

COCOA LIFE: IMPACT IN INDONESIA

Outcome Assessment of 2015 Cohort

by Ipsos



Mondelēz
International



About Ipsos:

Ipsos is a global non-partisan, objective research practice made up of experienced research professionals conducting strategic work in partnership with clients from government, public, corporate and not-for-profit sectors. Ipsos works with clients to determine and pinpoint shifts in attitude and opinion, understand and manage issues, advance reputations, enhance communications, measure impact, and evaluate policy.

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*This outcome assessment and report
were commissioned by Mondelēz International.*



Our Indonesia Roadmap: Creating Thriving Cocoa Communities to Inspire the Next Generation

At Mondelēz International, we have a credo: *Without cocoa, there is no chocolate. Without the next cocoa farming generation, there is no cocoa.*

This credo hangs on my office wall. It reminds me of my team’s purpose in Indonesia, where we’re working to transform the lives of cocoa farmers and their communities.

The Cocoa Life program was launched here in 2013. By the end of 2016, we’ve reached more than 16,100 farmers across 132 communities. Our innovative and holistic approach has been crucial to ensuring we’re making a difference across whole communities. Working with our partners on the ground, we’ve helped farmers improve their farming practices to increase cocoa yields and incomes, supported communities in building action plans and bringing them to life, and focused on reducing the environmental impact of cocoa farming. We also continued to advocate for women’s empowerment and provide training opportunities for youth to work in cocoa farming. I’m proud of how Cocoa Life has taken root in Indonesia and is truly shaping the future of cocoa for generations to come. And I’m equally proud of the farmers and their families for being active participants and working with us to drive their own success.

In this outcome assessment report, our research partner, Ipsos, highlights the outcomes of our efforts from the very first cohort of farmers we ever worked with in Indonesia. Overall, we are encouraged by the assessment’s potential in helping us better understand our impact. The report is organized according to our five focus areas: **Farming, Community, Livelihoods, Youth and Environment**. I share our perspective on the successes and challenges we faced. Anecdotes from our partners, farmers and community members are also included throughout the report to provide additional context on what we have achieved and what more we want to accomplish. Without their support, Cocoa Life would not be where it is today. For more details, visit our [Cocoa Life website](#).

My greatest lesson: One rod could not make a broomstick. Working together, we will build on our progress and empower even more cocoa farmers to thrive.

— Andi Sitti Asmayanti, *Director of Cocoa Life for Southeast Asia, Mondelēz International*



“I’m proud of how Cocoa Life has taken root in Indonesia and is truly shaping the future of cocoa for generations to come. And I’m equally proud of the farmers and their families for being active participants and working with us to drive their own success.”



What is Cocoa Life?
















Cocoa Life is Mondelez International’s long-term journey to creating a vibrant cocoa supply chain while transforming the lives of cocoa farmers and their communities at scale. The company’s ultimate goal is to source all of its cocoa sustainably, mainly through Cocoa Life. By 2022, Cocoa Life will invest \$400 million USD to reach 200,000 cocoa farmers and one million community members in six cocoa-producing countries: Indonesia, Côte d’Ivoire, Ghana, Dominican Republic, India and Brazil. In Indonesia, this includes 40,000 farmers across 400 communities.

With a holistic approach, Cocoa Life drives change by providing training, mentoring, inputs and investments to individual farmers and whole communities across five focus areas: **Farming, Community, Livelihoods, Youth** and **Environment**. Additionally, Cocoa Life embeds **women’s empowerment, child protection** and **climate change resilience** as cross-cutting themes to support each of these focus areas.

Third-Party Verification and Transparency

Supply chain verification is a critical element of Cocoa Life. Cocoa Life works with FLOCERT, a leading global certification body, to verify the flow of cocoa from Cocoa Life communities into the supply chain and the benefits received by farmers. Verification drives learning and transparency because Cocoa Life sources from the farming communities where it invests. This enables farmers to see how their cocoa crop contributes to the chocolate people enjoy.

Cocoa Life also engages Ipsos, an independent third-party research agency, to evaluate the program’s impact. Ipsos’ analysis will help Mondelez International better understand and continuously improve the quality of Cocoa Life’s interventions on the ground. The evaluation is based on Cocoa Life’s 10 global key performance indicators (KPIs), which correspond to the program’s five focus areas.

