

Defining, Calculating and Using a Living Income Benchmark in the context of Agricultural Commodities

Discussion note

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Inspired by the dynamic of a *living wage* discussion in the garment sector, the *living income* debate is gaining more attention on the agenda of leaders in the public and private spheres. The concepts of 'living wage' and 'living income' are both about achieving a decent standard of living for households. The idea of a living wage is applied in the context of hired workers (in factories, on farms). The idea of a living income is discussed in the context of any income earner, such as self-employed farmers. There is growing interest among many supply chain actors in understanding whether smallholder farmers are actually earning a 'living income' and, if not, what it would take to get them there.

In several meetings in the last months, we have heard interest in 'living income' from a variety of actors – representatives of companies, of standard systems, of non-profit organisations, of academic institutions, and others. They suggest that living income benchmarks could be used for a variety of different purposes:

- An alternative to a poverty line for benchmarking and evaluating current farmer incomes
- An inspirational goal for a sector or supply chain
- The basis for calculating measurable and achievable targets and goals for a specific company or standard
- Information to inform wage setting and price setting
- Input into models and analysis of farm economics, which will be used to inform intervention strategy development

The challenge is that discussions about living income are much less advanced than discussions about living wage. There is still no clear consensus on what we actually mean by 'living income', how exactly to calculate a living income benchmark, and whether investing in calculating living income benchmarks would be a worthwhile exercise. The goal of this paper is to dig deeper into the concept of living income and to explore its utility in practice. The paper is meant as a starting point of discussion, not as the final word on living income. The authors welcome your comments and input.

The paper is divided into three main sections. The first focuses on the living income concept and the calculation of a living income benchmark. The second asks whether there is a need for another related benchmark – a crop income benchmark or target.

¹ The original discussion note is from earlier this year and has now been updated based on the outcomes of the workshop *Working towards the Calculation and Use of a Living Income Benchmark in Agricultural Commodities* held at GIZ headquarters in February 2015. The discussion note is still meant to be food for thought and not the final word on living income. We would like to thank all participants of the workshop for their valuable input.

The third section is about using living income benchmarks (and crop income benchmarks) to better understand where farmers stand and what factors could influence income levels. This section proposes a general farm economics model and discusses how it can be used in practice to guide estimation of average current farmer incomes to compare the living income benchmarks, and also to inform the selection of indicators used for monitoring income at a household and farm level.

1. Towards a living income benchmark

1.1. Getting terms straight: what do we mean by living income?

The idea of a ‘living income’ is inspired by the concept of a living wage, so understanding what is meant by ‘living wage’ is a useful starting point for understanding and defining living income.

In general terms a ‘**living wage**’ is a wage that enables a worker to afford a ‘decent’ standard of living for him- or herself and his or her family. More specifically, a **living wage benchmark** is a target wage level for a particular place that reflects both the cost of a decent standard of living in that place and our expectations about how much the wage received by one worker can reasonably be expected to contribute to supporting a decent standard of living for an average family.

A number of organisations have put forward definitions for living wage, as well as methodologies for estimating the living wage benchmarks consistent with these definitions. As one example, the ISEAL living wage working group² has agreed to define a living wage as:

‘the remuneration received for a standard work week by a worker in a particular place sufficient to afford a decent standard of living for the worker and her or his family. Elements of a decent standard of living include: food, water, housing, education, health care, transport, clothing, and other essential needs including provision for unexpected events.’

The group has adopted a methodology developed by experts Richard and Martha Anker to operationalize this definition. This methodology defines ‘decency’, explains how to cost a decent standard of living, and how to calculate the living wage ‘benchmark’ (more detail on the methodology is provided in the next chapter). The ISEAL living wage group plans to calculate living wage benchmarks according to this methodology for the many different locations where sustainability standards work.

Other living wage calculations methodologies adopt somewhat different approaches, but there is significant alignment along key aspects of the methodology. Nearly all methodologies treat living wage ‘benchmarks’ (just like minimum wage benchmarks) as average calculations. They are not based on the situation of any specific worker, but are rather a calculation of what a worker, working a standard work week, and from an average sized household³ with an average number of workers, would need to earn in order to cover the average cost of a decent standard of living in the area

² The ISEAL living wage working group is an active collaboration of 6 sustainability standards in different sectors (FSC, Fairtrade, SAI, UTZ Certified, Sustainable Agriculture Network/Rainforest Alliance, and Goodweave International) to adopt a common approach to calculating living wage and including the concept in their standards.

³ A household is made up of all of those who: 1) normally live in the residence; and 2) usually live in the residence, even though they may be temporarily absent on the day of the interview for reasons such as work, vacation, illness, school, etc. Count domestic servants who live in the residence for most of the year. Source: Grameen Foundation

where he/she lives. In this sense, a ‘living wage benchmark’ is a normative target based on the situation of a typical worker in a particular area.

The idea of ‘living income’ and calculating a ‘living income benchmark’ is inspired by this approach: like living wage, living income encompasses the idea of the cost of a decent standard of living. But unlike the case of living wage, there is not yet a general consensus about which ‘income’ we are referring to when we talk about a living income benchmark for farmers (is it total household income or is it farm income or crop income?), and we do not have widely accepted conventions about how much we expect farming of any particular crop to contribute to overall household income.

