

The Cash Lab

Studying the effects of multifaceted cash transfers on the living-income gap



Welcome to the Cash Lab

A few euros a week was all it took to change Sawadogo Djaratou's (41) life for the better. A widowed cocoa farmer and mother of four, Djaratou had a hard time making ends meet, even though she worked multiple jobs. Apart from her cocoa plot, she grew beans and sold cosmetics in the local market. Earning barely enough to feed her children, she was unable to invest in her business ventures and focus on growth, always just scraping by.

That changed in the summer of 2020 when Djaratou received her first cash transfer. Every Monday for the following two years, a soft ping on her mobile phone would announce the arrival of another payout worth about eight euros in local currency. Money to feed her kids, grow her cosmetics business and expand her cocoa fields. With the help of these cash transfers, she has been able to send her oldest child to a local university. She has also bought a plot of land where she plans to build a new home.

Can Cash Bridge the Gap to a Living Income?

There are millions like Djaratou who live in extreme poverty. Essential workers in international supply chains connected through the cocoa trade who earn less than a living income. This so-called 'income gap' is a problem of global magnitude, but Djaratou's experience suggests that part of the solution might be simply giving away cash. Can a temporary infusion of cash lift other families out of poverty as well?

Looking to back up anecdotal evidence with facts, to see what role cash transfers can play in realizing living-income ambitions in the cocoa industry, we set out to answer this question in The Cash Lab's first research project. Executed in the summer of 2022, this study looked at 185 people receiving cash transfers and compared them to 188 who didn't. All were drawn from cocoa communities in the Indénié-Djuablin region of Côte D'Ivoire. In this brochure you will find the first results.

The Cash Lab is a research collaboration between Unilever (Magnum), Cargill, the Sustainable Trade Initiative (IDH), the Royal Tropical Institute (KIT) and 100WEEKS.

As low incomes continue to be a root cause of some of the most persistent problems in the cocoa value chain, The Cash Lab aims to study to what extent multifaceted cash transfer programs contribute to improving the livelihoods of cocoa farmers and their household incomes.

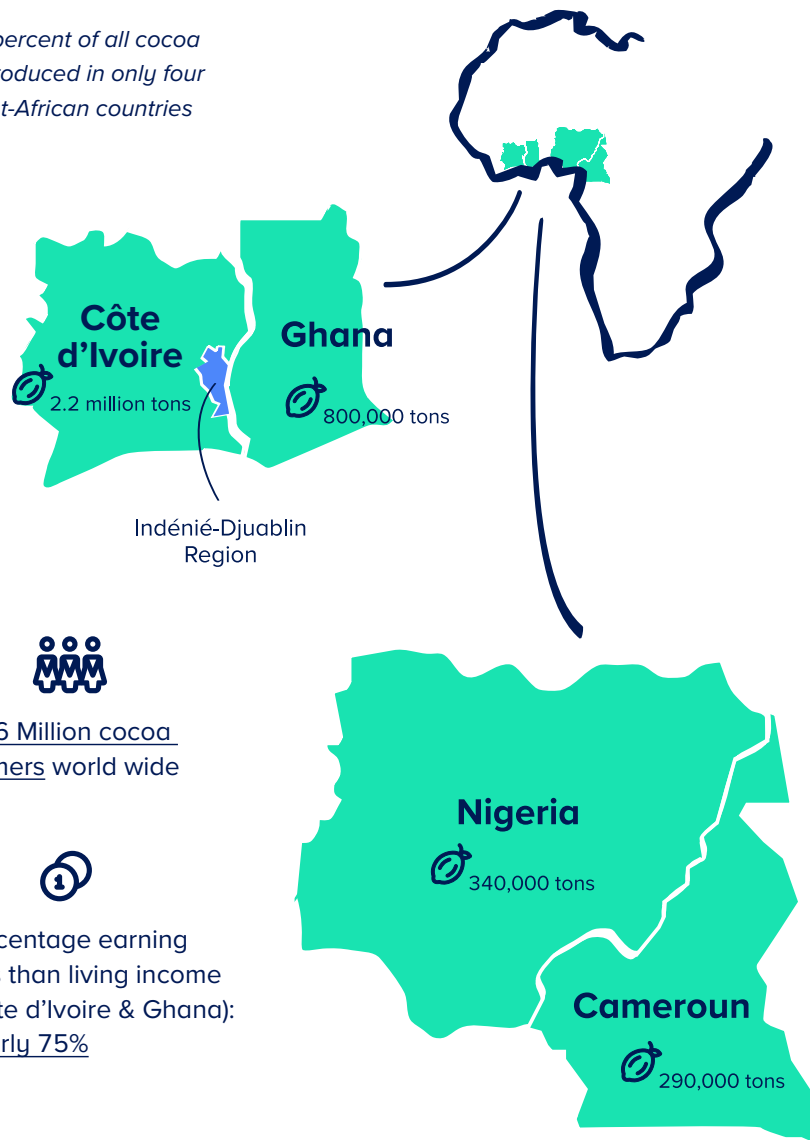
The 2022 study took five months to complete and was financially supported by The Sustainable Trade Initiative (IDH).

