









#### TRUEPRICE STUDY - CÔTE D'IVOIRE

Analysis of the **total farmer household income** for data collected in **2016.** 

This creates a baseline farmer income database for Fairtrade smallholder cocoa farms in Ivory Coast, covering 3202 farmers and 23 cooperatives.

Most farmers in the sample have a very low household income: 58% of the farmers earn below the extreme poverty line.





# DISTRIBUTION OF THE HOUSEHOLD INCOME: MOST FARMERS EARN BELOW THE (EXTREME) POVERTY LINE.



- Extreme poverty line is 1,90\$/day. Corrected to Ivory Coast, this is 0,78\$/day.
- Poverty line is at 3,10\$/day. Or 1,27\$/day in Ivory Coast.

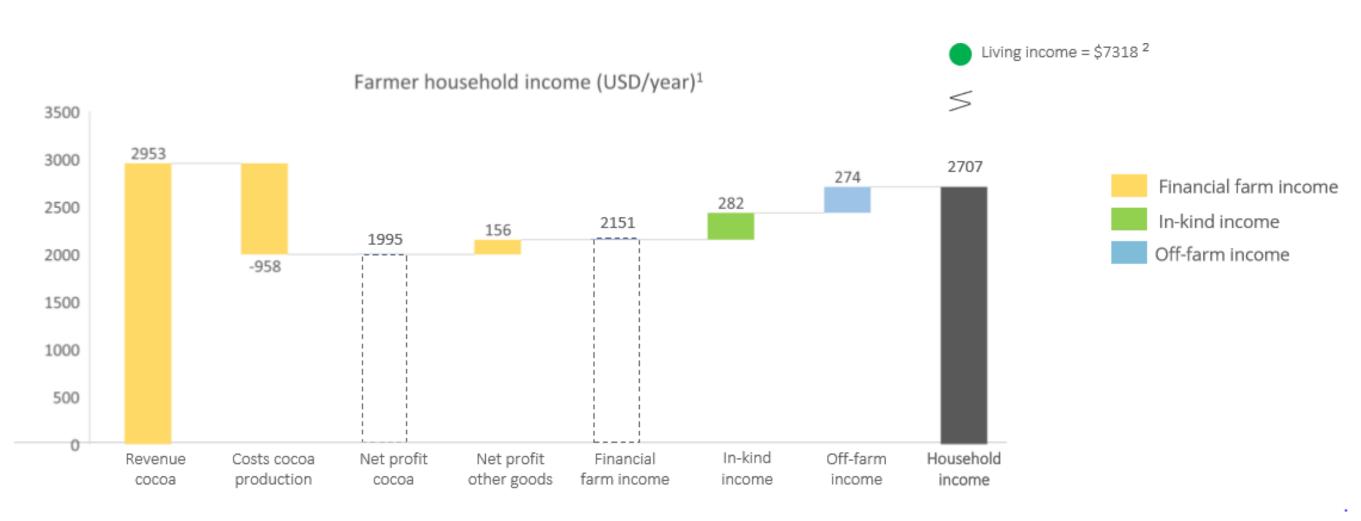


#### **ANALYSIS OF THE FARMS**

Indicator	Unit	Median	Average
Total farm area	ha	5.0	6.7
Area of cocoa production	ha	4.0	4.9
Amount of cocoa trees	#	5000	6352
Trees per hectare	rees per hectare #/ha		1348
Kilos of cocoa produced	kg	1500	1999
Profit per kilo cocoa	USD/kg	1.1	0.9
Yield	kg/ha	400	437
Hired FTE	#FTE	0.1	0.8
Wages (of hired labour)	USD/FTE	\$343	\$530
Quality of life	scale <sup>2)</sup> of 1-5	4.0	4.1
Household size	# people	8.0	9.0
Model household <sup>1)</sup>	# adults and children	4.3 adults,	4.9 adults,
		3.7 children	4.1 children
FTE in model household	#FTE	2.7 FTE	3.0 FTE
Percentage of trees below 5 years	%	2%	13%
Percentage of trees between 5 and 25 years	%	55%	51%
Percentage of trees over 25 years	%	5%	35%