FARMING	COMMUNITY	LIVELIHOODS	YOUTH	ENVIRONMENT
				
KPI 1  Net income from cocoa	KPI 3  Increase in women’s participation in decision-making processes	KPI 5  Net income from sources other than cocoa	KPI 7  Reduction in child labor and forced child labor	KPI 9  Helping future farming generations through sustainable natural resource use on farms
KPI 2  Cocoa productivity	KPI 4  Increase of capacity in the community to plan and advocate for their own social development	KPI 6  Cocoa farmers reduced vulnerability to external shocks	KPI 8  Increase in career opportunities for youth in cocoa sector	KPI 10  Increase in conservation of forests and maintenance of ecosystems

Cocoa Life in Indonesia

Cocoa Life was first implemented in Indonesia in 2013. By the end of 2016, the program operated in four regions with a total of 16,100 participating farmers across 132 communities.

In this report, Ipsos describes results for the impact Cocoa Life has made on the very first cohort of farmers to participate in the program. This cohort includes 7,115 farmers who entered the program in 2015 across two regions in Indonesia:

- 🌿 **Soppeng (South Sulawesi):** 3,115 participants farming 2,573 hectares across 28 communities
- 🌿 **Lampung (Sumatra):** 4,000 participants farming 3,257 hectares across 14 communities

Baseline data for the first year was collected in 2015. Follow-up (“Wave 1”) data was collected one year later in 2016. See *Appendix* for further details on this methodology.



Cocoa Life Partners in Indonesia

Together with its partners, Cocoa Life scales up each year by empowering more cocoa farmers and communities, and evolving the program against the five focus areas.

- 🌿 **Sulawesi:** Cargill, Swisscontact, Wahana Visi Indonesia, Barry Callebaut*
- 🌿 **Sumatra:** Olam
- 🌿 **Both Regions:** Save the Children, Embode, Indonesian Coffee and Cocoa Research Institute (ICCRI)

**Barry Callebaut is a new Cocoa Life partner. Communities engaged by this partner will be assessed in future outcome assessments.*

Executive Summary

The analysis presented in this Wave 1 report for the 2015 cohort of Cocoa Life farmers in Indonesia is the result of the very first Cocoa Life outcome assessment, and a step on the path towards full transparency around the impact of the program.

To date, Cocoa Life has yielded some promising results in multiple areas in which the program is focused. In particular, farmers have increased their income from cocoa along with their overall household income, and have diversified their sources of income. Furthermore, the increase in the number of communities with action plans and the number of projects being carried out under those plans are a sign that the groundwork for community-level impacts is underway.

FARMING



Cocoa productivity rose by **10%**, and the data suggest linkages between this increase and the Good Agricultural Practices (GAPs), such as the application of fertilizer, applied following Cocoa Life training. The price farmers received per kilogram (kg) of cocoa also increased by **31%**, likely resulting from an increase in general market prices during the research timeframe. Combined, these factors led to an increase in income from cocoa of **37%**, and this appears to contribute to an increase in annual household income of **43%**.

COMMUNITY



There was an **11%** increase in Village Heads reporting new community projects and an increase of **26%** in the total number of community projects reported at Wave 1. The government was the most common source of funding for these projects. The participation of women in leadership roles in farmer organizations appears to have remained static since Baseline.

LIVELIHOODS



Farmers reported a significant increase in the average number of income sources for their household, as well as more than triple the amount of income received from non-cocoa income sources. This suggests a diversification in income, which is a key resilience indicator. In addition, income from cocoa, while increasing overall, decreased as a percentage of total income from **76%** to **55%**, showing that other sources of income are contributing to the increase in overall household income. There was also a decrease in farmers reporting that they experienced food hardship from **6%** to **2%**.

YOUTH



Child labor is not thought to be a significant concern in the Indonesian cocoa sector. Additionally, school attendance, already high, remained at **98%**. Cocoa Life is working to implement the recommendations from Embode, including piloting child labor monitoring and remediation systems. This work will inform future assessments of outcomes against the child labor KPI.