You can read the full report [here](#).



Poverty: the Root Cause of the Cocoa Industry's Problems

70 percent of all cocoa is produced in only four West-African countries



5 - 6 Million cocoa farmers world wide



Percentage earning less than living income (Côte d'Ivoire & Ghana): nearly 75%

SOURCE: FAO/UN & WUR

Worldwide, 5 to 6 million farmers produce cocoa. In their communities, millions more depend on the trade for their livelihoods. The vast majority of these farmers are smallholders, with fields no bigger than a few hectares. The global cocoa industry is massive, generating more than 110 billion dollars in value annually, but without smallholder farmers it would grind to a halt overnight.

Whereas the cocoa industry knows many sustainability challenges, much focus has recently been on ensuring a living income for households active in its supply chains. This topic has generated much debate, because poverty is a root cause of many other sustainability issues in the industry, e.g. child labor and deforestation.¹ A focus on poverty has found resonance in the industry, forming the basis for the development of living-income benchmarks.² It is also the driving force behind the introduction of the Living Income Differential by Ghana and Côte d'Ivoire, the surge in literature on this topic and a range of interventions by chocolate companies focusing on increasing income levels of farmers. These include cash transfer programs, that have proven highly successful within other development contexts, demonstrating an ability to simultaneously alleviate poverty and empower women.³

1 Fountain, Antonie C. (2022): 2022 Cocoa Barometer Living Income Compendium

2 Living Income Community of Practice, <https://www.living-income.com>

3 e.g., Bonilla, J., Zarzur, R., Handa, S., Nowlin, C., Peterman, A., Ring, H., & Seidenfeld, D. (2017). Cash for Women's Empowerment? A Mixed-Methods Evaluation of the Government of Zambia's Child Grant Program. *World Development*, 95, 55-72. doi: 10.1016/j.worlddev.2017.02.017

100 Weeks of Cash Transfers, a Promising Solution

Fighting poverty through cash transfers is the cornerstone of the 100WEEKS method. Based in Amsterdam and founded in 2015, we have pioneered a novel approach in several African countries by setting-up a program consisting of three mutually reinforcing components: a Cash+ program. The program consists of the following elements:

