FAIRTRADE LIVING INCOME REFERENCE PRICES FOR COCOA

An explanatory note

INTRODUCTION

A Living Income Reference Price 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 play a critical role within Fairtrade's holistic living income strategy. They are instrumental for raising awareness around the fundamental need for sustainable pricing to enable living incomes on one hand, and on the other hand they inform price setting for Fairtrade and other actors committed to sustainability.

Fairtrade's recent finding that 58% of Fairtrade cocoa households in Côte d'Ivoire live in extreme poverty, triggered the urgency to prioritize progress towards living incomes for cocoa farmers in West Africa.

The regular cocoa price review in 2017/18 presented an excellent opportunity to apply and test the Living Income Reference Price concept within this product specific context.

The concept was introduced in a first round of consultation to explore viable ways of implementing such a price reference in West African cocoa. There was broad stakeholder support for establishing a reference price and for Fairtrade to take a stepwise approach to close the price gap through gradual increases of the Fairtrade Minimum Price, bearing in mind that setting the Fairtrade Minimum Price too high could also risk negative impact for farmers through lost sales.

Preliminary values were determined based on research findings from multiple sources, and adjusted after a second round of stakeholder consultation and validation.

Finally, the living income benchmarks for Ghana and Côte d'Ivoire, resulting from comprehensive studies by ISEAL's Living Income Community of Practice, were incorporated in the calculation of the Living Income Reference Price, in order to ensure wide acceptance by the industry.

Living Income Reference Prices for cocoa are estimated at US$ 2,668 and US$ 2,301 per metric tonne at farm gate for Côte d'Ivoire and Ghana respectively, based on the parameters outlined in this document.

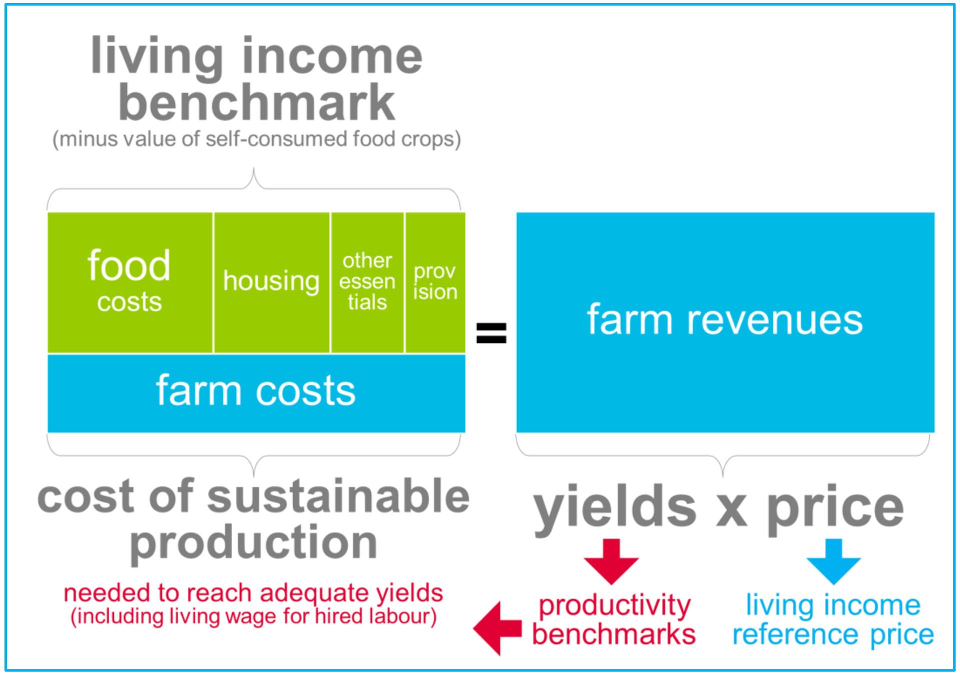
FAIRTRADE LIVING INCOME REFERENCE PRICES FOR COCOA

THE CONCEPT

The Living Income Reference Price concept is derived from the universal human right of everyone who works to a just and favourable remuneration, ensuring an existence worthy of human dignity. Hence, a 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 price that allows an average farmer household with a viable farm size and a sustainable productivity level to earn a living income can thus be calculated with the formula: price x volumes produced = cost of decent living + cost of production, or:

$$\text{Living Income Reference Price} = \frac{\text{cost of decent living} + \text{cost of sustainable production}}{\text{viable land area} \times \text{sustainable yields}}$$

It is important to note that for calculating the reference price we focus on the Fairtrade crop as our sphere of influence. Although it is recognized that farm income may well be diversified – and indeed crop diversification is strongly promoted – the formula is based on cocoa as a single crop, assuming that any other farm activity would be as profitable as cocoa and thus generate a proportionate share of a living income.