ENVIRONMENT



The study shows little conclusive data on the Environment focus area, as the KPIs were not developed at the time the Baseline was designed. Additional data is currently being collected for future outcome assessments. However, relevant data show positive behaviors in that most farmers are able to report the presence of shade trees on their farms and that no new land has been cleared since Baseline.

These are promising preliminary results for Cocoa Life in Indonesia, particularly for the Farming and Livelihoods focus areas. Methodological challenges, such as the small number of women participants in Cocoa Life, the ability to collect appropriate data around environmental practices, and the ability to link observed outcomes directly to the Cocoa Life program, will be addressed in future outcome assessments to ensure that the impact of the program on these areas is better understood.

FARMING

The Cocoa Life program is designed to help farmers improve productivity and limit harvest loss by encouraging GAPs through training and ongoing support. In turn, this should lead to an increase in farmer income from cocoa, especially when combined with the loyalty premium paid for participating in Cocoa Life. This section summarizes evaluation results related to the Farming focus area, specifically KPI 1 (net income from cocoa) and KPI 2 (cocoa productivity).



FARMING

KPI 1: Net income from cocoa



Across the 2015 cohort of farmers, the amount of cocoa sold increased significantly by 10%, the price of cocoa per kg increased by 31%, and income from cocoa increased by 37% (from \$459 to \$630), between Baseline and Wave 1. This increase in cocoa income appears to have contributed to the 43% increase in annual household income.

- Soppeng:** Farmers reported selling the same amount of cocoa at Baseline and Wave 1. However, they reported a 43% increase in the price/kg of cocoa sold and consequently a 38% increase in annual average cocoa income from \$428.31 to \$589.82.
- Lampung:** Farmers reported a 15% increase in cocoa sales compared to the previous year. They also reported a significant 46% increase in the price/kg of cocoa sold, as well as a significant increase in annual average cocoa income from \$306.76 to \$656.35 (114%).

Possible reasons for the increase in cocoa income are: improved productivity (see KPI 2); premiums paid by Mondelez International for participation in Cocoa Life; and market factors such as market price increases during the research timeframe. The prices per kg reported by Cocoa Life farmers were in line with Indonesian averages, suggesting that the increase in income may be most influenced by broader market factors.

Cocoa sold

Wave 1



Baseline

Cocoa price

Wave 1



Baseline

Cocoa income

Wave 1



Baseline



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“One of the main challenges I have encountered is pest and disease infestation. These conditions significantly impact productivity and the quality of our cocoa. I was prepared to convert the land into a natural rubber farm. After Cocoa Life was introduced, I no longer needed to. Through trainings, I’ve mastered new farming techniques, including pest and disease management. And after just two months, my farm showed significant improvement—infestations reduced and my cocoa yields nearly tripled. Cocoa Life has made a huge difference for my family and farmers like me.”

— Sutrisno, cocoa farmer, Waringinsari Timur Village, Adiluwih Sub-District, Pringsewu District, Lampung Province, Indonesia

KPI 2: Cocoa productivity



Across the 2015 cohort of farmers, the amount of cocoa harvested per hectare (ha) rose by 10% between Baseline and Wave 1.

Soppeng: The increase was slightly lower than the overall average at 8%.

Lampung: Farmers reported a similarly sized increase (11%) in cocoa harvest/ha.

Improved productivity may be related to an application of lessons taught during Cocoa Life training: farmers reported a greater adoption of GAPs, including a 10% increase in fertilizer use, which is statistically correlated with increased productivity, as well as increases in the use of herbicides (10%), insecticides (17%) and fungicides (16%), and a 3% increase in pruning. In addition, farmers reported a 25% decrease in loss of harvest, which may have contributed to improved productivity.

Cocoa yield

Wave 1



Baseline



FARMING

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“In partnership with Cocoa Life, the Indonesian Coffee and Cocoa Research Institute is working to map and improve productivity for cocoa farmers. This Mapping Cocoa Productivity research provides guidance on how to train cocoa farmers in implementing Good Agricultural Practices and accessing high-quality planting materials. We use these insights to improve cocoa productivity based on the specific conditions of each location and can also estimate cocoa production at the national level.”