#### **FARMER HOUSEHOLD INCOME ON AVERAGE - \$2707**



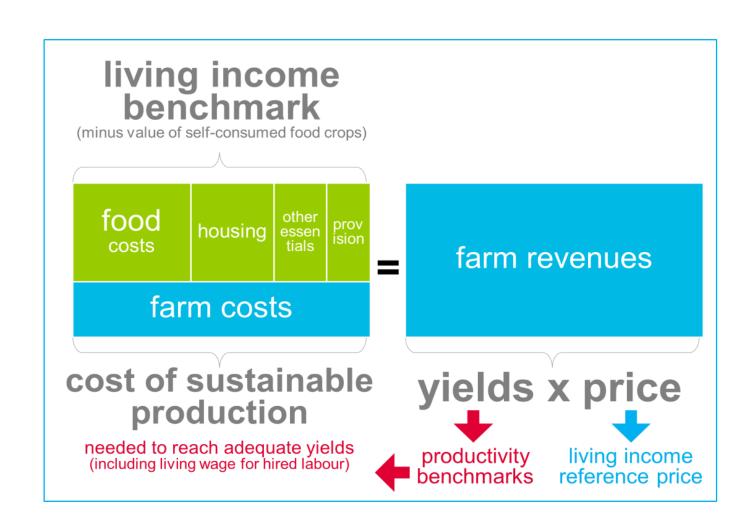
Note: producers depend on cocoa for 74% of the househould income. Over 55% of farmers have diversified their production to some degree.



#### THE CONCEPT

A Living Income Reference Price is based on the following key parameters:

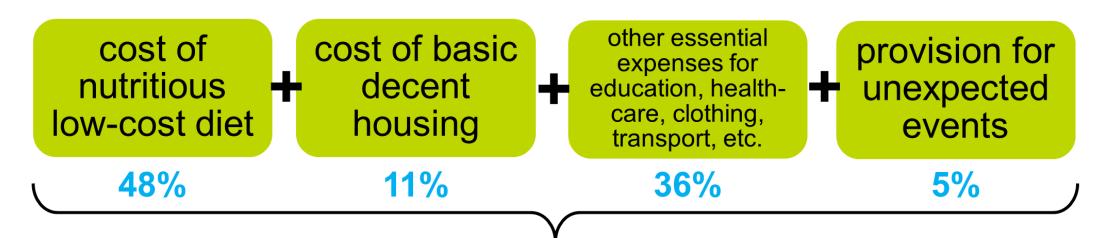
- Cost of a decent standard of living (living income benchmark)
- Sustainable yields (productivity benchmark)
- Viable farm size (to fully employ the available household labour)
- Cost of sustainable production (in order to achieve above mentioned yields)





#### LIVING INCOME BENCHMARK COTE D'IVOIRE

A living income for an Ivorian cocoa household with 6 members is estimated at\*:



#### living income



\*Source: ISEAL Living Income Community of Practice, 2018

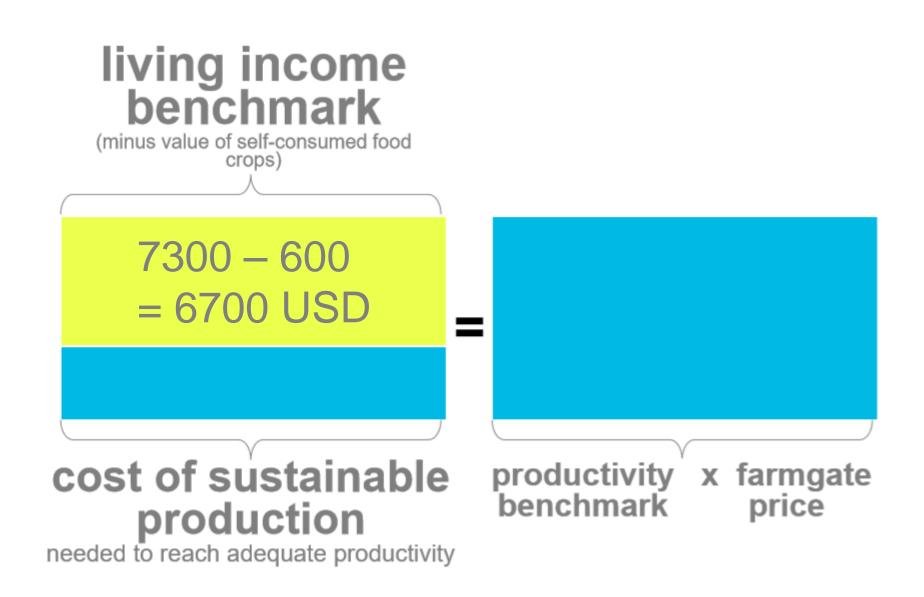


#### LIVING INCOME BENCHMARK COTE D'IVOIRE

Living Income benchmark	CDI
household size	8
cost of decent living pppd (US\$)	2.5
yearly household costs (US\$)	7300
target value of food produced on farm	600
financial cost of decent living (US\$)	6700

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 is deducted from the financial cost of living, as it reduces the food expenditure of the household. Food crops are generally grown alongside cocoa and compensate for unproductive years in rehabilitated cocoa areas.







#### **PRODUCTIVITY BENCHMARK**

Proposed productivity benchmark of 800 kg/ha as a realistic target yield that could be achieved in a medium term when implementing sustainable agricultural practices.

#### Feedback from consultation:

- Doubts about feasibility to attain 800 kg/ha, but these referred mainly to current low productivity levels, whereas the productivity benchmark should be seen as a target yield.
- The majority of the producers and technical experts from the cocoa industry indicated that a productivity benchmark of 800 kg/ha is adequate, and it is in line with the COCOBOD productivity target.
- The temporary suspension of all productivity improvement initiatives by CCC is a remaining challenge.
- Concerns 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.



#### **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.

#### Feedback from consultation:

- Majority of respondents agreed with a viable farm size of 5.25 ha for CDI.
- Need to consider 1/5th\* unproductive land as a result of crop renovation, in combination with the possibility to optimize use of renovated plots by growing food crops: count with productive cocoa area of 4.2 for CDI.
- The cost of production is based on the full 5.25, covering also the costs incurred in growing food, which compensates the lower investment needed in cocoa during the unproductive years.

<sup>\*</sup>Cocoa trees between 5 and 25 years old are optimally productive and thus, during a fifth of a 25 year life cycle the trees are not or very little productive. Continuous renovation for optimal yields implies a renewal of one fifth of the trees every five years.