A starting point for working on the measurement and application of living income is to reach a common agreement on what we actually mean by living income and how it would be measured.

We put forward the following definition based on the discussion during the workshop in February 2015:

Proposed Definition for Living Income

A living income is the net income* of a household** earned / generated under conditions of decent*** work, sufficient to enable all members of the (average) household to afford a decent standard of living.

* Net income = Total income minus all costs

** Household = Group of people (often family) living under the same roof and pooling resources (labour, income and assets)

*** Decent = ILO definition (e.g. FAO definition of decent *rural* employment): *Decent rural employment is defined as work that provides a living income and reasonable working conditions. It refers to productive and dignified work that enables people – whether self-employed or wage labourers – to provide for themselves and their families, while also ensuring their safety and health at work and providing them with opportunities to voice their concerns. Decent rural employment opportunities ensure a living wage, security in the workplace, access to social protection and respect for fundamental human rights.*

In this sense, a living income benchmark is similar to a national or international poverty line but has a few conceptual advantages. It is based on a “decent living” and therefore is a better indicator than a poverty line of what we are trying to achieve. It is a benchmark for a certain representative region (not on a national level) and would therefore better reflect the actual cost of living of this particular region.

Further we would propose the following:

- Living income benchmarks should (in first instance) be expressed as **dollars (or other currency units) per household per year**, so that they can be compared to (average) total annual household incomes of farming households. Farm income can vary dramatically by month, making it hard to estimate a monthly income.

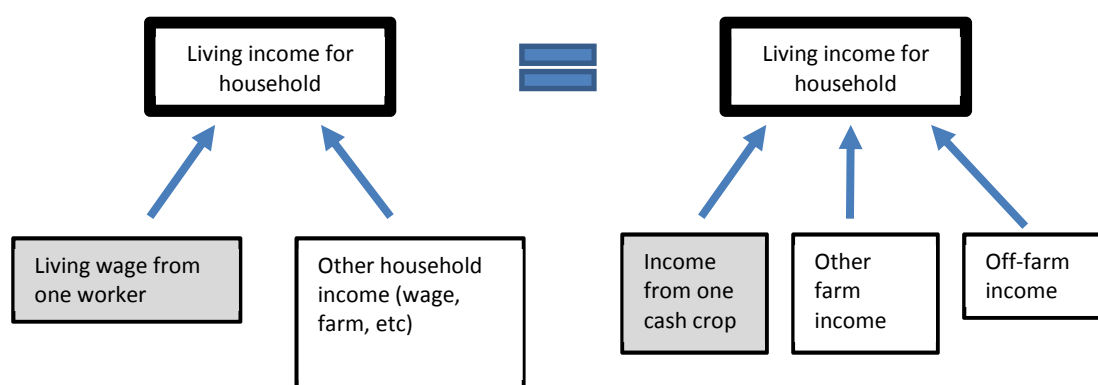
- Total household income for a farming household may come from multiple sources – on-farm income sources (net revenues from farming or livestock activities) and off-farm income sources (such as revenue from wage work). Farming families often also grow their own food or timber on their property, which can cover some of the costs of food and housing. As a result, we would not necessarily expect net revenue from a single activity or a single crop to, on its own, ensure that households have sufficient income to afford a decent standard of living. For this reason, it is important to **distinguish between a living income benchmark (for the household) and any benchmarks we set for net income provided by a single crop.**

For discussion: Do we need separate benchmarks for crop income? See more discussion of this below.
- The same standard of ‘decency’ applies to farming households as to households relying on wage labour** (indeed many households living in a particular location may rely on both wage labour and farming). Likewise all households living in the same area face the same basic cost of living (regardless of their occupation). If we agree that this is true, then to measure the cost of a decent standard of living for farming households (the living income benchmark) we can rely heavily on the methodology used for living wage calculations.

We suggest that any costs related to farming as a business, such as investment or risk margins, should be integrated as costs into the farm economics model (see section 3).

If we accept this proposal, then the living income concept would be quite different from the living wage concept: a living income is for a household (farming household or household relying on labour) and a living wage is the contribution that we would expect one full time wage earner to contribute to achieving that living income.

Figure 1: Living income for two households in the same area



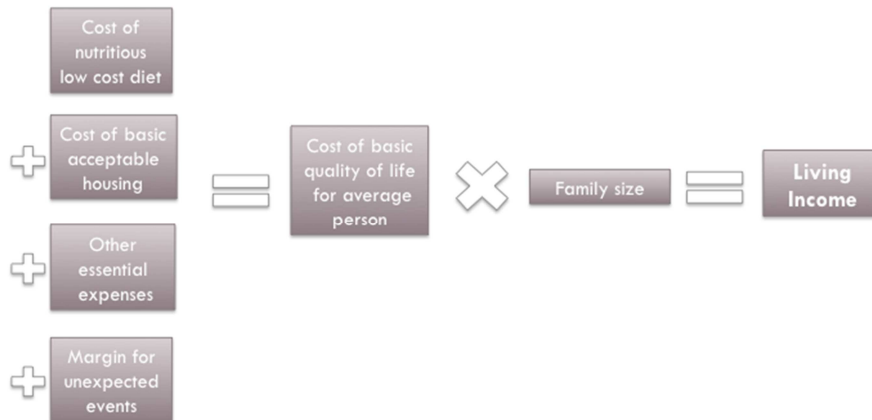
1.2. From concept to calculation: calculating a living income benchmark

We propose that living income benchmarks be calculated largely based on the Anker methodology for calculating living wage (see Annex 2). The first step in this living wage methodology is to actually estimate a living income benchmark: the living wage benchmark = (the cost for a basic but decent lifestyle for an average family) / (the average number of workers in a family).