— Dr. Misnawi Jati, PhD, *Director, Indonesian Coffee and Cocoa Research Institute (ICCRI)*



COMMUNITY

The Cocoa Life program aims to transform communities by providing knowledge and skills to cocoa farming families and communities, with a particular focus on empowering women. Here, the report summarizes outcomes for KPI 3 (increase in women's participation in decision-making processes) and KPI 4 (increase of capacity in the community to plan and advocate for their own social development).



KPI 3: Increase in women's participation in decision-making processes



The evaluation of KPI 3 is limited by the small sample of women farmers reporting on their own engagement (n=36) and the small sample of Village Leaders who can speak to the composition of leadership within their communities (n=50).

While almost all women farmers reported being members of farmer organizations, virtually none reported being leaders of farmer organizations. Most Village Heads reported that fewer than 10% of farmer organizations constituted women farmers, in line with the low incidence of women cocoa farmers in the regions of Indonesia covered by this study.



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Through Cocoa Life, I've been able to work with the community and Save the Children on developing Community Action Plans to improve our village conditions. I also learned how to reactivate our local women's groups, helping women learn about business and finance, as well as health and nutrition. I am personally wishing for a women's movement. I want housewives to develop their knowledge and independence, and learn how to contribute to decision-making in the household and at the community level. I also want the children in my community to be healthy and educated. These are all important goals for Cocoa Life, so I'm grateful to be involved.”

– Ibu Veronica Ngatini, Community Development Committee (CODEC) member, Purwodadi Village, Pringsewu District, Bandar Lampung Province, Indonesia

KPI 4: Increase of capacity in the community to plan and advocate for their own social development



More than half of Village Heads reported new community projects, increasing by 11% in the 12 months since the Baseline study, and the total number of projects reported increased by 26% from 235 to 296 at Wave 1. The government remained by far the most common source of funding, providing budget for 97% of the projects at Wave 1.

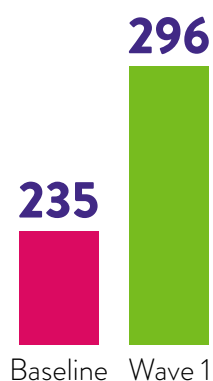


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Cocoa Life reached out to the most vulnerable groups in communities that were otherwise neglected. In the first year, Cocoa Life worked with communities, particularly women and youth, to become engaged and advocate for their own needs. Through the program, we saw how budding cocoa farmers could actively contribute to local development plans and gain equal standing in their communities. Community Action Plans are in line with the Indonesian government’s strategy to support rural communities. It is very encouraging to see how several community development committees have managed to get their action plans supported by local government.”

– Ross Jaax, Program Director, SCPP, Swisscontact

Community projects



THOUGHTS FROM MONDELÉZ INTERNATIONAL

We believe women are catalysts for change and amplify the impact of Cocoa Life. From our experience on the ground, we've seen that an increase in women's involvement in cocoa communities leads to better management of family finances, more children attending school, increased income from sources other than cocoa and more sustainable, thriving communities. Cocoa Life is focused on promoting women's empowerment across its five focus areas. We continue to engage our partners to improve women's access to training, farm inputs and finance, as well as to ensure their inclusion in decision-making processes and environmental programming.

However, women are not typically registered as farmers despite often playing an active role on family cocoa farms. In evaluating women's empowerment in Indonesia for this report, Ipsos found the number of respondents was low because the survey focused on farmer organizations, which primarily consist of men. Beyond farming, Cocoa Life extends across the community. For instance, we train female community members on leadership, public speaking and action plan development, ensuring at least 30% of Community Development Committee (CODEC) members are women. The impact of this work is described in the quote by Ibu Veronica. We are refining how our outcome assessments can better capture the roles that women play in farming and across the broader community, including incorporating qualitative research. It will allow us to understand and strengthen the impact Cocoa Life has on women in cocoa communities.



COMMUNITY



LIVELIHOODS

The Cocoa Life program is designed to strengthen entrepreneurship and economic resilience by helping farmers develop non-cocoa sources of income and improving farmer access to financial services. Thus, this section summarizes outcomes for KPI 5 (net income from sources other than cocoa) and KPI 6 (cocoa farmers reduced vulnerability to external shocks).

