

Towards a decent standard of living for smallholder farmers

The Living Income Community of Practice



giz

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH



iseal
alliance



www.living-income.com

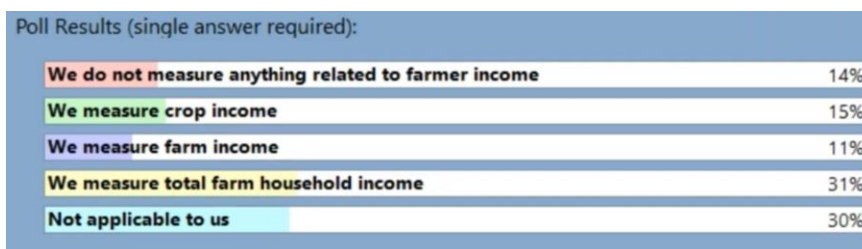
Living Income Community of Practice Workshop April 7th 2020

Summary of Session 3: Modelling and Monitoring for a Living Income

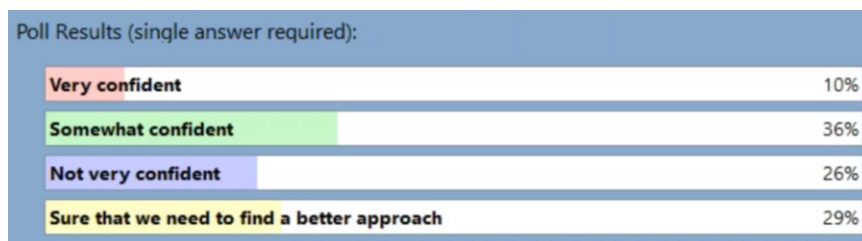
This session looked at the linkages between measurement and strategy. It explored how three different organizations are using measurement and modelling techniques to inform their living income strategies and to track progress. Through discussions with panellists, presentations, and interaction with the audience, it aimed to understand why organizations have made certain choices in their measurement approach and how what they are learning in the data is informing their strategic thinking. The three approaches explored were that of Cocoa Life - Mondelez's sustainability program (with third party evaluation by Ipsos), the Laudes Foundation, and Rainforest Alliance's net income model (developed by Agri-Logic).

Before diving into these case studies, the audience was first asked about their own income measurement approaches. The questions and responses to this poll are detailed below:

1. Which of the following best describes your organisation?



2. For those with a measurement programme, how confident are you that you have identified the right approach to measurement?



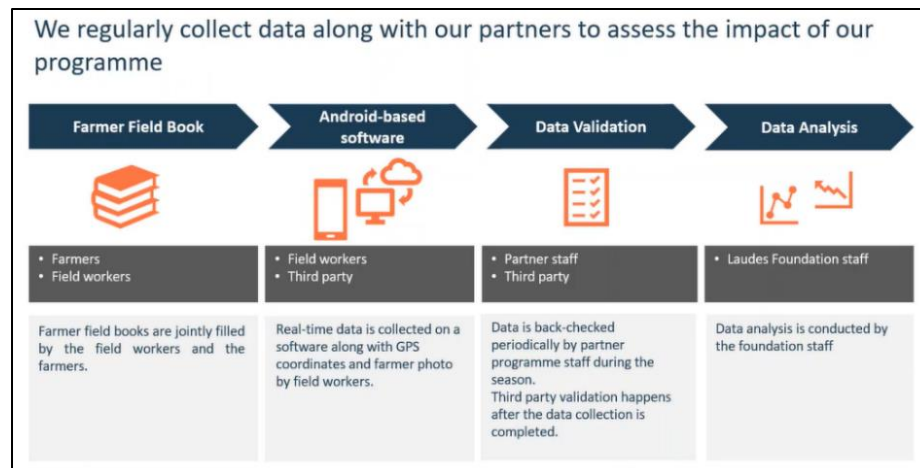
Laudes Foundation

The first approach explored was from the Laudes Foundation, who are currently exploring ways of incorporating the Living Income lens into their farmer improvement strategy.

Measurement Approach

Laudes and their implementing partners currently use a combination of farmer field books and third-party mobile software to collect farmer data to assess the impact of their cotton farmer programme. Profile and production data are collected for all the farmers. For income data, representative sampling techniques are used by the third party.

Data is collected at 3 points in the year in line with key points in the agricultural cycle: sowing, pre-harvest and post-harvest. At each point different types of information are subsumed e.g. farmer characteristic information at the sowing stage, yield projections at the pre-harvest stage and income data post-harvest.



Their sampled approach to data collection was implemented as result of increased workloads as more farmers entered the programme, and as the initially broad data collection scope was yielding insufficient value relative to the investment. This sampling has reduced burden on implementors, improved data quality, and meant that it has been possible for partners to collect more qualitative data through the monitoring process.