ESTABLISHING LIVING INCOME REFERENCE PRICES

In order to establish a Living Income Reference Price for cocoa in West Africa, values for each of the parameters were determined. These values were initially estimated based on findings from Fairtrade's household income study in Côte d'Ivoire.[1] These findings were complemented with research by New Foresight into realistic, sustainable productivity targets and the associated costs of production.[2]

Preliminary values were then consulted and validated with key stakeholders, including Fairtrade cocoa farmers in Ghana and Côte d'Ivoire, traders, licensees, research institutes, NGOs and civil society actors.

Finally, the cost of a decent living was adjusted based on the outcomes of recent living income benchmark studies in Ghana and Côte d'Ivoire, commissioned by ISEAL's Living Income Community of Practice.

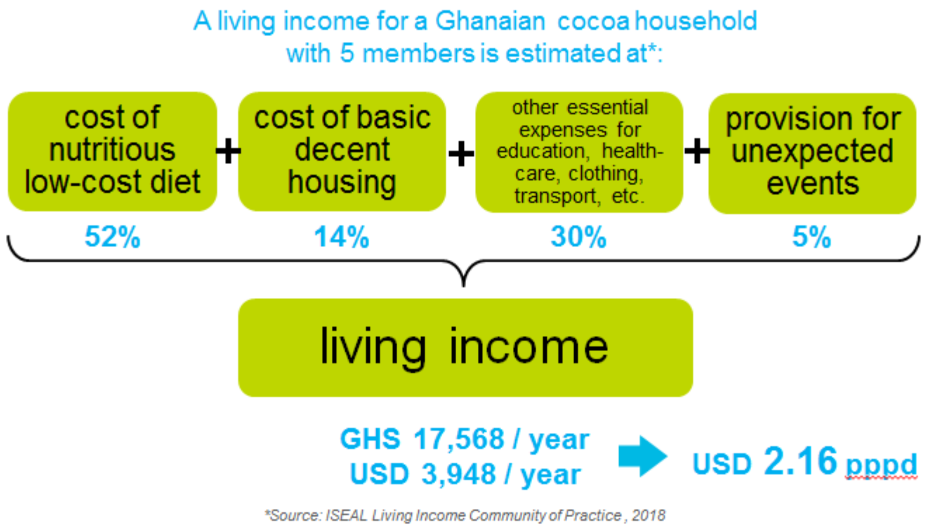
[1] *Cocoa Farmer Income*, Fairtrade International, 2018
[2] *Assessing Living Income from cocoa*, New Foresight, 2017

PARAMETER 1: LIVING INCOME BENCHMARKS

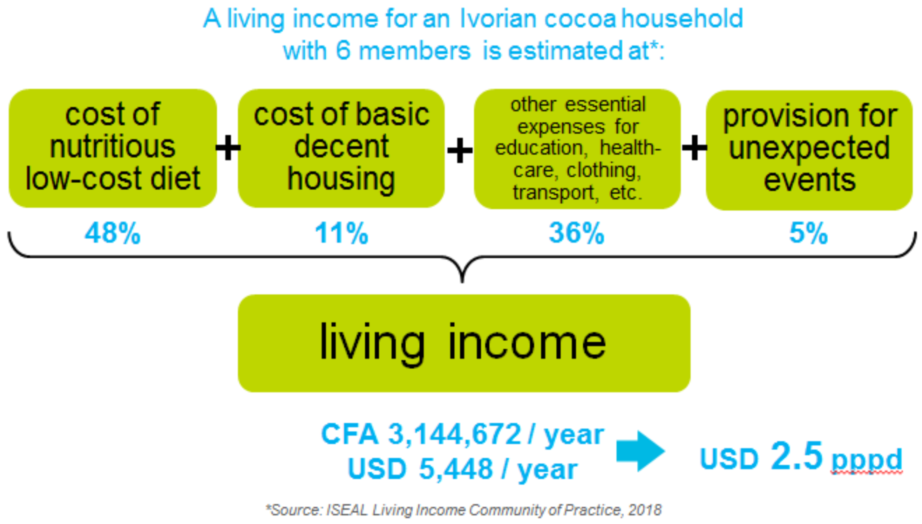
Living income is defined as **sufficient income generated by a household to afford a decent standard of living for the household members**. Elements of a decent standard of living include: a nutritious diet, water, decent housing, education, healthcare, transport, clothing and other essential needs, including a provision for unexpected events.