KPI 5: Net income from sources other than cocoa



Across the 2015 cohort, the percentage of Cocoa Life farmers who reported receiving any income from a source other than cocoa nearly doubled, increasing from 44% of farmers at Baseline to 82% of farmers at Wave 1. This corresponds with a decrease in the proportion of farmer income that came from cocoa, from 76% at Baseline to 55% at Wave 1.

The average increase in income from all non-cocoa sources at Wave 1 was \$828.10 USD/11,019,530.06 Rupiah, representing a 344% increase—more than three times higher than the average Baseline income. This suggests that farmers are finding additional ways to improve their income as they are increasing their income from cocoa (as reported under KPI 1).

Soppeng: The number of farmers who reported receiving income from any non-cocoa source increased from 47% of farmers at Baseline to 77% of farmers at Wave 1. The average increase in income from all non-cocoa sources combined was \$864.89 USD/11,509,072.17 Rupiah, which is more than two times higher than the average Baseline income (267% increase). Among Soppeng farmers, cocoa represented just 58% of farmer household income at Wave 1 compared with 75% at Baseline. Rental income from houses owned provided a new income source for Soppeng farmers at Wave 1 (averaging 13% of farmers' total income).

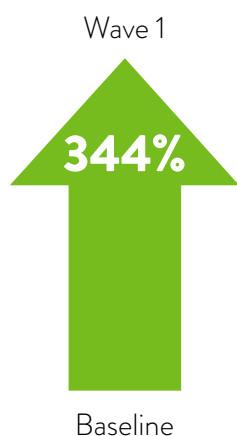
Lampung: The number of farmers who reported receiving income from any non-cocoa source more than doubled, increasing from 41% of farmers at Baseline to 85% of farmers at Wave 1. The average increase in income from all non-cocoa sources combined for Lampung farmers was \$804.70 USD/10,708,149.18 Rupiah, which is more than four times higher than the average baseline income (431% increase). Among Lampung farmers, cocoa's contribution to their total income declined from 76% to 53%. Rental income from houses owned provided a new income source for Lampung farmers at Wave 1 (averaging 7% of farmers' total income).



LIVELIHOODS



Net income from non-cocoa sources



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“Cocoa Life fully supported us to form a cooperative nursery. The field experts help us understand what we need to do, beginning with proper planting material and high-quality seeds to good nursery management. We have an opportunity to become a professional service provider for other farmers who need grafting and pruning service, and this will result in additional income for us. We are bringing some talented young people from youth training programs for those activities, and this nursery will inspire the next generation to learn more about cocoa farming.”

— Mr. Endriyanto, Head of Professional Nursery Management, Kakao Sinar Jaya Cooperative, Pringsewu District, Lampung Province, Indonesia

KPI 6: Cocoa farmers reduced vulnerability to external shocks



There are multiple factors related to reducing vulnerability to external shocks, which is frequently described as “resilience” in the sustainable development field. These factors include diversification of income sources, reduction in food hardship and access to finance, whether through savings or loans.

Across the 2015 cohort, farmers reported an increase in the total number of sources of income for their household, from 1.5 to 2.4 sources, and that income from these sources increased between Baseline and Wave 1 (as reported under KPI 5). While food hardship was low with just 6% of farmers reporting food hardship at Baseline, it decreased further at Wave 1 to just 2%. While this study did not ask farmers about savings, farmers reporting increased focus on financial management through bank accounts increased from 23% at Baseline to 38% at Wave 1 and there was a 3% increase in farmers reporting access to loans.



LIVELIHOODS

Soppeng: Farmers reported an increase in the total number of sources of income for their household, from 1.5 to 2.3 sources, and that income from these sources increased between Baseline and Wave 1 (as reported under KPI 5). While food hardship was low with just 7% of farmers reporting food hardship at Baseline, it decreased further at Wave 1 to just 3%. Farmers reporting increased focus on financial management through bank accounts increased from 29% at Baseline to 55% at Wave 1 but there was a 10% decrease in farmers reporting access to loans.