Cocoa Life – Mondelez

The second approach presented was that of Mondelez, who have incorporated living income into their Cocoa Life strategy; with Ipsos acting as their implementing measurement partner.

Measurement Approach

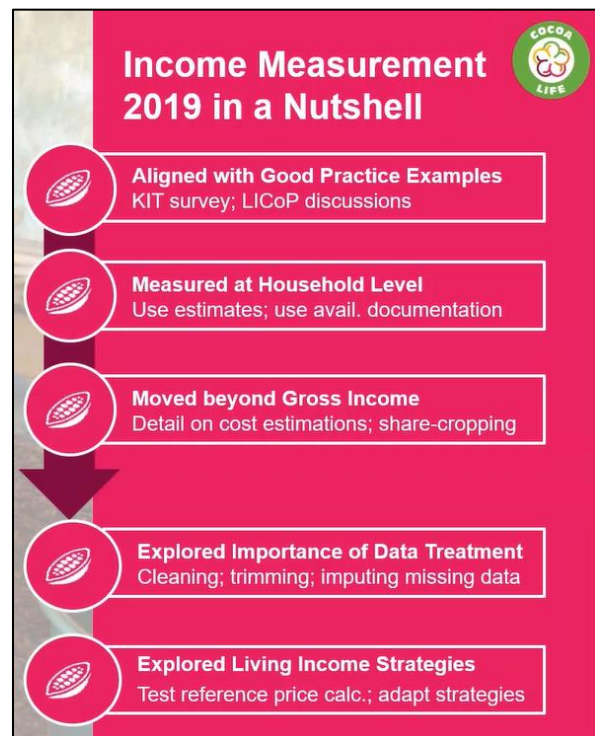
Their focus on income measurement for 2019 had been to adapt, align and improve impact monitoring. To do this they first explored potential measurement alignment with good practice examples, including the KIT approach and those discussed in the Living Income Community of Practice. Existing income measurement was then adapted to secure details beyond cocoa, incorporating income estimates from other household members and sources. This partially included leveraging additional data from farm records to improve data reliability.

They have used the resultantly generated data to explore the importance of micro-decisions in income surveying – i.e. what implications do data cleaning, trimming and gap filling have on income analysis and results.

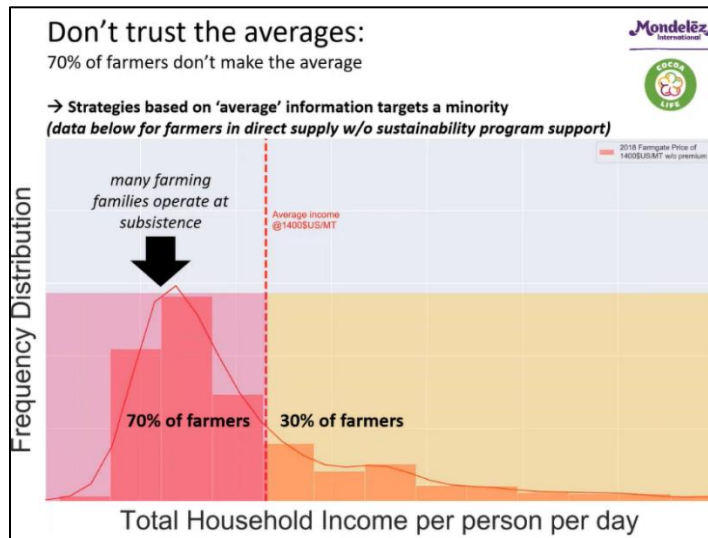
They have also used the new influx of data to check and adapt various living income strategies, including living income reference prices. In aligning with the KIT approach to measurement, Mondelez moved away from the measurement of gross incomes, and improved consideration of different farm costs. They are also considering shifting from a 3-year study to every other year approach over 5-years to better explore income and change from income interventions over time.

Learnings and strategic reflections

One of the key learnings from this work is that no two income studies are alike, and it is important to standardize and align around income measurement as a key element of multi-stakeholder targets and learning. Context drives the approach to measurement, with analytics informed by cultural specificity. Ipsos found that they could not provide a fully standardised approach to income measurement across the Cocoa Life programmes geographic contexts. They learned that it is important that studies are developed flexibly to ensure that contextual nuances are captured (e.g. an average of 75% of farmers' incomes from cocoa in Ghana, whereas only 44% in Indonesia with greater diversification).



Furthermore, it was discovered that mildly different treatments of the data using the approaches of different actors dramatically influenced the conclusions that they could derive from it. This highlighted to them the importance of alignment and standardisation on analytical approaches across different actors.



