4: Currency Exchange Rates

Currency Exchange Rate	GHS
GHS per USD, 20 January 2020	5.53
GHS per USD PPP January 2020	1.94
1 EUR to GHS, 20 January 2020	6.13

What are we doing to further support measurement?

- Developing a practitioners guide on income measurement.
- Aims to support organisations choose methods and an approach to income measurement based on use case, context and capacity.
- Will present a framework that recommends minimum and good practice income measurement approaches.
- Connects practitioners with more technical methodological guidance.
- **To be published quarter 1 of 2022**

Living Income Community of Practice




A practitioner's guide and framework for selecting an approach to income measurement

Being developed in collaboration with the Living Income CoP Technical Advisory Committee

What resources are currently available?

All can be found in the 'Resources' section of the LI CoP website

Income gap calculation



Guidance manual on calculating and visualizing the income gap to a Living Income Benchmark

Prepared for the Living Income Community of Practice



LIVING INCOME BENCHMARK

Cost of a basic, decent standard of living for a household



FOOD FOR MODEL DIET



DECENT HOUSING



OTHER ESSENTIAL NEEDS



UNEXPECTED EVENTS

INCOME GAP



ACTUAL INCOME

Potential household income



OTHER SOURCES OF INCOME



NET OFF-FARM INCOME



PRIMARY CASH CROP INCOME






SECONDARY CROP INCOME



PRODUCE CONSUMED AT HOME

Income measurement using primary data





Guidance on calculating household income

Version 1.

Prepared for the Living Income Community of Practice

Income estimation using secondary data







Estimating farmer household income

How to use secondary data to estimate farmer household income illustrated by two specific use case scenarios

V1.2

Prepared for the Living Income Community of Practice

HEA framework



Applying the Household Economy Analysis to Measure and Address Income Gaps in Agriculture Supply Chains

Guidance Note for the Living Income Community of Practice – December 2019

Authored by Jessica Grillo and Jennifer Bush

Upcoming engagement opportunities

Dec 8, 2021 14:00 GMT

Living income and standards systems webinar

Showcase of projects that work to meet producer needs and positively influences livelihoods & resilience

Dec 15, 2021 14:00 GMT

Advancing living income in non-agricultural space.

Join us to reflect how other sectors are approaching the topic of living income and livelihoods.

Thank you!