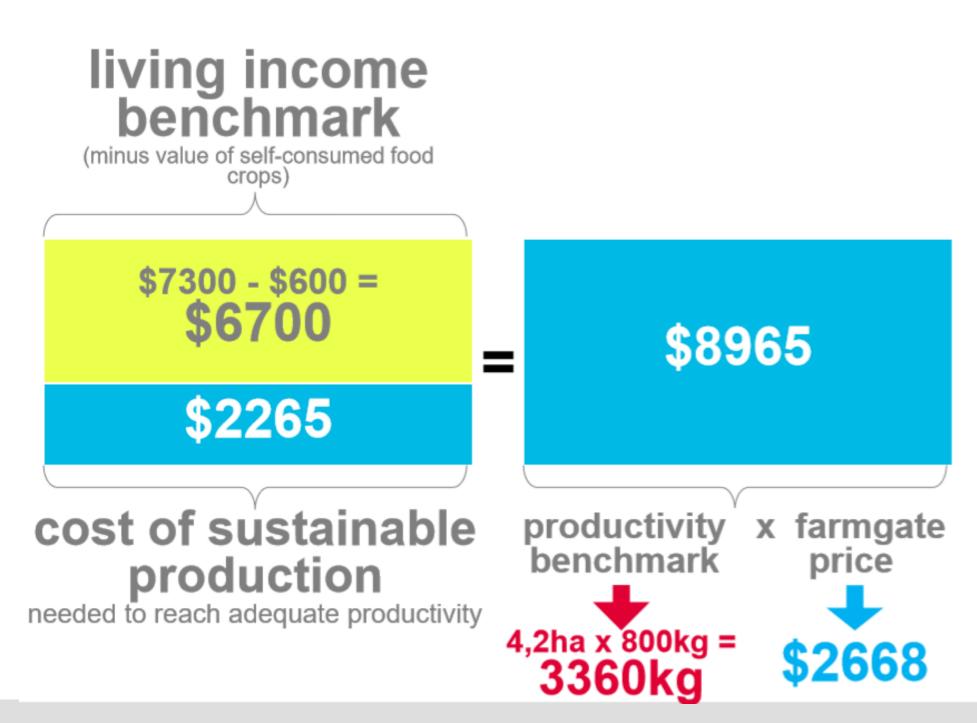
#### **COSTS INVOLVED TO PRODUCE 800 KG/HA**

cost item	feedback	adjusted value
fertilizer (6-7 bags/ha)	Majority or producers agreed to requiring 6-7 bags per hectare of productive trees to reach the target yields of 800 kg. However, renovated areas need much less. Considering 1/5 of the area under renovation, the average fertilizer use would be 5.8 bags/ha.  Recommendation to calculate with non-subsidized fertilizer price of \$32/bag across CDI and Ghana.	186 US\$/ha
other inputs	Feedback from producers show large variances, from agreement with the proposed value to an increase to \$173/ha. Better records are needed to validate this value. Small increase applied.	80 US\$/ha
hired labour (13 days*)	The cost of decent living is applicable to both farmer households and their workers. The adjusted Living Income benchmark therefore also increases the Living Wage if a similar household composition for rural workers is assumed. Based on the ISEAL study results, a Living Wage is estimated at ~\$9.25/ day in CDI.	121 US\$/ha
fixed costs	All Ivorian producers agreed to the amount of \$45/ha for fixed costs, whereas one Ghanaian group suggested a lower and another suggested a higher amount. Hence, on average the proposed value was supported and is kept unchanged.	45 US\$/ha
total/ha		432 US\$/ha

<sup>\*</sup> Calculation based on fully employed non-remunerated household labour, and additional hired labour needs at Living Wages. For 5.25 ha of cocoa approximately 70 labour days need to be hired a year, besides the household labour.