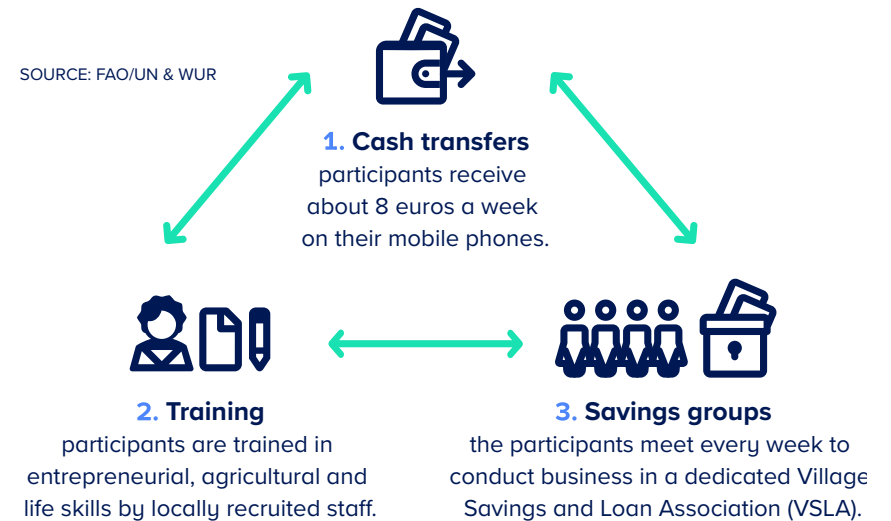
1. Weekly cash transfers: beneficiaries receive around €8 a week on their mobile phones for a period of 100 weeks.

2. Weekly training: beneficiaries receive training in financial literacy, entrepreneurial skills, and life skills. Topics covered include personal leadership, business incubation, parenting, family planning, reproductive health, nutrition, and water and sanitation. Facilitated by a coach, the weekly sessions are an opportunity for beneficiaries to provide and receive mutual support and advice.

3. Weekly VSLA meetings & coaching: beneficiaries meet every week in VSLA (Village Savings and Loan Association) groups. Membership in the VSLA and the possession of a personal mobile-money wallet are the first steps towards financial inclusion and resilience for participants.

The duration of the program is 100 weeks.

The Three Main Elements of the 100WEEKS Cash+ Program



More than money

100WEEKS offers what is known as a ‘multifaceted’ approach to cash transfers, meaning that payouts are complemented by other interventions, in our case, a training program and savings-group membership.

Earlier studies have shown that multifaceted programs tend to be more effective than those offering cash alone. Nobel Prize-winning economists Abhijit Banerjee and Esther Duflo looked at multifaceted cash transfers carried out in six different countries and found a positive impact on all ten indicators considered. They concluded multifaceted programs ‘can help the poor establish sustainable self-employment activities and generate lasting improvements in their well-being’.

Proving Cash Works: The Cash Lab

The Cash Lab, a joint research initiative by 100WEEKS and the Royal Tropical Institute, with the support of IDH, Unilever and Cargill, seeks to find evidence for the effectiveness of the Cash+ intervention. Early in 2022 our research team established what would become the framework for the first Cash Lab study, hoping to pin down the leave exact effect of the program on participants.

Our first 200 participants from Côte d'Ivoire's cocoa communities joined the Cash+ program in 2020, funded by Unilever through its Magnum chocolate ice-cream brand. By June 2022 they had just finished, making them a natural group to study. Because a comparison group was not established at the beginning of the program, an artificial comparison one was created using a statistical method known as propensity-score matching. This scientific technique seeks to create a set of matching individuals by finding people who share most of their characteristics with someone from the group receiving the intervention.

Participants had to be part of a cocoa producing household and financially vulnerable, i.e. with little or no alternative income-generating activities (i.e. apart from cocoa farming) and/or income from cocoa farming that was insufficient to provide for their families. Of the 200 original participants, we succeeded in surveying 185. A comparison group of similar size (188 people) was recruited according to the same criteria in the summer of 2022

Surveying both groups

Local 100WEEKS staff carried out surveys among treatment households and the comparison group, determining not only household

income but also the gap separating given households from the living-income benchmark for their specific locale. Respondents were asked to report their total savings and money earned through alternative income-generating activities. Care was taken to ensure that cash transfers were **not** reported as income. Savings, however, do include money received through the program.

The survey questionnaire was developed by the Royal Tropical Institute and focused on gaining insight into the effect of a combined Cash+ intervention on household income and the living-income gap. In addition, several other variables were measured for both groups, mainly related to health and general wellbeing, reflecting the multidimensional nature of poverty.