Mondelez have also found that one needs to be very careful with the use of averages for summarising income information, as they can provide a very skewed picture of reality. In terms of decision making, it was realised that it was more important to explore income distributions across farmers against living income benchmarks, because a small percentage of over performing families can make the income situation look much better than it is for the majority of farmers. Whilst plotting distributions, they also found

that stratification of farmers based on differing characteristics is very useful for informing catered strategies.

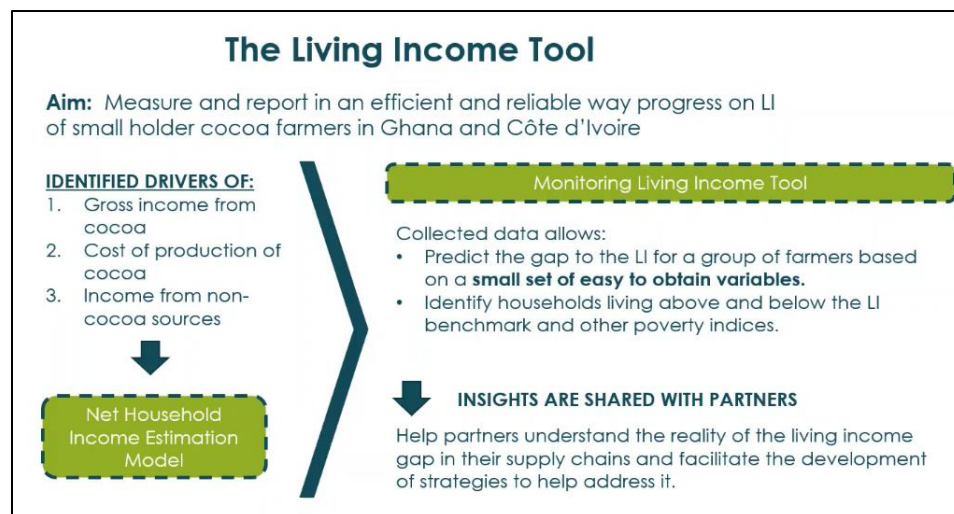
This means, that Living Income Reference prices are unlikely to create a Living Income even for the majority of farmers and especially not for the worst-off farmers. When setting targets and reviewing effectiveness of strategies, this has to be kept in mind as to set realistic expectations for what is achievable within a given timeframe.

Rainforest Alliance

The third and final approach presented was that of Rainforest Alliance (RA) and their research partner Agri Logic. RA have a four-pronged intervention strategy around farmer livelihoods: landscapes and communities, reimagining certification, advocacy, and tailored supply chain services. One of the activities they are undertaking on the topic of living income includes the development of a farm income prediction tool that can be used to more effectively monitor the gap between net income and a living income on a continuous basis. The purpose of this is to inform on impact reach and strategy setting for closing the income gap.

Measurement approach

Traditionally, income data has been collected by RA through in-depth impact studies which over the years has yielded a bank of useful focus crop income data. However, the cost and frequency of the studies does not allow for the monitoring of the net income of producers regularly and at scale. They have therefore been exploring if and how you can use a combination of actual data collected during the certification process and reliable secondary data collected at scale through existing research. The goal being to develop an effective, lean and scalable way to monitoring net



income of producers.

Identifying key variables that significantly affect (cocoa) producers' income, recognising different typologies of producers and the share of income from cocoa versus the rest were part of the steps taken to develop such a tool.

After running multiple analyses of data from studies in Cote D'Ivoire and Ghana, they were able to establish the correlations between the net income of producers and a number of key variables that significantly affect income. They found that there was a strong (yet unsurprising) correlation between net cocoa income and cocoa productive output. This coefficient could therefore be used, in combination with the establish correlation with other key variables, to predict cocoa income based on production reporting.

Data is collected from a large sample annually through Farmer Field book independent studies to confirm the established correlation coefficient and if needed adjust the underlying algorithm in the tool. Farmer Field Book studies allow Rainforest Alliance to make use of data that is entered on continuous basis in the field on several economic and social aspects. The farmers keep daily farming activity records that are collected and digitised every 2 weeks.

In order to estimate net household income however, they also needed a predictor for non-cocoa income. Even when considering secondary data, determining a clear relationship proved challenging. It was therefore deduced that the most effective approach to obtain this data was to collect data on farmers' average share of income from cocoa through an annual survey that can part of the internal inspection.

On the back of this work, they are piloting a transparent income monitoring tool where data can be input to generate various statistics including the gap to living income, income distributions and farmer income characteristics. The estimation models within the tool have been developed with quite large farmers samples (over 6000 farmers in Cote D'Ivoire and Ghana across cocoa growing regions). The tool is currently only for Cote D'Ivoire and Ghana, but individual districts/provinces can be filtered within those countries. They plan to develop this further to encompass poverty hotspots elsewhere to trigger more action and investment.