Lampung: Farmers reported an increase in the total number of sources of income for their household, from 1.5 to 2.5 sources, and that income from these sources increased between Baseline and Wave 1 (as reported under KPI 5). Again, food hardship was low with just 5% of farmers reporting food hardship at Baseline, and it decreased further at Wave 1 to just 2%. Farmers reporting increased focus on financial management through bank accounts increased from 20% at Baseline to 28% at Wave 1 and there was a 6% increase in farmers reporting access to loans.

Income sources



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As the treasurer of KUBE Mawar, one of our local women’s groups, my role is to oversee finances for our pastry production business. When our group was first established, we didn’t know how to properly manage the business and the group was eventually shut down. At a Community Action Plan meeting, we proposed a group management and business skills training for the women’s groups in our village. Cocoa Life, through Save the Children, conducted the training and provided regular coaching and mentoring. We’ve since learned valuable skills in bookkeeping and business planning, which have helped improve our sales and family incomes. We also started a Village Savings and Loan Association with Cocoa Life and are continuing to build our financial knowledge. We hope to expand our group and create more jobs for our village in the future.”

— Ibu Nurlela, Bacu-Bacue Sub-Village, Citta Village, Citta Sub-District, Soppeng District, South Sulawesi, Indonesia



THOUGHTS FROM MONDELĒZ INTERNATIONAL

Cocoa Life is helping cocoa farmers build sustainable livelihoods by promoting entrepreneurship and strengthening their economic resilience. This involves diversifying farmers' income sources, improving their financial literacy, providing access to micro-finance and loans, and encouraging a stronger savings culture. Ipsos' data demonstrates the progress we have made across these areas.

In Indonesia, for instance, we're teaching farmers about household and farm financial management and how to open savings accounts, in collaboration with the local national bank (Bank Rakyat Indonesia). We've also introduced Village Savings and Loan Associations (VSLAs), enabling members to make monetary contributions into a shared pool and take out low-interest loans. Annually, the total pool is shared among them, which most members have used toward education, health and agricultural inputs. Through our interventions, we're continuing to work with cocoa communities on improving their financial stability and resilience, so they can better support themselves and their families.



LIVELIHOODS



YOUTH

While child labor in Indonesia is generally lower than in other cocoa-growing origins,¹ Cocoa Life aims to address the root causes of child labor and prevent its worst forms, and works to encourage young people into cocoa farming careers in the long-term. In this Youth section, there are no metrics included directly addressing KPI 7 (reduction in child labor and forced child labor). However, this report does present outcomes related to school enrollment, as well as KPI 8 (increase in career opportunities for youth in cocoa sector).

KPI 7: Reduction in child labor and forced child labor



In June 2017, Embode, an independent human rights consulting agency, published an assessment of the child labor situation in the Indonesian cocoa sector and found that child labor was not a significant concern in the cocoa-growing communities visited.¹ Additionally, school enrollment—an important variable in understanding child labor—is high. At Wave 1, farmers continued to report virtually universal school attendance at 98%, unchanged since Baseline.

The Embode report made a number of recommendations to Cocoa Life to build on its holistic approach to address child labor, including:

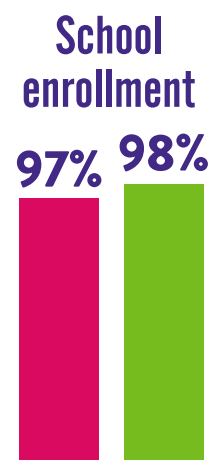
1. Develop interventions to ensure children stay in school as long as possible, as the primary response to identified risk.
2. Integrate the existing program more intentionally with relevant social assistance programs to help the most vulnerable children and families access resources.
3. Engage more actively in the national cocoa sustainability conversation.

Cocoa Life is working to implement Embode’s recommendations, including piloting child labor monitoring and remediation systems in 17 Cocoa Life communities in Lampung and Soppeng this year, with a planned roll-out across all Cocoa Life communities from 2018. This work will inform future assessments of outcomes against KPI 7.

¹<https://www.cocoalife.org/progress/embode-child-labor-assessment-indonesia>



YOUTH



Baseline Wave 1



THOUGHTS FROM MONDELĒZ INTERNATIONAL

As one of the world's largest chocolate companies, we have a responsibility to confront the issue of child labor head on in our own supply chain. That's why child protection is one of Cocoa Life's cross-cutting themes. Over the years, we've taken a holistic child-centered approach that focuses on addressing the root causes of child labor and helping to prevent its worst forms. Working with Save the Children and Wahana Visi Indonesia, we're training Indonesian communities on child labor issues and workplace standards for youth, and strengthening local child protection systems.