Multidimensional Poverty Index

Drawing on an internationally accepted standard developed by the United Nations, we also measured poverty in multidimensional terms. The Multidimensional Poverty Index (MPI) considers deprivations experienced by people living in poverty in various aspects of their lives: health, education and living standard. The MPI is scored on community level, resulting in a percentage score representing the fraction of deprived individuals within a certain population.

Health and Nutrition Measures

A number of standardized questionnaires were used to determine household food intake and mental health. The Household Food

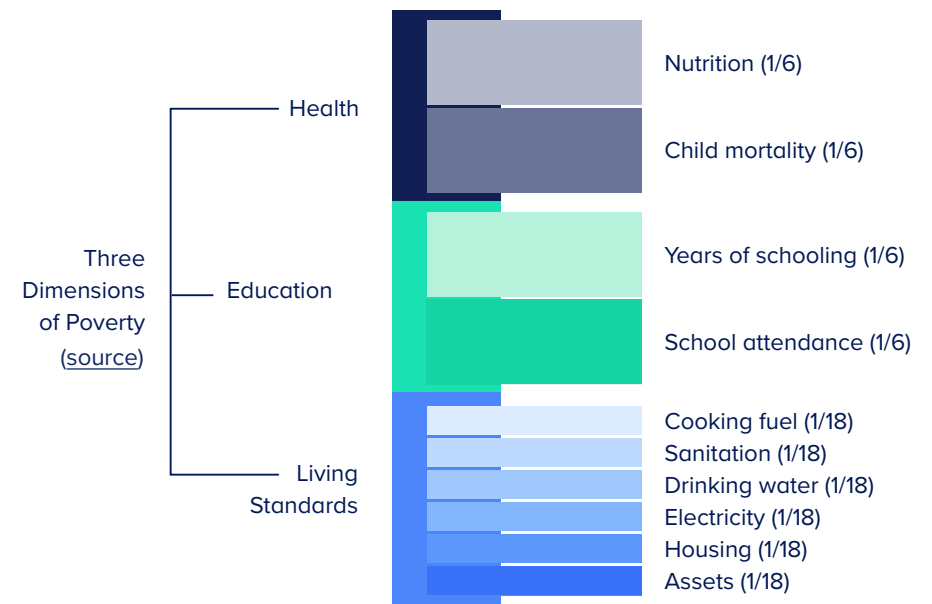
Insecurity Access Scale (HFIAS) consists of nine questions that yield a likelihood that a given family is food insecure. The Dietary Diversity Index (DDI) assesses the quality and diversity of the household diet and the General Health Questionnaire (GHQ) scores the mental health of individuals through a set of twelve questions.

Main Research Question

What is the impact of a cash transfer program on the multidimensional poverty and incomes of cocoa-farming households?

Multidimensional Poverty Index (MPI)

The Multidimensional Poverty Index (MPI) offers a reasonably straightforward way of scoring deprivation on a community level.