Comprehensive living income studies, based on the Anker methodology[3], calculated the cost of decent living at **US$ 2.16 per person per day in Ghana** and **US$ 2.50 per person per day in Côte d'Ivoire.**[4]

For a typical six-member household in Ghana[5], this would result in a living income benchmark of **US$ 4,730** per year.



Similarly, a typical household with eight members in Côte d'Ivoire[6] would need **US$ 7,600** per year to cover their cost of a decent living.



The cost of a nutritious diet makes up for approximately half the living cost. Food produced on farm for home consumption is considered as in-kind income and can be deducted from the financial cost of living, as it reduces the food expenditure of the household.

Fairtrade's household income study in Côte d'Ivoire valued the food crops produced for home consumption at US$ 282 on average per year. However, producers as well as research data indicated that a (much) larger share of household food is in fact produced on farm, with in-kind values even exceeding US$ 1,000 per year. These food crops are generally grown alongside cocoa and compensate for unproductive years in areas where cocoa trees have been newly replanted as part of rehabilitation efforts. For the Living Income Reference Price, more conservative estimates of **US$ 500 for Ghana** and **US$ 600 for Côte d'Ivoire** are taken into account for food produced for home consumption.

Hence, the financial cost of living is brought down to **US$ 4,230** and **US$ 6,700** for Ghana and Côte d'Ivoire respectively.

[3] https://www.globallivingwage.org/about/anker-methodology

[4] *Living Income Benchmark study*, Living Income Community of Practice, 2018

[5] *Royal Tropical Institute Gap analysis*, Bymolt, Laven & Tyzler, 2018

[6] *Cocoa Farmer Income*, Fairtrade International, 2018

PARAMETER 2: SUSTAINABLE YIELDS

Adequate productivity levels are determined based on feasible yields, obtained when implementing sustainable agricultural practices. These are called productivity benchmarks.

New Foresight was commissioned to investigate feasible productivity levels in Côte d'Ivoire and Ghana, by reviewing literature, interviewing experts and conducting workshops with Fairtrade lead farmers in both countries. Although they found that yields of 1,500 kg/ha would be feasible, these would only be achievable in the long term and under favourable conditions (such as timely availability of good quality seedlings and agricultural inputs, access to finance, etc.).

In consultation with West African producers, 800 kg/ha was considered a more realistic benchmark under current circumstances. For comparison, the average yield in Côte d'Ivoire was 437 kg/ha and only 2% of the surveyed households in 2016 obtained yields per hectare of 1,000 kilogrammes or more.[7]

A **productivity benchmark of 800 kg/ha** was put forward for consultation. Although some stakeholders expressed their doubts about the feasibility of these yields, the majority of the producers and technical experts from the cocoa industry confirmed this to be a realistic target yield that can be achieved in the medium term. Moreover, it is in line with Ghana COCOBOD's productivity target. This feedback was decisive to maintain the proposed productivity benchmark.

Some concerns were also raised around agro-ecological production practices not being taken into consideration. Further research is needed to determine whether similar yields are achievable through adoption of agro-ecological production techniques.

PARAMETER 3: VIABLE FARM SIZE

The Universal Declaration of Human Rights establishes: "Everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity." Hence, hired workers have the right to a living wage and self-employed farmers should be able to make a living income from their farm proceedings. **Following this guiding principle, a farm that is big enough to fully absorb the available household labour, should generate a living income.** This would be considered a viable farm size or a 'full-employment farm size'.

A viable farm size was established at 5.25 hectares, based on 2.7 full-time breadwinners in an average household in Côte d'Ivoire. This was affirmed by a majority of respondents to the consultation. Similarly, a typical six-member Ghanaian household with two full-time breadwinners would need four hectares to fully employ their available labour force.

The need to consider unproductive farm area as a result of crop rehabilitation, in combination with the possibility to use renovated plots for growing food crops, was also repeatedly stressed during the consultation.

Cocoa trees between five and 25 years old are optimally productive and thus, during a fifth of a 25-year life cycle the trees are not productive or only minimally so. Continuous renovation for optimal yields implies a renewal of one fifth of the trees every five years. Therefore we set a **productive cocoa area of 4.2 / 3.2 hectares for Côte d'Ivoire / Ghana respectively**.

