How to achieve a living income for different types of smallholder cocoa farming families?

Evidence based insights to feed discussion on strategy design

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Multiple pathways towards a living income

- The majority of the smallholder farming families in cocoa, coffee and tea do not earn a living income.
- Living income gaps are often large, on average thousands of dollars per family per year. Billions are needed per country to close all gaps
- Evidence shows that not all farming families can earn a living income by producing cocoa, or from farming
 - Despite price increases, cash transfer, farm output increase
- **Different pathways for different families**: Cocoa production, on farm diversification, But also: off-farm diversification



What pathways for which types of families?

- Assess which factors are important in predicting whether a living income gap is small or large (machine learning)
- Assess the potential for households to earn a living income, based on thresh-holds for factors important for predicting income gap
- Assess which household segments are identified through an econometric clustering analysis, with living income gap as outcome variable
- For Côte d'Ivoire, Ghana and Indonesia
- Based on these assessments: Propose different groups of farming families and their pathways for achieving or exceeding a living



Important factors in predicting the income gap

Main factor: Total cocoa volume produced

- Total input costs
- Cocoa farm size
- Farm ownership
- # days spent by hired labour (total)
- Gender & Region
- # People in household



Differences between countries

- IND:
 - Total input cost, cocoa farm size and regions are more important
 - Gender less important
- CIV: Ownership more important
- GH: Region less important

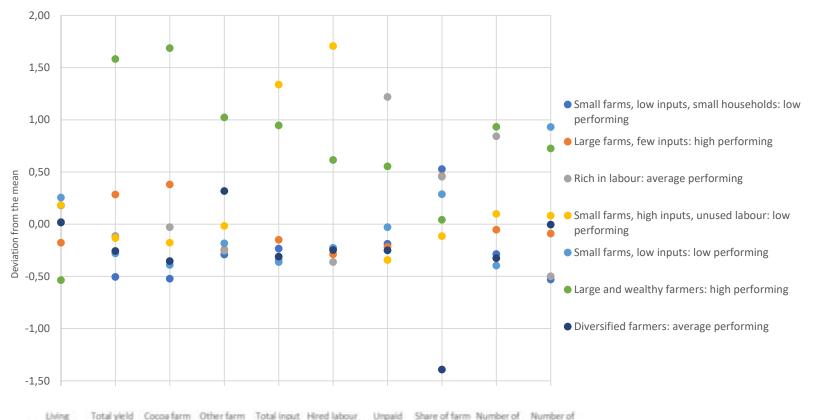
Seven family segments in Côte d'Ivoire

- Low or no income gap: large volume on large farm, cocoa & other
- Low income gap: Larger volume on larger farms, low input & low hired labour cost
- Average income gap: More time spent by family
- Average income gap: Diversified: lower share of farm with cocoa
- Larger income gap: Smaller farm, lower volume, lower input cost, smaller families
- Larger income gap: Smaller farm, higher input & hired labour cost, less time spent by family
- Large income gap: Smaller farm, lower input cost



Differences between the segments

income gap



cocoa

children in the household

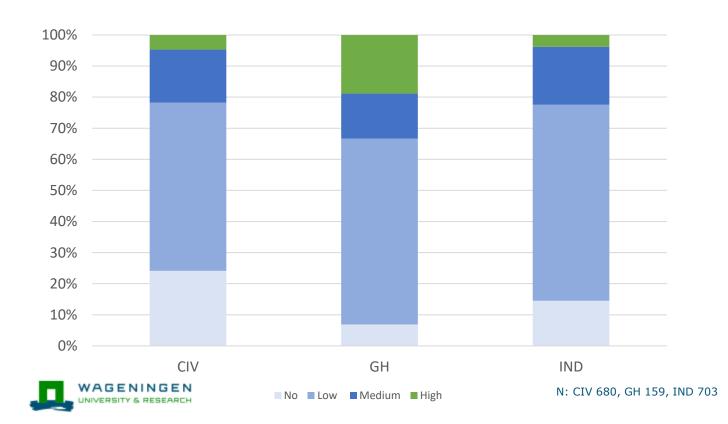
Devitation from the mean =

Factors considered to assess the potential to close income gaps with commodity production

- Farm size: based on living income reference price methodology
- Total cocoa volume: as volume is important predictor for gap
- Ability to invest: based on total cocoa production cost per year
- Willingness to invest in cocoa: based on survey question(s)
- Size of the living income gap: 400 USD as applied in cash transfer programs



Potential of families to earn a living income **from cocoa**, without structural change



Characteristics of these groups in Côte d'Ivoire

Factors (mean)	No (n = 164)	Low (N = 368)	Medium (N=116)	High (N = 32)
Total cocoa volume (kg)	680	1,500	2,200	2,300
Cocoa farm size (ha)	1.8	3.9	4	<u>5</u>
Other farm size (ha)	0.6	1.1	1.5	2
Cocoa yield (kg/ha)	432	470	572	510
Family days/ha	60	38	24	25
Willing to invest in cocoa (%)	0	27%	30%	94%
Size of the gap (USD)	1,700	1,500	1,500	1,400
Women (%)	12%	7%	9%	6%



Conclusion

- To close living income gaps entirely, we need to think big and do things structurally differently, addressing challenges of all families
- Farming families need voice & choice to <u>substantially</u> increase income, from farming but especially also from off-farm sources
- Different types of support needed for different farming families because of the differences in potential to increase their income from cocoa and farming
- This requires all stakeholders to take responsibility: governments, companies, investors, multilateral donors, NGOs and science



Thank you!

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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)



