Breakout Session: Understanding Cocoa Prices to Impact Living Income
Ballroom

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Role of price increases in achieving living incomes

Insights from empirical evidence

Yuca Waarts & team of researchers & partners
Production costs and living costs increase: the current living income benchmark is higher, therefore larger living income gaps.

Comparison of three groups of households and the impact of price increase on their living income gap (current FG price x 1.5):

- 30% with highest volume: 4000 kg per year
- 70% with (above) average volumes: 2000 kg per year
  - Large proportion with volumes of about 1000 kgs.

Price increases contribute to close living income gaps, but especially for the poorest families much more is needed.

The importance of supply management measures
Impact for 30% ‘highest’ income: Côte d’Ivoire

Current
- Total kgs/year: about 4,000
- Gross cocoa income: 6,400
- Total household income: 6,300
- = living income for many

Price x 1.5
- Total kgs/year: about 4,000
- Gross cocoa income: 8,100
- Total household income: 8,000
- = living income for most

1700 USD increase per family per year

Based on total volumes, other income and cost from literature, e.g. KIT 2018 & 2022, farm gate prices from this season, without a premium. Figures in USD & estimates. The net income is calculated without remuneration for household labour.
Impact for 70% lowest income: Côte d’Ivoire

**Current**
- Total kgs / year: about 2,000
- Gross cocoa income: 2,700
- Total household income: 3,400
- \( \approx \) 50% of a living income

**Price x 1.5**
- Total kgs / year: about 2,000
- Gross cocoa income: 4,100
- Total household income: 4,800
- \( \approx \) 80% of a living income

1400 USD increase per family per year

Based on total volumes, other income and cost from literature, e.g. KIT 2018 & 2022, farm gate prices from this season, without a premium. Figures in USD & estimates. The net income is calculated without remuneration for household labour.
Impact for households producing 1000kg max

**Current**
- Total kgs / year: about 1,000
- Gross cocoa income: 1,350
- Total income: ~1,650
- = ~ 25% of a living income

**Price x 1.5**
- Total kgs / year: about 1,000
- Gross cocoa income: 2,030
- Total household income: 2,330
- = ~ 38% of a living income

680 USD increase per family per year

Based on total volumes, other income and cost from literature, e.g. KIT 2018 & 2022, farm gate prices from this season, without a premium. Figures in USD & estimates. The net income is calculated without remuneration for household labour.
Thank you!

For more information, please contact:

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Further reading:

- Balancing the living income challenge (2021)
- Multiple pathways to living income (2021)
- WUR white paper on living income (2019)
Appendix: detailed calculations
### Current
- Total kgs/year: about 4,000
- Gross cocoa income: 6,400
- Cost cocoa production: 1,300
- Net cocoa income: 5,100
- Other income: 1,200
- Total income: 6,300

#### average ‘no’ living income gap

### Price x 1.5
- Total kgs/year: about 4,000
- Gross cocoa income: 8,100
- Cost cocoa production: 1,300
- Net cocoa income: 6,800
- Other income: 1,200
- Total income: 8,000

#### = living income for most

Based on total volumes, other income and cost from literature, e.g. KIT 2018 & 2022, farm gate prices from this season, without a premium. Figures in USD & estimates. The net income is calculated without remuneration for household labour.
### Impact for 70% poorest: Côte d’Ivoire

**Current**
- Total kgs / year: about 2,000
- Gross cocoa income: 2,700
- **Cost cocoa production**: 500
- Net cocoa income: 2,200
- Other income: 1,200
- Total income: 3,400
- = ~ 50% of a living income

**Price x 1.5**
- Total kgs / year: about 2,000
- Gross cocoa income: 4,100
- **Cost cocoa production**: 500
- Net cocoa income: 3,600
- Other income: 1,200
- Total income: 4,800
- = ~ 80% of a living income

Based on total volumes, other income and cost from literature, e.g. KIT 2018 & 2022, farm gate prices from this season, without a premium. Figures in USD & estimates. The net income is calculated without remuneration for household labour.
Impact for families who produce max 1000kg

**Current**
- Total kgs / year: about 2,000
- Gross cocoa income: 1,350
- Cost cocoa production: ~200
- Net cocoa income: 1,150
- Other income: ~500
- Total income: ~1,650
- = ~ 25% of a living income