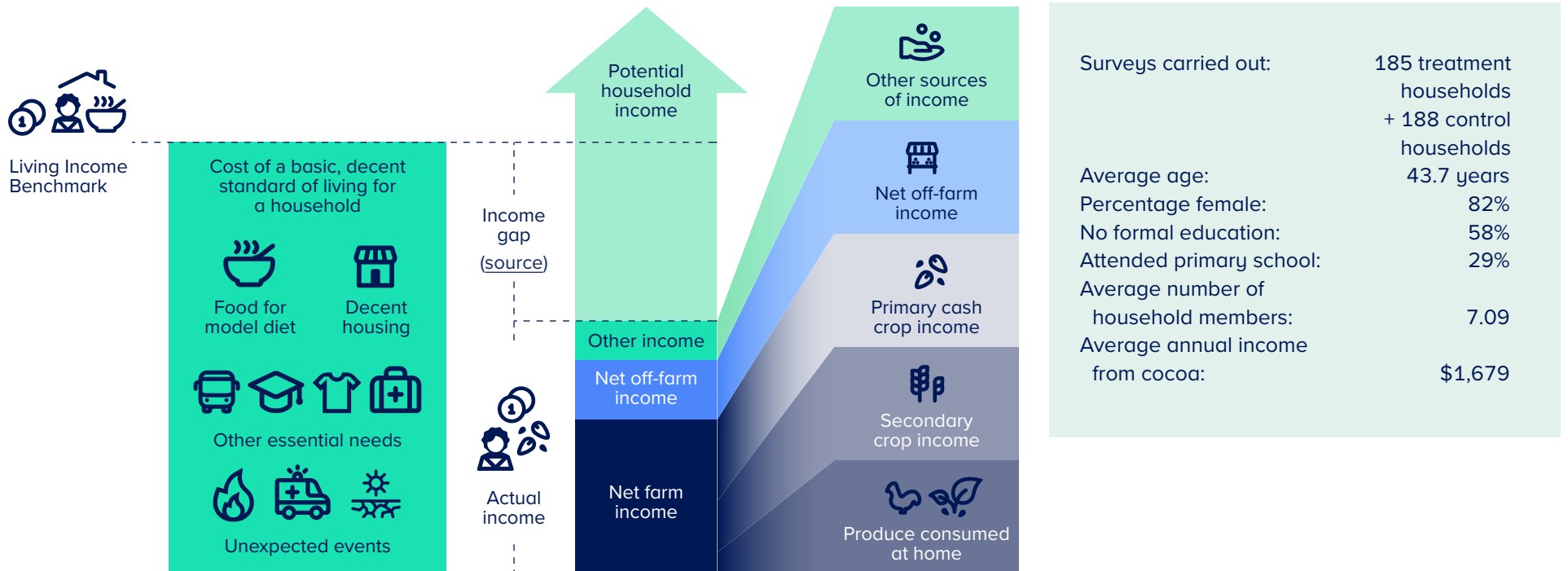
Living Income

Living income is a context-dependent way of assessing poverty. The living income for a specific location is the minimum amount a household requires annually to be able to afford a decent standard of living. This includes food, water, housing, education, health care, transport, clothing, and other essential needs including provision

for unexpected events. As households vary in their needs, so does their living income, but on average, for a cocoa-producing family of six in Côte D'Ivoire this amounted to \$5225,90 annually, as determined in March 2022 when the study began. The living-income gap constitutes the difference between living income and real earnings.

Living Income Gap

By looking at both actual income and the real needs of a household, the Living Income Gap can be determined.



More women

100WEEKS usually targets women exclusively. Studies have shown that this is the most effective way to ensure payouts reach the entire household.

In our Indénié-Djuablin Region-region program we included a number of VSLA groups already set up by the local cocoa cooperative in our program. These included men as well as women. Participants selected by 100WEEKS were all female. The result was a skewed gender mix.

Evidence of Lasting Effect

The study showed that the 100WEEKS program had an impact both on the size of the living-income gap, making it smaller, as well as livelihoods and health indicators. This makes a strong case for the disbursement of multifaceted cash transfers to women in the cocoa supply chain to bridge the living income gap.

Compared to the comparison group, the annual **living-income gap was \$838.50 smaller** in the treatment group. Crucially, **this number does not include the cash transfers**, meaning that recipients were able to improve their economic situation beyond the value of the money donated.

Women invested in cocoa production...

Looking at the numbers in more detail, this effect was mainly driven by higher income from cocoa production which **lay \$551.79 per year higher** in the treatment group than the comparison group. This supports anecdotal evidence from the field. Many women surveyed said they had purchased land to expand their husband's cocoa production. However, because of the statistical methods employed, it cannot be ruled out that the treatment group owned more land than the comparison group before the intervention. Further research is required to differentiate cause and effect with certainty.

...but also in other activities

Interestingly, the treatment saw its income from alternative-income sources grow, reporting an **additional \$36.50 in income a month (\$438 annually), more than triple** the amount found in the comparison group. The statistical caveats mentioned above do not apply here, meaning 100WEEKS' role is much more certain.