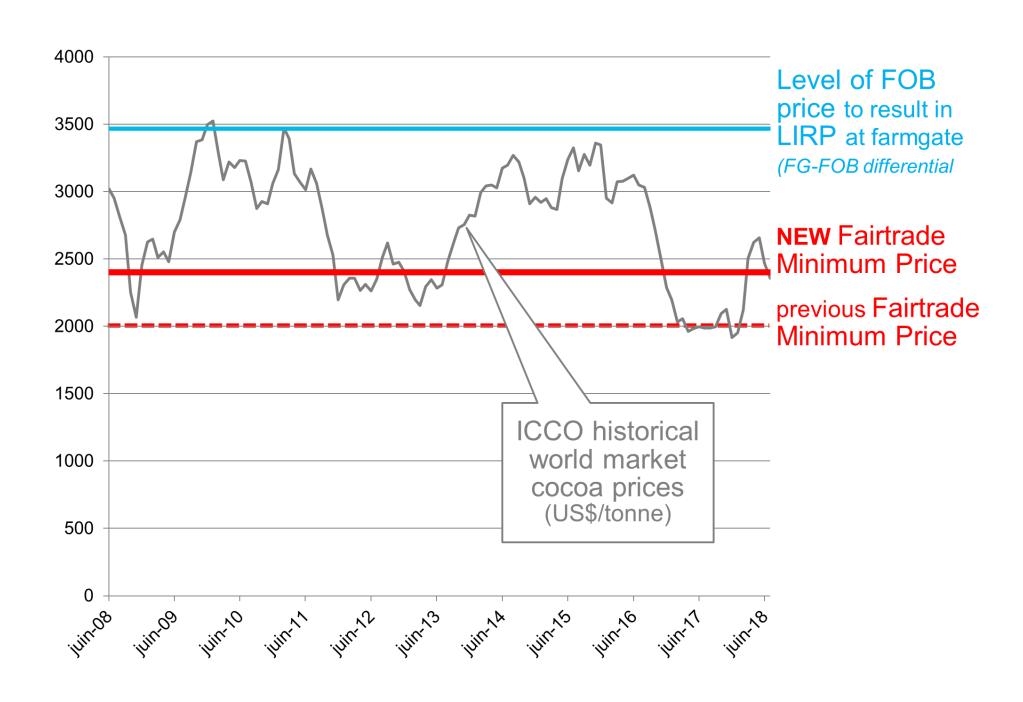


#### PRELIMINARY LIVING INCOME REFERENCE PRICE CD'I



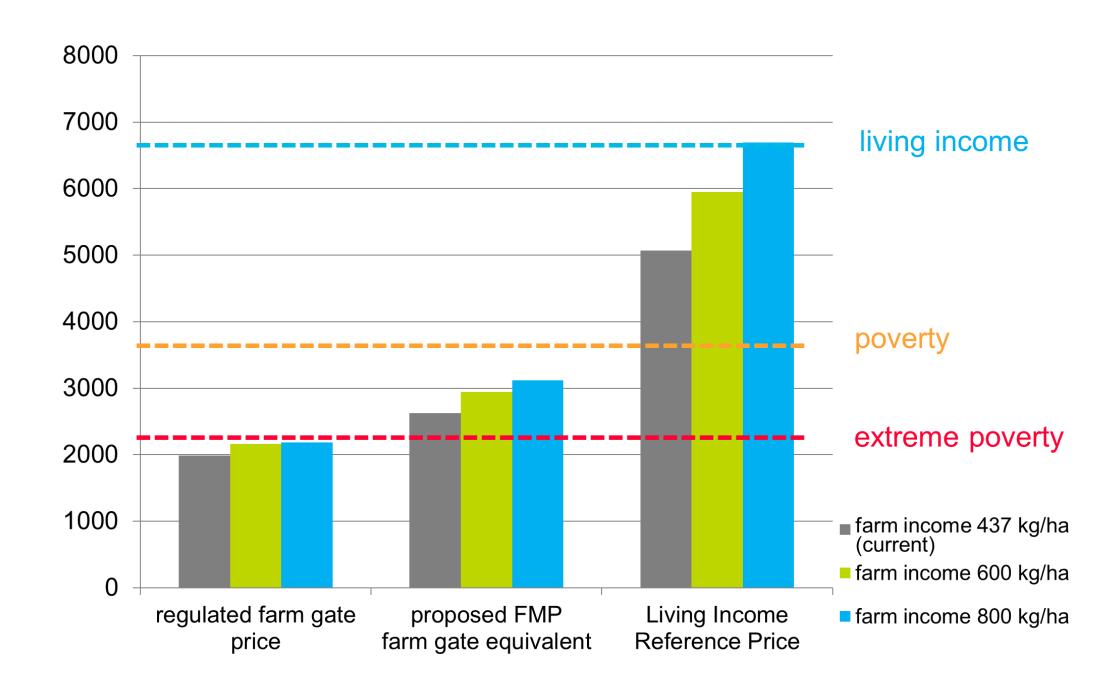


#### IN RELATION TO WORLD MARKET PRICES...





#### **INCOME SCENARIOS IVORY COAST**





## QUESTIONS?

### THANK YOU