The cost of production, however, is based on the full 5.25 / 4 hectares, also covering the costs incurred in growing food, which compensates the lower investment needed in cocoa during the unproductive years.

[7] *Cocoa Farmer Income*, Fairtrade International, 2018

PARAMETER 4: COST OF PRODUCTION

The costs associated with a productivity of 800 kg/ha are higher than the actual production costs, since the current low yields can be attributed to insufficient farm investment. In order to project the farm business costs involved in producing 800 kg/ha, the following main cost items are considered:

- Fertilizer: Six to seven bags of fertilizer are required per hectare of productive cocoa area to reach the target yield of 800 kg/ha, but renovated areas need much less. Considering one fifth of the crop area being under renovation, the average fertilizer use is estimated at 5.8 bags per hectare. The non-subsidized fertilizer price is around US$ 32 per bag across both countries, resulting in a cost of US$ 186 per hectare.
- Other agricultural inputs: A lump sum equal to 40% of the fertilizer costs for pesticides, seedlings and other inputs was put forward for consultation. Feedback received from producers showed large variances, ranging from agreement with the proposed value to an increase to US$ 173/ha. Until more accurate data become available, a slight increase to US$ 80/ha is applied to cover other inputs.
- Labour: Approximately 125 labour days per hectare per year are needed to produce 800 kg/ha. Most of this work is expected to be done by household members and is not included in the cost of production. Besides the household labour, an average 5.25 hectare farm in Côte d'Ivoire would need approximately 70 hired labour days per year. Thirteen labour days per hectare are factored in at living wages. **This way, the reference price covers a living income for the farmer household (provided the available household labour is effectively employed on their farm) from the cocoa profits and a living wage for hired workers.**

  Assuming comparable household compositions for rural workers and farmers, proxy living wages are estimated based on the ISEAL Living Income benchmark study results, at US$ 9.25 per day in Côte d'Ivoire and US$ 8 per day in Ghana.
- Fixed costs: An amount of US$ 45 per hectare was agreed to cover investments in tools, equipment and infrastructure, as well as farm administrative costs.

These previous farm cost items add up to **US$ 432 and US$ 415 per hectare in Côte d'Ivoire and Ghana respectively.**

The cost of production is subsequently multiplied by the area of a viable farm size and added to the living income benchmark, in order to calculate the total farm revenues needed to afford a decent living and make the necessary investments in the farm.

PRELIMINARY LIVING INCOME REFERENCE PRICES

The parameter values lead to preliminary Fairtrade **Living Income Reference Prices of US$ 2,668 per metric tonne of cocoa at farm gate for Côte d'Ivoire** and **US$ 2,301 per metric tonne for Ghana**, as follows:

$$\text{Living Income Reference Price Côte d'Ivoire} = \frac{(7300 - 600) + 5.25 \times 432}{4.2 \times 800} = 2.668 \text{ US\$/kg}$$

The fact that the reference price for Ghana is significantly lower than for Côte d'Ivoire is directly related to a higher cost of decent living in Côte d'Ivoire on a per person per day basis (approximately 20%).

$$\text{Living Income Reference Price Ghana} = \frac{(4730 - 500) + 4 \times 415}{3.2 \times 800} = 2.301 \text{ US\$/kg}$$

IMPLEMENTING LIVING INCOME REFERENCE PRICES

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 price gap is large and it will take considerable effort and commitment from the entire industry to make living incomes possible.

The proposed increase of the Fairtrade Minimum Price for cocoa is a first step in a gradual approach to bridge the price gap. Applying today's differential of US$ 799 between farm gate and free on board (FOB) prices, as per regulated price breakdown in Côte d'Ivoire, the Fairtrade Minimum Price at FOB would have to be US$ 3,467 per tonne to result in a farmer price that equals the Living Income Reference Price. Hence, a Minimum Price increase from US$ 2,000 to US$ 2,400 per tonne closes **27% of the price gap.**

