Fairtrade living Income Reference Price for cashew

Introduction

A Living Income Reference Price (LIRP) indicates the price needed for an average farmer household   with a viable farm size and an adequate productivity level to make a living income from the sales of their crop.

Living Income Reference Prices (LIRPs) are an essential component within Fairtrade's Living Income Strategy. LIRPs are important for raising awareness around the fundamental need for sustainable pricing as part of a smart mix of interventions to enable living incomes. And they inform price setting mechanisms for Fairtrade and other actors committed to sustainable trade.

A cooperation with Johnny Cashew and Lidl Nederland on the establishment of a Living Income Reference Price for cashew for their supply chain in Tanzania has been realized in the past year. This is a supply chain specific proxy LIRP, calculated on request of the two companies. Johnny Cashew coordinated the field research undertaken by QSM Agriservices, Fairtrade supported on methodology and Lidl Nederland funded the research. Another key stakeholder is Mama Cashew, a local processor which handles the processing of the raw cashew nuts to an edible product.

This document explains the figures and validation process behind the calculation of the Living Income Reference Price for cashew nuts from farmers from UWAMI cooperative in Mikoma Village in Kilwa District in the Lindi region in Tanzania.

The Price Model

The model is derived from the universal human right for everyone who works to a just and favourable remuneration, ensuring an existence worthy of human dignity. Hence, an effective, full-time farmer should be able to make a living income from the farm revenues. A Living Income Reference Price is based on the following key parameters:

1. Cost of a decent standard of living (living income benchmark)
2. Sustainable yields (productivity benchmark)
3. Viable farm size (to fully employ the available household labour)
4. Cost of sustainable production (in order to achieve above mentioned yields)

A LIRP is thus based on the following equation

$$\text{living income reference price} = \frac{\text{cost of decent living} + \text{cost of sustainable production}}{\text{viable land area} \times \text{sustainable yields}}$$

Although crop diversification is strongly encouraged to increase income resilience, the equation of the underlying model is based on cashew as a single cash crop, however, assuming that any other chosen farm activity would be as profitable as cashew and thus generate a proportionate share of a living income.

Establishing Living Income Reference Prices

In order to establish Living Income Reference Prices for cashew nuts in Kilwa District in Tanzania, values for each of the parameters were determined.

1. Living Income Benchmark

Living Income is defined as sufficient income generated by a household to afford a decent standard of living for the household members. Elements of a decent standard of living include: a nutritious diet, decent housing, education, healthcare, transport, clothing and other essential needs, including a provision for unexpected events. The Living Income benchmark has been established through a model developed by the University of Wageningen[1], heavily based on the gold-standard of measuring cost of decent living: the Anker methodology. The model calculated the cost of decent living for a typical local household, and the values were confirmed in a validation workshop with farmers.

For a six-member household this results in a living income benchmark of 11,698,957 TSh per household per year.

2. Sustainable yields

Adequate productivity levels are feasible yields obtained when implementing sustainable agricultural practices. These are called productivity benchmarks. The analysis is based on the actual productivity that farmers indicated. Farmers indicated that they had been discouraged to professionalize their farming because of low prices, and that they are aware that they have not been achieving ideal yields. On average farmers harvested 10 kg of raw cashew nut per tree. Farmers occupying more of their own labour were able to harvest 13 kg per tree. The most effective farmers achieved a yield of 26kg per tree. However, farmers indicated that 50 kg per tree might be achievable if Good Agricultural Practices were applied. Even though some farmers indicated very high achievable yields, it was decided to go for a target value of 25 kg, as this is closer to the yields which farmers who spend more time working on their farms are already achieving. No instance of 50kg per tree has been recorded in the sample.

3. Viable farm size

In accordance with the universal right to remuneration for work that provides a decent living, a hired worker is entitled to a 'living wage'. Consistent with this logic, a self-employed farmer should earn the equivalent of a living wage for the work on his or her farm – a living income, from their farm proceedings. The fundamental principle behind this assumption is the idea that farmer household are fully utilizing their available household labour. The available household labour is the amount that adult members of the household can contribute to the farming activities, based on the concept of full-time equivalence[2]

Following this guiding principle, a farm that is large enough to fully absorb the available household labour, should generate a living income. This is considered a viable farm size or a 'full-employment farm size'. Likewise, producers with smaller plots of land would earn a share of a living income proportional to their time invested in farm work. In those cases, the household would have time available to supplement their income with other activities.

Most often the concept of a viable farm size is expressed in area, but in this case the viable farm size was measured in number of trees. The reason for this is that farmers were much

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[1] https://models.pps.wur.nl/wur-lict-wur-living-income-calculation-tool
[2] Maximum 48 hours / week and 246 days per year as defined by ILO

more able to express how many trees they own and how many could be managed rather than measuring their farm in area. Even though farmers did know their farm size this was not seen as indication of full-employment due to the fact of land abundancy in the region. However, this metric allowed to measure for ideal tree density, which in return made it possible to calculate the corresponding viable farm size. This metric is helpful for other stakeholders to understand the size of a cashew farm, while the number of trees is more helpful for farmers to understand the target.

On average farmers cultivate 105 cashew trees (12 trees per acre) , ranging from a minimum of 20 up to 300 cashew trees. The target of 197 (16,5 trees per acre) trees is based on the amount that farmers who deploy a lot of their household labour indicated as feasible to manage by themselves.

The Mikoma village in the Kilwa district has an abundant access to land, and farmers do not use all of the available land. Farmers indicated that at most up to 250 trees could be cultivated by a farmer household. This number of trees could be achieved when the number of hours worked will be intensified.

For now, farmers agreed that a target of 197 trees is realistic.

Presented numbers: number of trees:

Average	Minimum	Maximum	Target
105	20	300	197

Presented numbers: farm size in acres

Average	Minimum	Maximum	Target
9	2	20	12

4. Cost of sustainable production

The cost of sustainable production is calculated based on the crop investments needed throughout a crop life cycle to reach the targeted sustainable productivity level. The presented costs are representative for a representative a year of investments.

Specifically, an inventory of costs related to farming activities was made and farmers have been surveyed. The outcome of this survey has been analysed and the result of the data assessment – e.g. the costs and amount of used fungicides and pesticides - were discussed with farmers. As before, these variables are based on an analysis of the actual usage and costs of fungicides and pesticides. Based on these indications best performers were identified and their usage of agrochemical inputs analysed, and related costs suggested. That resulted in a cost of sustainable production of 1,187,407 TSh per year per farm (197 trees at a density of 16,5 trees per acre).

Living Income Reference Price

$$\text{living income reference price} = \frac{9{,}359{,}166 \text{ TSh} + 1{,}187{,}407 \text{ TSh}}{25 \text{ kg} \times 197 \text{ trees}} = 2{,}133 \text{ TSh per kilo}$$

By establishing Living Income Reference Prices, Fairtrade quantifies the gap between market and sustainable prices at farm gate level and emphasizes the need to address price as a crucial factor to attain sustainable supply chains that enable farmers to earn a living income.

The Living Income Reference Price model makes up an integral part of Fairtrade's Living Income Strategy. Fairtrade is constantly testing and improving its model in order to develop a standardized approach for establishing sustainable price levels for smallholder farmers, applicable to a wide range of commodities and regions.