The figure below shows the basic components of this living income benchmark calculation: food, housing, other essential needs, and a margin for emergencies or unexpected events. The Ankers describe the methodology for estimating each of these components as follows:

Figure 2

The living income benchmark is the (cash) amount sufficient to afford a decent standard of living for the income earner and her/his family.



1. **Food costs** are estimated based on: (i) a low cost nutritious diet that meets WHO recommendations on calories, macronutrients and micronutrients and is consistent with local food preferences and a country's development level; and (ii) local food prices for the types, qualities and quantities of foods that workers typically buy based on new data collection that involves workers and key informants.
2. **Housing costs** are estimated using international (UN-HABITAT) and national standards for decency (e.g. dwellings located outside slums and unsafe areas that have permanent walls, roofs that do not leak, and adequate ventilation; amenities such as electricity, water, and sanitary toilet facilities; and sufficient living space, so parents can sleep separately from children). The cost of acceptable housing is established based on visits to local housing with workers.
3. For practical reasons, costs of **other essential needs** are estimated using an extrapolation method based on secondary household expenditure data. This is then "post checked" to make sure that sufficient funds are included for health care and education and transport.
4. Finally a small margin (e.g. 10%) is added to provide for **unexpected events and emergencies** such as illnesses and accidents, to help ensure financial stability and avoidance of perpetual poverty trap.

The advantage of adopting this approach to calculating the living income benchmark is that it is a well-respected methodology that will be widely used in the coming years by standard systems and other actors to look at living wages. The methodology is designed with enough rigor, local participation and consultation to make the estimates understandable and defensible. Living income calculations are part of the living wage calculation, so no extra information is needed to derive a living income benchmark.

2. What about a benchmark or target for income from a single crop?

As Figure 1 shows, the living income benchmark as we are defining it is not equivalent to a living wage. Living wage is a benchmark for one source of income, whereas living income is a benchmark for total household income.

The problem with using a living income benchmark in the context of farming is that many of the actors concerned about farmer welfare (agricultural extension agents, companies in the agricultural supply chains, crop-specific sustainability standards) have little direct influence over total household income. They would like to set ambitious but realistic goals for their work with farmers and are concerned that they have too little direct influence over total household income. Using a living income benchmark as an aspirational goal has the advantage that it encourages actors to think more holistically about household livelihoods and how their own actions affect them. But living income benchmarks also have the disadvantage that actors may feel that household incomes are too removed from their own work for living income to be a useful target.

Would it be helpful to have a crop specific income benchmark - target for income that the household receives from a single crop (after accounting for all farm costs) that is derived from the living income benchmark?

If we do agree that it would be useful to define a crop income benchmark, then how to calculate it is the next challenge. There is still no consensus about how much we can reasonably expect a single crop to contribute to total household income. This is essentially a normative decision, but it is possible to use empirical data to arrive at a convention for how to measure the expected contribution of a crop to living income. In the case of living wage, the convention is to divide the cost of a household leading a decent standard of living across the average number of workers. In the case of income, options might be the following:

- 1. Rely on the average contribution of the crop to household income:** One option would be to determine the average contribution of that crop to current household incomes in the region, and then assume that the crop should be able to cover the same proportion of the cost of a decent standard of living. For example, if cocoa income is typically about half of a household's total income, then the sustainable cocoa income benchmark for that area would equal the living income benchmark divided by 2.

One problem with this approach is that it does not reflect the potential for the target crop to represent a larger proportion of household income, for example if productivity would increase.

- 2. Rely on the percentage of land dedicated to the target crop:** A second approach would be to look at the farm land dedicated to a single crop. If one third of the total land area is under cultivation in coffee, then the expected contribution from coffee to living income would equal living income divided by 3.

One conceptual challenge with this approach is that crop income is not the only income the household has. The family may also have livestock, wage labour or other sources of income, which are not linked to land area. The land area approach is also hard to apply in the case of intercropping.

3. **Rely on a calculation of the needed return to labour:** Another option would be to determine what the return to household labour would need to be in order to ensure that remuneration of all available household labour hours would be equivalent to a living wage, or that the household is able to earn a living income with all available working hours (assuming workers work an acceptable number of working hours, with time for rest, etc.).

These and other options are all possible. The challenge is to agree on a construct that seems reasonable and realistic. It will always be different from the real situation in a particular household, but we are after a defensible estimate of the income that we can reasonably expect one crop to contribute to household income.

For discussion: is it useful or necessary to agree on one shared convention for a crop income benchmark or target? Or would it make more sense for different actors to set their own crop targets, but all based on a shared living income benchmark? May it be advisable to refer to the farm economics model instead of creating a specific crop income benchmark?