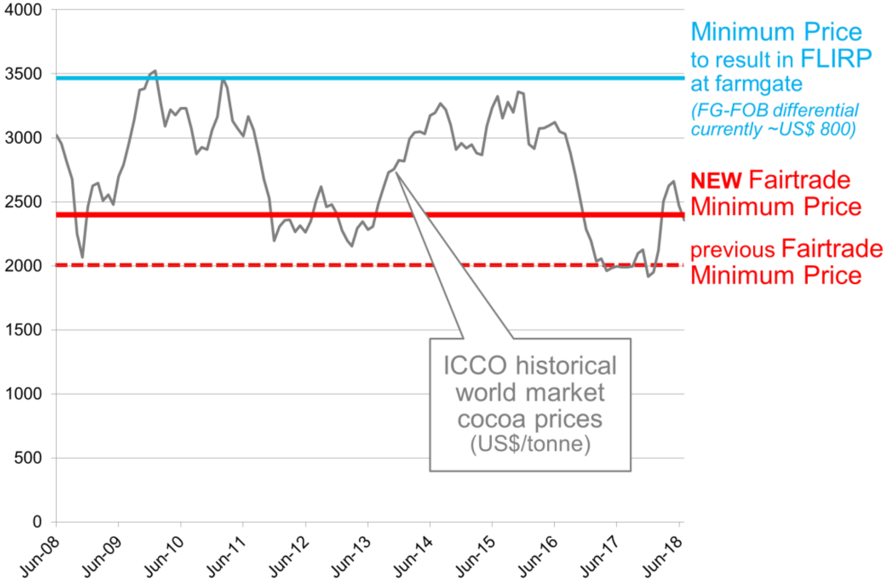


Figure 1: Fairtrade living Income Reference Price for Côte d'Ivoire in relation to the Fairtrade Minimum Price and historical world market prices

An average Ivorian household would need to receive US$ 1,450 per metric tonne at farm gate to reach the World Bank's extreme poverty line.[8] The Fairtrade Minimum Price increase allows cocoa farmers to escape extreme poverty with current yields.

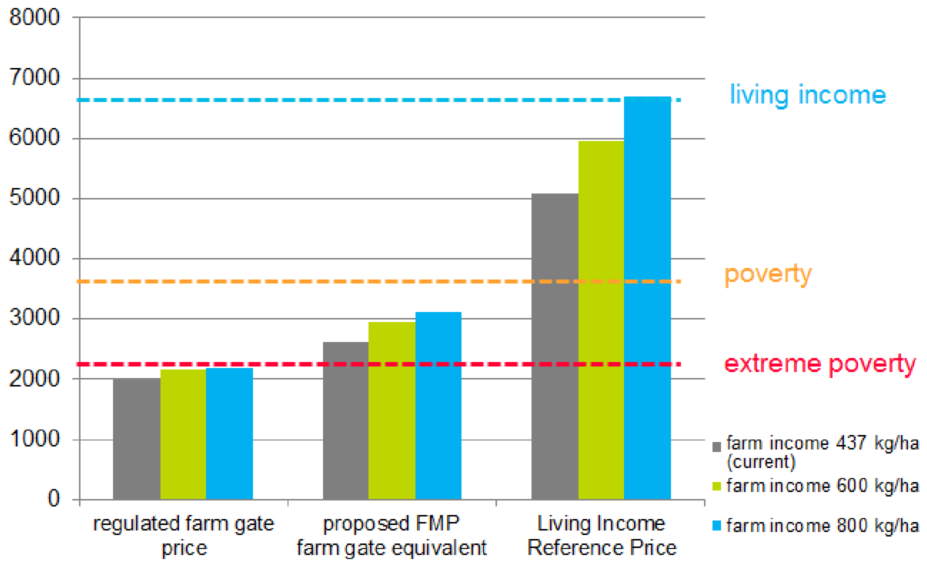


Figure 2: Income scenarios for Cote d'Ivoire with different price and yield levels in relation to poverty lines and living income

Fairtrade will integrate voluntary payment of these preliminary reference price values in living income pilot projects with committed, forward looking, commercial partners. By implementing the holistic living income strategy on a limited scale, we seek to demonstrate its effectiveness and validate the price component as a critical driver to achieve living incomes.

[8] The World Bank's extreme poverty line is set globally at US$ 1.90 per person per day. By applying the Purchasing Power Parity rate for Cote d'Ivoire, this converts into 78 dollar cents per person per day or US$ 2,276 on an annual basis for an 8-member household. With food produced for home consumption valued at US$ 282, a net income of US$ 1,994 is needed to escape extreme poverty. With the current average yield of 437 kg/ha, productive farm area of 5.25 hectare and production costs of US$ 200/ha, a farm gate price of US$ 1,450 per tonne is minimally needed to reach the extreme poverty line.