Together, we are making a difference. But we know there is still work to be done. Recently, we commissioned Embode to analyze the national child protection infrastructure in Indonesia. Based on the assessment, we will build on our efforts to ensure at-risk children remain in school and to improve their families' access to resources. We're also currently piloting a community-based Child Labor Monitoring System in 17 communities. As part of this pilot, we are building the capacity of Village Child Protection Committees (Komite Perlindungan Anak Desa or KPAD). These KPADs serve to secure the well-being of children by reporting child labor issues to the Child Protection Office (P2TP2A) of the district- and province-level government, so that the authorities can follow up on reported issues and coordinate appropriate remediation actions. Looking ahead, we'll continue to ensure child protection remains a priority in Indonesia, advocating for best practices and encouraging others to follow our lead.



YOUTH



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Child labor does not take place in a vacuum. It is enabled and triggered by a multitude of socioeconomic factors, of which structural poverty and lack of access to education play a very big part. Holistic community development, with children at its heart, makes all the difference to a long-term sustainable response to child labor.”

— Aarti Kapoor, *Managing Director, Embode*

KPI 8: Increase in career opportunities for youth in cocoa sector



There was a 23% increase in farmers reporting that their children were interested in entering cocoa farming from 35% at Baseline to 43% at Wave 1, although the average number of youth who had permanently left cocoa farming remained static at just one young adult per household. However, the number of youth per household leaving cocoa farming permanently would be a longer-term impact that would be unlikely to show up at this stage. No differences between Soppeng and Lampung were reported for these indicators.

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“At Olam, we’re working with Save the Children to inspire the next generation of cocoa farmers. Our program trains youth in Good Agricultural Practices, including pest and disease management, grafting techniques, composting, pesticide use and farm maintenance. In 2016, we educated 249 young men and women, ages 18 to 24. For me, the most exciting thing about our Cocoa Life program is seeing young people becoming motivated. They learn the skills they can use for their livelihoods. By improving their cocoa farms, we are training youth to become agents of change and models for their peers.”

— Muhammad Sanne,
Program Coordinator, [Olam Cocoa Indonesia](#)



YOUTH

Youth interested in entering cocoa farming



ENVIRONMENT

Maintaining cocoa ecosystems and protecting the landscape are critical to the future of cocoa farming communities. For this study, neither KPI 9 (helping future farming generations through sustainable natural resources used on farms) nor KPI 10 (increase in conservation of forests and maintenance of ecosystems) had been agreed upon at the time the Baseline was designed, and were therefore not included in the study. However, the study did collect data on three areas that are relevant to KPI 10.

KPI 10: Increase in conservation of forests and maintenance of ecosystems



The metrics collected in this study that are relevant to KPI 10 are the presence of shade trees, which protect cocoa trees and help them flourish. They also promote biodiversity and improve soil conditions on cocoa farms and the clearing of new land for farming, which is felt to be problematic for forest preservation.

Across the 2015 cohort, farmers reported a slight increase in the existence of shade trees on their farms, from 88% at Baseline to 91% at Wave 1. Farmers also reported virtually unchanged levels of new land clearance, with just 2% reporting new land clearance at Wave 1 compared with 1% at Baseline. There were no regional differences in these metrics.

Shade trees on farms



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“The provision of seedlings through the Cocoa Life program aims to provide economic value. Aside from being a conservational effort, we also expect to increase soil fertility, raise the available oxygen, control erosion and improve watershed conservation.”

— Edi Karizal, Chief Representative, Watala

METHODOLOGY FOR OUTCOME ASSESSMENT

Ipsos evaluates Cocoa Life based on 10 global KPIs. As new Cocoa Life participants enter the program each year, they become a new cohort for a longitudinal panel study. As the program “scales up”—or expands into new areas—new longitudinal panel studies commence with these new cohorts. These studies are part of Cocoa Life’s outcome assessment.