During the February 2015 GIZ/ISEAL workshop on the living income concept, participants were unable to agree on a recommended approach to calculating a living income benchmark. While the group found the concept useful, differences across farms, regions, and crops, and challenges in collecting information on labour hours, makes it practically very difficult to agree on a convention for a crop-specific income target. The general conclusion was that it is useful to continue to explore the idea of targets for household income derived from a single crop, but that this is most likely to make sense when analyzed for a particular location, based on real data from that area, for example through analysis of a farm economics model (see below).

3. Putting living income benchmarks to use

Living income benchmarks (and potentially crop specific benchmarks) can be used for many different purposes.

- First, the benchmarks themselves are simply useful references for planning or evaluation. A crop income benchmark could also be used as a target for crop-specific agricultural interventions. A living income benchmark could be a target for broader livelihood interventions.
- Second, the benchmarks can be used to monitor how specific farming households, or a whole farming sector, are performing in relation to these reference benchmarks. For example, we may want to know: What percentage of farmers have household incomes above the living income benchmark in their area? What is the gap between current incomes and a living income? On average, do farmers in a particular region earn enough from a particular crop for that crop to make a meaningful contribution to achievement of a living income? What is the gap between current net income from a crop and the crop income benchmark?
- Third, we can use a living income and/or crop income benchmark as a target or reference in **farm economics models** where changes to farming systems and other drivers of household income can be tested (modelled) to see how much specific improvements could move farming households toward a living income. This model can also be used to estimate how much change in land area, price, or productivity would be needed to get average farmer incomes up to this benchmark.

The last two potential uses require more than the benchmark itself. They require information on current household, farm or crop incomes and an understanding of the economics of farming livelihoods.

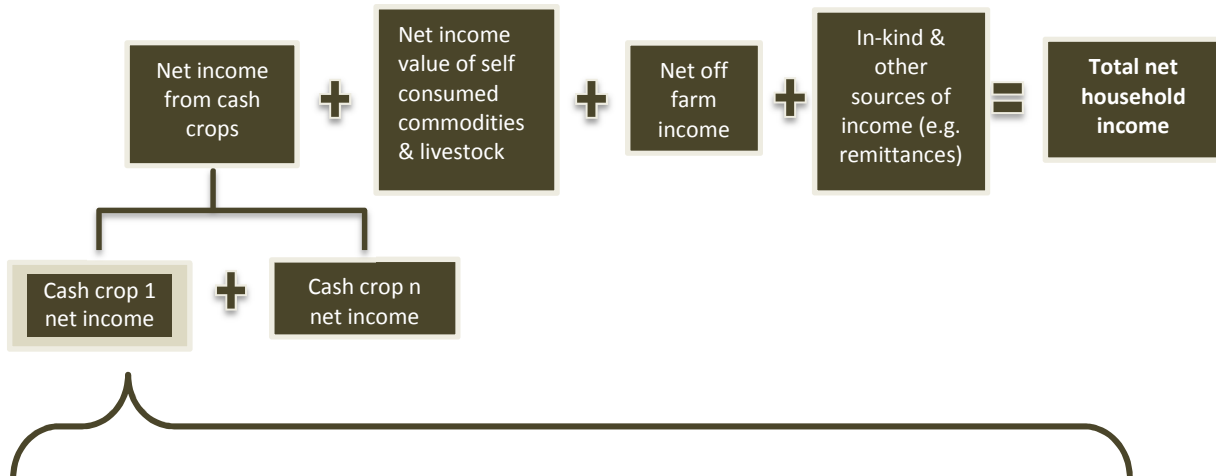
This section of the paper puts forward a proposal for a smallholder farm economics model and discusses how information on farmer characteristics and current incomes could be collected in order to put uses of living income and crop income benchmarks into practice.

3.1. Understanding smallholder household income and how it relates to income benchmarks

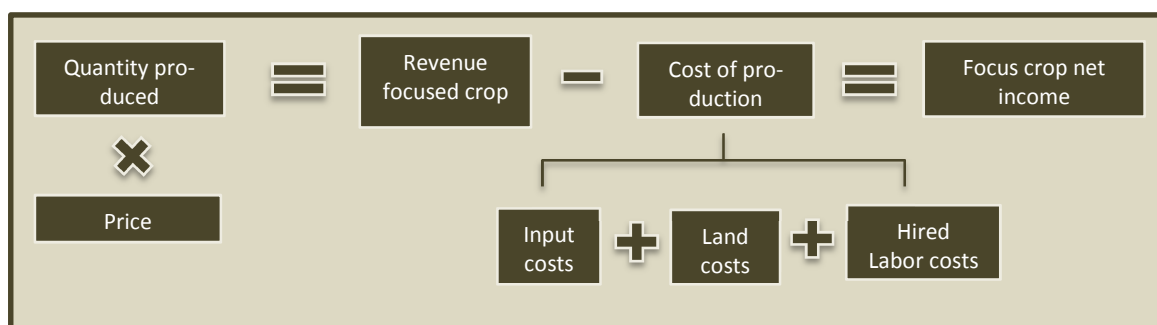
Household income in an agricultural context can be understood as the monetary value of the income from production of cash crops and livestock production, plus the value of food produced for home consumption and off-farm income. It is best to consider annual income as many crops are seasonal and have specific payment cycles through the year.⁴

This composition of household income is captured in the farm economics framework shown in the figure below. To see whether farming households are achieving a living income, one could **compare the living income benchmark to the total net household income** depicted in the figure.