**Price x 1.5**
- Total kgs / year: about 1,000
- Gross cocoa income: 2,030
- Cost cocoa production: ~200
- Net cocoa income: 1,830
- Other income: ~500
- Total income: 2,330
- = ~ 38% of a living income

Based on total volumes, other income and cost from literature, e.g. KIT 2018 & 2022, farm gate prices from this season, without a premium. Figures in USD & estimates. The net income is calculated without remuneration for household labour.
Living Income approaches in cocoa

Facts and Data

Antonie Fountain, VOICE Network
Farm Gate Prices and Living Income
Farm Gate Prices and Living Income

• Higher Yields
• Bigger Farms
Higher Yields don’t increase net income

- 550 kg/ha, 75 labour days
- 800 kg/ha, 150 labour days
- 1000 kg/ha, 200 labour days

CDI 3ha
Ghana 2ha
Higher Prices do increase net income

- 550 kg/ha, 75 labour days
- 800 kg/ha, 150 labour days
- 1000 kg/ha, 200 labour days

CDI 3ha
Ghana 2ha

- $1.5 per kilo
- $2.25 per kilo
- $3 per kilo

- 1000 kg/ha, 200 labour days
- 800 kg/ha, 150 labour days
- 550 kg/ha, 75 labour days

Legend:
- Red: 550 kg/ha, 75 labour days
- Green: 800 kg/ha, 150 labour days
- Brown: 1000 kg/ha, 200 labour days
(Slightly) Larger Farms

only with low yields or high prices

$1.5 per kilo

$2.25 per kilo

$3 per kilo

550 kg/ha, 75 labour days

800 kg/ha, 150 labour days

1000 kg/ha, 200 labour days
Available labour is the key constraining factor
Farm Gate Prices and Living Income

• Higher Yields
• Bigger Farms
Current approaches are completely insufficient
We need to think of some outside the box solutions.

What’s in the box?

We don’t talk about that.

Pay farmers more.
A Way Forward
Good Agricultural Practices

Good Governance Policies

Good Purchasing Practices
Supply management
Rural development policies
Transparency & Accountability
Functioning cooperatives
Traceability systems
Rule of law
Due Diligence regulations
Cash transfers
Infrastructure
CLMRS
VSLAs

(Much) higher farm gate price
Long term contracts/ shared risk
Timely payments
LID Transparency
• Cocoa not transformative for an economy
• Need medium/long term economic and social policies at origin to lower dependency upon export of primary commodities and create widespread employment opportunities
• Framework of agreement between EU and cocoa producers a major step towards putting in place necessary structures for modernization – more visibility and accurate data
• Obvious national priorities – provision of electricity, clean water, education – which impact entire population
• Others more relevant for agricultural sector
• Eg Land tenure reform to encourage domestic/international investment in agriculture (including pooling of smallholder leases) with objective of substantial land use change
• Eg Encourage multinational involvement in internal supply chain to improve infrastructure - storage facilities/offices/employment
• Improved fiscal and structural efficiency - taxation of sector should devolve to central government who then allocate to various ministries education, transport, agriculture instead of being integrated in cocoa budget
POLITICAL & ECONOMIC BACKDROP TO A LIVING INCOME

- Cocoa a major/vital source of national income in Ghana and CDI
- Economically flexible and diversified producers like Malaysia and Brazil retreated from production in 80-90’s-Indonesia during last 10 years
- Price perceived internationally as inadequate to support families though regionally continues to attract farmers to plant and production expand
- Lack of alternative employment options in W Africa due to lagging economic development
- After widespread logging and with land and seeds effectively “free” we witnessed a massive destruction of natural rainforests in Ghana (±2.5 mil ha between 1980-2000) and in CDI (>2.5 mil ha since 2000) much of which was turned over to plant cocoa and is seen in the rise of crop numbers
- Immigration from poorer adjacent countries continues to provide a labour pool
- “Low income” better than “no income”
COCOA
HISTORIC PRICE
VOLATILITY

1970s
- Period of high food price inflation
- Record 1977 cocoa price - $5,368/mt
- In real terms today = $26,291 (source: USA cpi deflator - Sept 22)
- Jul'77 record cocoa price
  - $5,368/mt
  - In real terms today = $26,291 (source: USA cpi deflator - Sept 22)