The longitudinal panel study consists of a **Farmer Impact Study (FIS)** and a **Community Impact Study (CIS)**. For each cohort, a Baseline and at least two follow-up assessments will be collected at yearly intervals. The same farmers, community leaders and community members will be included at each interval.

This longitudinal evaluation approach using a panel design offers great advantages—the panel design reduces potential biases in measuring change in survey responses, while simultaneously allowing an evaluation of the long-term effects of Cocoa Life program participation.

The FIS is implemented with the following evaluation tools:

1. **A Farmer Household Survey (FHS)**
2. **A Farm Observation Survey (FOS)** with a subsample of farmers included in the FHS
3. **Follow-up In-depth Interviews** with a subsample of farmers included in the FHS*
4. **Last Mile Verification (LMV)** to validate FHS responses related to farm output and farming practices

The CIS is implemented with the following evaluation tools:

1. **A Village Leader Survey (VLS)**
2. **Community Focus Groups***

*Not included in this report but to be included in future waves

Baseline FIS and CIS data for a sample of the 2015 cohort of farmers in Lampung and Soppeng were collected in 2015, and follow-up (Wave 1) data were collected a year later in 2016.

TABLE 1: WAVE 1 SAMPLE SIZES BY EVALUATION TOOL

	LAMPUNG	SOPPENG	TOTAL
FHS	305 farmers (15 villages)	194 farmers (11 villages)	499 farmers (26 villages)
FOS	50 farms	32 farms	82 farms
VLS²	40 Village Heads	10 Village Heads	50 Village Heads
LMV	130 farmers; 9 collectors	70 farmers; 5 collectors	200 farmers; 14 collectors

Note: The 2015 cohort study was designed by Harvard University with data collection implemented by Survey Meter between September 2015 (Baseline) and October 2016 (Wave 1). Ipsos assumed responsibility for the evaluation at the Baseline analysis phase (Fall 2016), and will manage future outcome assessments.



Limitations

This report contains data from the first outcome assessment carried out for the Cocoa Life program. During the study, a number of methodological limitations arose. These limitations will be addressed for future outcome assessments.

Timing: When the first farmers entered the program and the Baseline survey was conducted, many pieces of the Cocoa Life program were still in the process of being developed, and they were therefore not factored into study design. This is particularly apparent for the Community, Youth and Environment focus areas. For new cohorts entering the program in the future, the outcome assessments are significantly broader and more able to speak comprehensively to the overall program objectives.

Breadth: The 10 Cocoa Life KPIs are extremely important in demonstrating the ultimate goals of the Cocoa Life program, and critical for the ongoing accountability of Mondelez International to its stakeholders. However, the impact evaluation work will need to look at a broader picture to ensure that the KPIs can be understood in context of the sustainable development challenges that they wish to address. For example, measuring community engagement and leadership levels amongst women is not sufficient to understand the impact of the Cocoa Life program on women in the context of the broader women's empowerment agenda.

Attribution: Attributing observed outcomes to a program is the most challenging aspect of any evaluation. In this study, the evaluation team designed a Diff-in-Diff treatment-comparator method (where a group of farmers not participating in the Cocoa Life program is compared to participating farmers). However, in the preliminary analysis, the treatment and comparator groups did not match sufficiently to make a valid comparison. The Ipsos team is working on developing a comparator group using propensity score matching (PSM) that may be viable for use in future outcome assessments. In the absence of a viable comparator group, the analytical team uses various types of correlation analyses and triangulation with other data sources to understand the linkages between the program and observed outcomes.

Impact on Women: Ensuring the impact of the Cocoa Life program on women in cocoa communities is an extremely important program goal. In the case of this evaluation, there were too few women farmers in the regions covered to capture and disaggregate the data by gender. The community evaluation was not designed in such a way to deeply explore the impact of the Cocoa Life program on women in cocoa communities overall. This will be addressed through a broader community impact study, including qualitative research, for future outcome assessments.



WE BELIEVE

Integrity and transparency are as important as sun and water.

A sustainable cocoa supply begins with thriving farmers.

Partnership is the key to lasting change.

Efficient farming practices lead to financial security.

The work of children is education and play.

Gender equality benefits everyone.

Conserving the land is a promise to future generations.

Together we grow: Cocoa Life