Composition of household income in a given period



Example for the income composition of one activity:



⁴ When we talk about income, we consider it to be the net income, both if it is a particular crop income and if it is the aggregated income.

Cash crops are often a critical component of household income for small-holder farming families. On the figure above, “cash crop 1 net income” represents the contribution that a particular crop makes to the total household income. To understand whether that contribution is above or below expectations, one could **compare this cash crop net income to a crop income benchmark** as discussed above.

For discussion:

- How can this model better account for time (income varied greatly over time)?
- How does food grown for subsistence enter into this model?
- Farm assets are also important to consider – asset building and asset depletion.
- What about investments costs? And risk margins? Investment and risk margins may be considered as additional costs. Like production costs, they may be subtracted from the revenue.

Net income from cash crops is a function of the average costs and returns of production. Typical returns come from the value of volume of produce at farm gate prices, either from produce that is sold or that is self-consumed/utilized. Defining elements to be included into the cost structure can range from a few basic operational input costs to more complex models which consider fees, taxes etc. The challenge lies within finding a balance between accuracy and available resources.

Typical costs include:

- variable costs, comprised of paid labour, input, services, transport, marketing and storage costs
- fixed costs, including depreciation on capital equipment, land, interest payments & taxes.

The net crop income that accrues (or could accrue) to the household is the above returns minus costs.

For discussion: This net crop income calculation does not take into account the costs of labour provided by the household members. Should it? Considering the costs of labour provided by the household (opportunity costs) can be useful, if for example we want to explore the economic performance of the farm or a certain crop and compare it with other investment opportunities.

We suggest that received subsidies or in kind contributions for production (e.g. seedlings, fertilizer) should be deducted from the production costs. Remittances, subsidies or in kind services related to the needs of the household (e.g. free school or medical services provided) should be included as an additional income, if the costs related to those goods and services were considered in the living income benchmark assumptions as expenses.

Net crop income from a single crop, as well as household income from agricultural activities more generally, can fluctuate greatly from year to year and across regions, due to many factors:

- Volume and price of a range of agricultural products
- Available work force (labor units)
- Available land
- Natural conditions: e.g. rain, soil fertility
- Socio-economic conditions: farmer’s knowledge and skills, infrastructure, access to inputs and financial services

For discussion: While the living income benchmark helps us focus on total household income relative to the cost of living in a region, it is important to remember that farmers also value income smoothing where income comes evenly through the year (and is directly related to food security) and also income reliability (how much the farmers can rely on stable income from year to year). These ideas are neither captured in the living income concept described earlier in the paper nor in the idea of a sustainable crop income benchmark.

Adding a risk margin to the farm economics model could at least partly reduce the risk related to income losses from farming due to price decline or production losses.

3.2. Towards a common framework and a data collection approach for a farm economics model

We propose building farm economic models for certain crops and regions as a basis for examining and analysing average yearly income of smallholder farming households. The starting point for the farm economics model is the graph presented above, the **framework** comprising different components of income. To be useful, this framework then has to be populated with data on farmers and farming households in the regions to be studied, so that it is possible to model how changes in one variable could affect another.

While the farm economics framework could be useful in understanding the income structure of a particular household, we are most interested here in using a farm economics model to understand the *average* situation of farmers in a particular area and how this could evolve to move towards a living income or crop income benchmark. For this use, having information about averages (e.g. average costs, average farm size in a particular area or for a particular group of farmers) is sufficient for initial analyses of how far different interventions (such as changes to farm size or price increases) could go in moving farmers towards a living income⁵.

In this section of the paper we discuss what kind of information is needed to populate this model and some of the methodological considerations behind collection of this information.

3.2.1. Constructing a typical farm & farm household (or farm and household typologies)

The first step in populating the farm economics model is to define the 'typical' or 'average' farm and farm household that will be examined in the model (or averages for several typologies). Depending on the overall objective of the exercise, one or several types of farms or farming households (e.g. poor/better-off farm households; high/low input production; small/large farms) can be constructed for the geographical area/crop considered. In general it is advisable to work with median data instead of averages.

Following data is usually needed for designing a typical farm or farm household:

- Number of farm household members
- Available family labour
- Available farm and/or production area/surface

Basic data on:

- Main crop activities (cash crops and food crop production)

⁵ Individual level data could then be used to examine how well particular farmers would fair after these changes. For example, which farmers might still not achieve a decent standard of living even after prices and productivity are improved enough to improve the welfare of most farmers?

- Main livestock keeping activities (if relevant)
- Off-farm activities

The data for constructing a typical farm and farm household can often be taken from secondary data. If these are not available, they need to be collected through a baseline survey or in focus group discussions (see section below).

3.2.2. Collecting data on income from farm activities

The next step is to collect data on the main farm activities (revenue and costs) for each of the typical farm or farm household types. The goal is to calculate average net income generated from each farm activity (crop production, livestock keeping, etc.), and from each off-farm activity, and aggregate these (as shown above) to produce an estimate of average household income for each typical farm or farm household type.