Cash gave Konfe Habibou a chance to grow

Having a side business next to cocoa production is essential to smallholder farmers. It makes them less dependent on a single source of income, ensuring a degree of financial stability.

The story of Konfe Habibou (39) shows what role cash transfers can play in developing alternative income-generating activities. Habibou had a small business in cassava, selling roots just over the border with Burkina Faso at a modest margin. The trade was profitable, but with seven mouths to feed she was never able to save enough to grow her business.

Cash transfers helped her triple her exports, turnover and – most importantly – profits. Today, Habibou sells up to fifty bags of cassava every month. She has expanded her export business by branching out into other products, selling broomsticks and avocados as well.

Treatment group saved more and felt better

Perhaps less surprisingly, the group receiving cash transfers reported higher savings, totalling an additional \$348.98 compared to the comparison group (\$460.60 vs. \$111.35, this figure includes money from the transfers themselves.) That is **four times more** than the comparison group set aside. Food security and mental health also saw huge improvements. Though dietary diversity actually *worsened* - the only negative outcome in the treatment group. This might be the result of a preference for unhealthy eating patterns, something warranting further study.

Some caveats

Though the study executed in 2022 offers reason for optimism, like any study it comes with limitations. Limited sample size (n=373), demographics (few male respondents) and research design (quasi-experimental) are the main ones. It does constitute a first step in the direction of more specific research. As the program scales up, The Cash Labs intends to discover more, drawing on a learning-by-doing mentality.

Main Results

After two years of weekly cash transfers, the treatment group of 200 participants did better on almost all measures.

Dimension	Indicator	Average Treatment Effect on the Treated
Household income	Annual household net cocoa income (USD)	\$551.79* (Treatment \$1626.69 Control \$1074.89)
	Annual Living Income gap (USD)	-\$838.50* (Treatment \$4197.57 Control \$5036.08)
	Monthly income earned from AIGAs (July 2022)	\$36.5** (Treatment \$52.95 Control \$16.50)
Livelihoods	Reported savings	\$348.98*** (Treatment \$460.60 control \$111.35)
	MPI (score)	-0.0439
Health	Household Food Insecurity Access Scale (HFIAS)	-4.55
	Dietary Diversity Score (DDS)	-0.479**
	General Health Questionnaire (GHQ)	+0.273**

Notes: * p<0.10, ** p<0.05, *** p<0.01

The Cash Lab: next steps in this collective learning journey

The Cash Lab is a research collaboration between Unilever (Magnum), Cargill, the Sustainable Trade Initiative (IDH), the Royal Tropical Institute (KIT) and 100WEEKS. As low incomes continue to be a root cause of some of the most persistent problems in the cocoa value chain, The Cash Lab aims to study to what extent multifaceted cash transfer programs contribute to improving the livelihoods of cocoa farmers and their household incomes. It is the objective of The Cash Lab collaboration to add to the growing body of evidence for the effectiveness of cash transfers.

The evidence suggests that the Cash+ program is an effective intervention to help bridge the gap to a living income. Given the limited financial resources on the part of consumer-facing corporations and official development-assistance (ODA) organizations, it is imperative to find out how much cash a family needs exactly to increase their income, given its poverty situation and land ownership at the start of a Cash+ program. Further research on the required size of cash transfers could very well be the next big question. The poorest smallholders owning a few hectares of cocoa plots will probably never be able to reach a living income from their cocoa harvest alone. These poorest smallholders will need to both increase their yields and develop alternative income-generating activities and will likely require blended assistance, combining ODA with financial support from corporations in the supply chain.



Djaratou

2024: The Cash Lab continues

This was only the first study to take place under the umbrella of The Cash Lab. We intend to publish a follow-up in 2024. This next study will draw data from baseline and endline interviews with 400 beneficiaries in the La Mé and the Lôh Djiboua regions, following them throughout the program, hopefully providing more evidence of effect and further deepening our understanding of how cash transfers work.



Would you like to receive more information on The Cash Lab, join the research program or implement a Cash+ programme?

You can reach out to our Director Jeroen de Lange via jeroen@100weeks.org