1979
- Period of high food price inflation as price was too low - claimed cost of production $1.86 = $4,100/mt
- Jul'77 record cocoa price
  - $5,368/mt
  - In real terms today = $26,291 (source: USA cpi deflator - Sept 22)

1992
- $790
- $1,750
- $674 before political instability in Cote d’Ivoire caused major price adjustment

Dec’00
- $1,750
- $674 before political instability in Cote d’Ivoire caused major price adjustment
- Dec’00 $674

2004
- Since 2004 lowest price is $1,300/mt
- 2017 briefly below $1,800
- Since 2004 lowest price is $1,300/mt
- 2017 briefly below $1,800

2016
- $3,775 during CDI civil war
- $3,350 Ebola crisis
- $3,200 - 2016 weather problems

2016
- $3,775 during CDI civil war
- $3,350 Ebola crisis
- $3,200 - 2016 weather problems
CURRENT COCOA MARKETPLACE

- Commodity markets expanding and evolving
- Strength of market participants changes
- Volume of physical crop and futures trading growing but traditional commodity houses diminishing in influence-shorter supply chain/less hedges
- Improved communications and technology have improved efficiency and transparency of the sector - JIT inventory systems
- Financial players without in-depth knowledge of sector gained significance in 2000-2016
- More recently futures markets dominated by computerised trading using algorithms to generate signals & predict price moves
- Consolidation/vertical integration/globalization of industry
- All this happening in context of macro-economic cycles/developments in food technology/supply chain management/food safety
- If you can’t beat it, join it!
COCOA PRICES – THE LAST 10 YEARS – NY COCOA FUTURES

source: tradingeconomics.com
COTE D’IVOIRE
GHANA
LIVING INCOME DIFFERENTIAL (LID)

• In Ghana and CDI farmer historically got 60-70% of world price
• Elsewhere 90-100 % of world price with no farmer support
• LID a good idea in theory but not viable despite generating 65% of crop
• Lack control over price
• Free market with speculative money and investors active and other origins completely flexible in making sales
• Large global stocks – >2.0 mil met tons
• CDI/Ghana do not have the financial or physical ability to with-hold supplies from market
• Trying to de-couple cash from global futures deters buyers who can no longer exercise risk management hedges to control their price exposure
THE “LID” GAP

Availability versus Needs Sept 2022

<table>
<thead>
<tr>
<th>CDI &amp; GHANA PRODUCTION</th>
<th>BRAND BE USE</th>
<th>RoW PRODUCTION</th>
<th>STOCKS</th>
<th>STOCKS + RoW PRODUCTION</th>
<th>LID GAP = AVAILABILITY - BRAND USE</th>
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</thead>
<tbody>
<tr>
<td>2.835</td>
<td>2.7</td>
<td>1.975</td>
<td>2.1</td>
<td>4.075</td>
<td>1.7</td>
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</tbody>
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COCOA SPECIFIC POLICIES

• Supply side management only part of the picture
• At a minimum requires abandonment of any short-term policies to boost cocoa output because of likely price damage
• Recognize that without multi lateral donor support, unable to withhold cocoa from market without inflicting financial hardship on farmers (nb donors unlikely to favour one specific farming sector eg cocoa v cashew)
• Undertake a modernization of marketing strategies designed to achieve higher pricing
MARKETING REFORM SUGGESTIONS

- Maintain a seasonal/monthly farmer price
- Create a cost of production index maintained by accredited 3rd party to provide a “moral” guide to “fair prices”
- Outlaw the concept of “mass balance” in sourcing which has allowed the industry to buy certificates but not necessarily the cocoa underlying them (LID avoidance)
- Focus on flat price objectives (simplifies control over timing and level of sales)
- Forward sales should stop if no premiums. Alternative forms of funding to allow smooth operation of seasonal buying programs need to be implemented
- Sellers should take advantage of the high liquidity in financial derivatives to widen range of buyers, expand and anonymize sales activity
- Sellers can achieve enhanced value for their clients by using financial instruments eg sale of futures & options
- Helps strengthen local banking and financial sector which benefits along with international donors/lenders from improved transparency
- Take equity in all major publicly traded chocolate companies so you can influence agenda
THANK YOU