The main categories of information needed to calculate net income per activity are:

- A. Revenue (quantity x price)
- B. Cost categories:
 - Variable costs: Inputs (fertilizer, pesticides) and
 - Labour costs: input for hired labour
 - Fixed costs: Depreciation for hand tools, etc.

Net household income for one activity = A – B, where A = revenue and B = cash costs (see table). The sum of net income for all activities equals total household income. The table below provides an example of what this might look like if data were collected and calculations done for one farm type:

Components of income Average for farm type A, in fictive currency units (CU)	Crop X	Livestock Y	Off-farm Z	Total Household
A. Revenue	800	600	350	1750
Input costs	20	0	40	60
Hired labour costs	30	40	30	100
B. Total cash costs	50	40	70	160
C. HH income (A – B)	750	560	280	1590

The estimates of average net income from crop x and livestock y could be compared to sustainable crop income benchmarks. The estimate of average total household income could be compared to a living income benchmark. If additional information about the ‘typical’ farm type is available, this information can also be used to look at how revenue would increase with changes in price or productivity, what the return per hour of labor invested is, or other similar analyses.

3.2.3. Proposed approach to data collection and common data challenges

Collecting this type of information about farm activities can be both difficult and expensive. Expert interviewers capable of prodding for farmer estimates and ensuring good results are usually neces-

sary. Detailed cost of production information is best gathered from individual and focus group interviews with experienced farmers/experts rather than larger household surveys.

We propose a simple two stage data collection process to generate the data needed for these economic models, minimizing costs by collecting data through in depth focus groups (rather than large numbers of individual farmers) and by using secondary data where possible.

For discussion: are there types of information that would be very difficult to collect in a public focus group setting?

To assure a high accuracy, it is advisable to triangulate information gathered as well as the income estimates made in a least two loops with different experts such as experienced farmers, advisors, agricultural representatives. It might be necessary to prepare several different estimates for different typical farm or farm household types, especially if the target activity/group is not homogenous or different production levels (low versus high intensity) exist.

In additional to the general difficulty and expense of collecting this data, other challenges that might be faced include the availability of accurate data, variability of data from year to year, and the need to make decisions about how to simplify complex agricultural production systems. A number of considerations and assumptions therefore have to be taken into account among others:

- Seasonality and volatility of prices and production volumes over years: Data for calculating current income should be based on an average production year/averages from several years to avoid biases through extraordinary high/low prices as well as production volumes (e.g. weather related).
- Average age and related production volume of perennial crops: perennial crops often only provide yields after several years, with a clear peak and declining yields towards the end of their lifetime. The current age of the plantation highly influences the production volume and therefore the crop income.
- Self-consumed goods: Besides producing crops for the market farming households often produce goods such as vegetables, staple food, milk, eggs etc. for their own consumption. Their market value needs to be taken into account when calculation the total household income.
- Share cropping: tenant and share cropping systems need to be taken into account for further accuracy of the income calculation.

3.3. Measuring and monitoring the situation of individual farming households

The above section has described how to calculate average household, farm, or farm activity income when there is the capacity to accurately collect revenue and costs of production data and when there is a need for robust data to construct a model for future use. The living income benchmark and farm economics model can be powerful tools for supply chain actors and development partners to understand current livelihood conditions against a meaningful benchmark and to test out the potential impact of changes.

While the general farmer economic model based on average farmer data is useful, many actors will want to update or enhance a general model with specific data gathered through their own work in their supply chains, or will want to look at how individual farmers are doing. This section outlines the key variables that impact a farming household's income and are appropriate to be collected through modest household surveys. Collection of this data at an individual farmer level can be used to tailor

such a model for a particular site or intervention or to examine variation across farmers in crop income, farm income, and household income.

Measuring **total household income** allows us to track improvements in income relative to a metric like living income; however it is quite complicated in smallholder supply chains. But as shown in the farm economics model above, one can break down total income into its major components. Primary cash crop net income, income from other crops, value of home food consumption, and off farm income all need to be estimated. We recommend asking both about an overall household income estimate, and then also components of income.

While the living income benchmark, the sustainable crop income benchmark, and the farm economics models focus on income, it is important to take a wider view in household survey to include not only cash income but also assets and possibly food security when assessing whether a farming household is able to achieve a decent standard of living.

Household assets are important for two reasons. First, research has indicated that assets are critical to assisting poor people to move out of poverty, especially intergenerational poverty. Income is transitory while assets—land, savings, a house, and a mode of transportation—are more durable and can be used to generate further income. Second, household assets can give a sense of household quality of life (when compared to averages in the region) and whether households have been able to invest in their farms and homes. Of course, what assets a farmer invests in will vary across cultures. And this can make it hard to gather comparable data. One option for standardization is to align asset measures with the components of a ‘decent standard of living’ idea that is embedded in the definition of living income.

In the annex an example can be found what data should be collected in farmer surveys to allow the user to tailor the generic income model to gain a better analysis of the actual situation for farmers in a particular place.

For discussion: We consider it as important to include assets (which can be e.g. premises of household, land, livestock or also perennial crops) when looking at income and income changes over time. How could assets/the change of asset value within a given time period be consider within the LI concept / farm economics model?