Learnings and strategic reflections

RA have learnt from the data that investing in improved farming performance is key to improving the livelihoods and resiliency of producers. They also found that land size, land tenure, farmer age and savings from previous seasons are among variables that effect net incomes significantly. For farmers with small land sizes and a dependency on one crop, it is essential to facilitate the creation of alternate income sources. More investigation is needed to measure non-cocoa income in an efficient and reliable way and identify effective interventions to support the creation of alternate income and employment.

Key questions raised during the session

What do your data strategies and analyses tell you about what we should do for the smallest farmers?

Rainforest Alliance – Individual empowerment is the most important thing to deliver on. The provision of opportunity is paramount, and it is the responsibility of the farmers to take those opportunities. So, from a strategic point of view it is about defining what opportunities can be provided. For Rainforest Alliance, farmers choose to be part of the programme. The benefits of the program would vary depending of the starting point and situation of each individual. For very small farmers, with a small plot data shows income dependency on one specific crop, which means intensive support and investment would be required to create new opportunities- as well as willingness to accept opportunities provided. In this period, we are analysing further our data through segmentation to inform more a tailored strategy. In general building capacity, determining partnerships and improving income diversification are all important. On the policy side, price is also an integral discussion, and structural changes are necessary, which is also the role of government (e.g. access to inputs, creation of employment opportunities).

Mondelez – Segmentation of the least well-off farmers is still important for determining strategies as there can still be major differences in farmer characteristics. One of the overarching challenges that we do see is there is a major overdependency on cocoa to get a cash income and that must stop. Diversification of income is particularly important for the smallest farmers. We need to look at household incomes holistically.

Is there anything from the data that will tell you how quickly income can be improved over time?

Agri-Logic – Moving the bulk of farmers to a living income is an extreme challenge, and after looking at 5 years' worth of data the needle seems to hardly ever move including on income improvement elements such as yields. The top 10-20% of income earners are the ones where we see the needle move as they have the capacity to make the necessary improvements. One recommendation might be that some of these farmers should not really be in cocoa – yet they live in economies that have very little external employment opportunities.

Do you provide rewards for farmers to incentivise data collection?

Mondelez – Not directly under Cocoa Life. We must be very careful with this, both ethically and because of the bias it might encourage in the data reported. Farmers who are surveyed are provided with benefits for becoming part of the Cocoa Life. These include premiums, VSLA's and free access to trainings. When signing up to the programme they must provide consent to having data collected. With more involved studies however (e.g. ethnographic), farmers have been remunerated in-kind with farming tools.

Laudes Foundation –There is no direct reward to farmers for data provision, but there are a number of indirect benefits, including implementing partners using farming book data to explain the business case for converting to organic farming models, and the use of the data to link farmer producers to companies, which are farmer collectives to various brands sourcing organic cotton.

Are there any systems or technologies for data collection that have been particularly useful?

Mondelez – Digital technology can be a big help, but it shouldn't stand in the way of making contact with people. Face to face connection has been found to be incredibly valuable. Directly inputting data onto electronic tools, and tools that provide data checks/security hooks (e.g. for unrealistic answers) are very helpful for enumerators.

Laudes Foundation – Using a Java based software called Source Trace to collect the data but also maintain physical contact, and the use of farmer field books. Data directly uploading to the cloud to be immediately accessible to Laudes Foundation and partners to improve efficiency in making programmatic decisions.

Is the methodology and results from Mondelez income measurements public?

Living Income CoP - See all the reports and methodology here: <https://www.cocoalife.org/impact> and here: <https://www.ipsos.com/en-us/knowledge/society/quasi-experimental-methods-cocoa-sustainability-program-evaluations>

How much are different players cooperating on their measurement efforts?

Living Income CoP - There are multiple efforts to facilitate cooperation, while still maintaining farmer confidentiality. Principal is the CocoaAction work of 11 companies, the common indicators of the Global Coffee Platform and shared platforms like Supply Shift. The 2017 KIT cocoa study is a gold standard of open source baseline data.

Has the community looked at developing and getting consensus on several easy to deploy methodologies with different levels of rigor (i.e. sample size, length of survey, type of interviews), that companies could use?

Living Income CoP - We are currently developing measurement guidance that will support on this, both in terms of the data required from surveys to measure incomes, and also in the pipeline guidance that looks at what other sources of information or approaches can be used when surveys aren't feasible. Stay tuned for updates on these as they are released, and they will be discussed in our next virtual workshop on measurement in May.