Annexes:

Annex 1: Sustainable Food Lab recommendations for key variables to collect for example of a primary cash crop such as cocoa or coffee. For systems with multiple major cash crops, the cash crop net income will need to be detailed out for the 2-4 primary cash crops.

Indicator Area	Metric
Income	Farmer Reported Total Household Income Percent of revenue from focus crop Off farm income
Assets	Source of water for domestic use Access to electricity Total land area owned (versus rented or leased)
Estimated Productivity	Focus crop production Land planted in main cash crop
Crop Revenue and Income	Focus crop revenue calculated from estimated sales Premiums or value addition not included in reported prices Major variable cash costs of production – hired labor, land rental, interest, inputs (use the averages from the farm economics model for the smaller costs) Income from other crops (rough estimate is fine if they are a small percentage of overall household income) Value of home food production (crop + livestock consumption). This can also be calculated based on percentage of diet provided by the farm and multiplied by average annual food costs from living income benchmark data.

As a rule of thumb, the following contextual characteristics are important to collect also.

Characteristics	
Farm	Location Farm size Amount of land in production of target crop Amount of land owned versus rented, leased or borrowed
Household	Number of household members ⁶
Crop	Seasonal crop calendar Target yields Global commodity price (if applicable)

⁶ A household is made up of all of those who: 1) normally live in the residence; and 2) usually live in the residence, even though they may be temporarily absent on the day of the interview for reasons such as work, vacation, illness, school, etc. Count domestic servants who live in the residence for most of the year. Source: Grameen Foundation

Annex 2: Description of living wage methodology (Martha and Richard Anker)

A Shared Approach to Estimating Living Wages

Short description of the agreed methodology

Richard and Martha Anker

November 2013, for the ISEAL Alliance Living Wage Working Group

Background

Despite the recognized need for a decent and living wage, lack of a generally accepted definition or methodology for measuring living wage has often been used to justify ignoring living wage in practice. A recent ILO review indicates that this is no longer an appropriate reason to avoid addressing living wage. There is in fact a clear consensus in the world about what a living wage is (R. Anker, *Estimating a Living Wage: A Methodological Review*, ILO 2011). Moreover, a new methodology for measuring living wage has been developed and is being supported by six sustainability standard systems. This methodology has been used to date to estimate living wages in nine countries for a multi-national corporation and in two countries for Fairtrade and Social Accountability International. Fairtrade International, Forest Stewardship Council (FSC), GoodWeave, Sustainable Agriculture Network/Rainforest Alliance (SAN/RA), Social Accountability International (SAI) and UTZ Certified are joining hands (see Box 1) and working with us to further refine and test this methodology for using in estimate living wage levels for the areas in which they work. This note briefly describes the methodology.

Definition of living wage

The six sustainability standard systems have agreed to the following definition of living wage. This definition succinctly incorporates the main characteristics of living wage found in over 60 living wage descriptions and definitions from human rights declarations, national constitutions, NGO, multinational and corporate codes of conduct, ILO documents, and statements of major historical figures, Popes and the Catholic Church (Anker 2011). Living wage is:

A Shared Approach to Living Wage

Fairtrade International, Forest Stewardship Council, GoodWeave, Sustainable Agriculture Network/ Rainforest Alliance, Social Accountability International and UTZ Certified are working together on the methodology, promotion and implementation of a living wage for the workers that are protected by their respective labour standards. The organisations have agreed to a common definition of living wage and will use the same methodology for estimating living wage. All are committed to using a wide range of strategies, appropriate to each of their respective standards systems, to work towards the long term goal of improving wages and to involving brands, buyers, retails, and other relevant stakeholders in this process.

Remuneration received for a standard work week by a worker in a particular place sufficient to afford a decent standard of living for the worker and her or his family. Elements of a decent standard of living include food, water, housing, education, health care, transport, clothing, and other essential needs, including provision for unexpected events.

Methodology for measuring living wage

The living wage methodology has two main components, each of which is described in more detail below. The first component estimates cost of a basic but decent life style for a worker and his/her family in a particular place. The second component determines if the estimated living wage is being paid to workers. Several aspects of this methodology are new and path breaking. First, the methodology emphasizes participation of local people and organizations in order to increase its credibility and acceptance by stakeholders. Second, housing costs are estimated using international and national standards for decent housing. By estimating the cost of decent housing, the methodology enables different living wages estimates within countries and helps ensure that workers can afford decent housing.

Third, the methodology requires transparency and detailed documentation and analysis to ensure that the living wage estimate is solid and credible. This includes critical appraisal of available secondary data and adjustments to these data when required. Fourth, a judicious combination of new local data collection and available secondary data is used to make the methodology simultaneously practical and credible. Thus, local food prices and housing costs are collected as are education, health care and transport costs to make sure that workers are paid enough to afford these.

Finally, the estimation of living wage is explicitly separated from determination of whether particular workers receive a living wage or particular employers pay a living wage. The evaluation of wage levels by certification bodies requires considering not only gross cash payment but also deductions from pay, overtime pay, bonuses, and in-kind benefits.

Estimating the cost of a basic but decent life style for worker and family

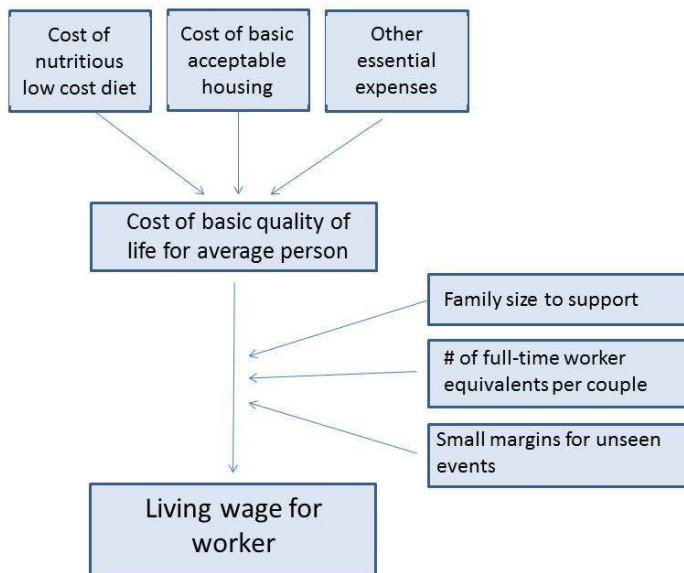
Figure 1 depicts how the methodology works in graphical form. In the first step, living costs are divided into three categories: food, housing, and other essential needs.

- Food costs are estimated based on: (i) a low cost nutritious diet that meets WHO recommendations on calories, macronutrients and micronutrients and is consistent with local food preferences and a country's development level; and (ii) local food prices for the types, qualities and quantities of foods that workers typically buy based on new data collection that involves workers and key informants. This approach to the model diet uses a more stringent nutrition standard than the more typical approach at present, which ensures only a sufficient number of calories. By collecting local food prices with worker input, realistic food prices are obtained that mimic workers' food shopping habits and preferences.
- Housing costs are estimated using international (UN-HABITAT) and national standards for decency (e.g. dwellings located outside slums and unsafe areas that have permanent walls, roofs that do not leak, and adequate ventilation; amenities such as electricity, water, and sanitary toilet facilities; and sufficient living space so parents can sleep separately from children). The cost of acceptable housing is established based on visits to local housing with workers.
- Lastly for practical reasons, cost of other essential needs is estimated using an extrapolation method based on secondary household expenditure data. This is then "post checked" to make

sure that sufficient funds are included for health care and education and transport. This guards against the extrapolation method replicating poor living conditions as it is based on currently observed expenditure according to available household expenditure data.

Total cost per capita of a basic but decent standard of living is then scaled up to arrive at a cost for a typical family size in the area. A small margin is then added to provide for unexpected events and emergencies such as illnesses and accidents, to help ensure sustainability and avoidance of perpetual poverty trap. At arrive at the living wage estimate, the estimated total cost of a decent standard of living for a typical family is then defrayed over the typical number of full-time equivalent workers per family for the location.

Figure 1. Flow chart of methodology for estimation of living wage



This methodology is a practical compromise between separately estimating cost of each and every expense families have, and the most common approach currently used for estimating living wage in developing countries, which uses just two expense groups (food costs based on a model diet and nonfood costs based on secondary data). Using normative standards for decent housing and estimating housing costs separately (not as part of nonfood costs as in typical methodologies) ensures that living wage estimates enable workers to afford decent housing. In contrast, typical methodologies rely on available expenditure data to estimate housing costs and so replicate current (often substandard) housing conditions. Our methodology also better allows for different living wage estimates for rural and urban areas because housing costs are usually the most important cause of differences in living costs. Our methodology also increases transparency, because size of the ‘all other essential costs’ bucket is much smaller and examined more thoroughly (and adjusted when necessary) than in typical approaches.

Determining if a living wage is being paid

To determine if a worker receives a living wage, the methodology takes into account how workers are paid. For example: (i) overtime pay is excluded because living wage needs to be earned in standard working hours; (ii) productivity bonuses and allowances are excluded unless they are guaranteed; (iii) mandatory taxes are taken into consideration because sufficient disposable income is required so workers can

afford a decent living standard; and (iv) fair and reasonable value for in-kind benefits provided is taken into consideration, because in-kind benefits reduce amount of cash income workers require for a decent living standard. However, since too great a reliance on non-monetary benefits hinders empowerment and free choice, the methodology includes rules on how to value in-kind benefits to ensure that their value is fair and reasonable. The methodology will also include guidance on how to check wage levels in different labour situations (e.g. standard employment, temporary or seasonal labor, piece rate).

Involvement of local stakeholders in estimation process

The process of estimating a living wage for a particular location involves consultation and participation of local stakeholders, including trade unions and employer organizations when present. The goal of the estimation process is to obtain a credible living wage estimate that stakeholders are likely to view as legitimate and reasonable regardless of whether or not local employers feel they can pay this living wage. Local stakeholders are closely involved in collection of local food and housing costs based on visits to workers' homes and places where workers shop for food; workers provide information on local preferences and living conditions; employers and workers provide information on in-kind benefits, bonuses and deductions from pay; and, before final conclusions are taken, stakeholders are asked to provide feedback and suggestions on preliminary living wage estimates.