COLLABORATING TO BOOST SUSTAINABLE COCOA PRODUCTION IN INDONESIA

This case study has been developed in the framework of the Seas of Change initiative by Monika Sopov, Wageningen Centre for Development Innovation, Wageningen UR and Roger Reuver, Reuver+Co Communication Design.
The program area supported by Rikolto Indonesia is situated in Polman (Polewale Mandar) district in West Sulawesi province. The main commodity produced in this area is cocoa, with a total production of 79,029 MT on a total cocoa farm area of 119,884 ha.

As in other parts of Sulawesi, the main problems in cocoa production in Polman are low quality and low yields because of pests, diseases and low use of fertilizers. Average yields are only 0.5 tons ha/year cocoa, whereas 2 tons/ha/year should be achievable under optimal conditions.

### Purposes

The Sustainable Agriculture Chain Development (SACD) program seeks comprehensive development of the cocoa sector in Polman - from cultivation through market access - which will enable cocoa farmers to maximize their incomes.

### Strategies

- Better farming practices, which lead to greater productivity and quality improvement and hence, increased income from higher yields.

### Objectives

- Establish public-private partnership to increase farmers' cocoa yield. Partnership offers extension services through peers, higher price through certification and linking farmers to buyers.

### Funding Resources

- Rikolto, Belgian Directorate General for Development (DGD), Cordaid

### Program Duration

- 2010 - 2017

### Budget

- Funding from Rikolto starting in 2010: € 70,000
- Funding for 2011 - 2013: € 275,000
- Funding for 2014 - 2017: € 275,000

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### Partnership

- Rikolto, WASIAT, MARS, AMANAH Cooperative

### Key Milestones and Targets

- No. of beneficiaries, 2010: 1500 farmers
- Target no. of beneficiaries, 2013: 1800 farmers
- Target no. of beneficiaries, 2017:

- Average cocoa production, 2010: 327 kg / ha
- Target average cocoa production, 2013: 412 kg / ha
- Target average cocoa production, 2017: 750 kg / ha

- Farm gate price, 2010: IDR 20,000 ($ 2.33) / kg dry cocoa
- Target farm gate price, 2013: IDR 30,000 ($ 2.24) / kg dry cocoa
- Target farm gate price, 2017: IDR 30,000 ($ 1.99) / kg dry cocoa

- Average annual farmer income, 2010: $ 490
- Target average annual income, 2013: $ 1430
- Target average annual income, 2017: $ 1800
Indonesia’s cocoa production which once topped global production, has been declining as its cocoa plants age, and production / ha decreasing.

The Indonesian government and the parliament issued a number of policies which discourage cocoa farmers and industry players from undertaking plantation.

- In order to incentivise investment into the downstream cocoa industry, a progressive export tax was introduced in April 2010 that increases in line with global prices for raw cocoa beans under Ministry of Finance Decree No. 67/2010. The tax goes up to 15% when the world price exceeds $3,500 USD /MET. This tax maintains ample domestic supply for processing, however it has been heavily criticised considering the low domestic uptake which results in an excess. Increasing the capacity of the downstream sector, which accounted for 158,075 MET and 103,055 in exports for 2010 (Ministry of Trade) is now the priority.

- Governmental budget reduction for cocoa development: from 1.2 trillion IDR (USD 90 million) to 325 billion IDR (USD 28 million) in 2016 due to low state revenue.

- Inefficient approach to sector development: The Indonesian government launched a USD $350 million program, National Cocoa Movement in 2009 to boost Indonesia’s cocoa production. The results of this initiative have been limited due to the lack of mentoring being provided to the farmers once new seeds and fertilisers have been distributed on better farming-techniques.

- Other regulations that also hamper the local cocoa industry are cocoa bean certification and local farmers’ obligation to ferment their cocoa beans before selling their harvest in order to add value. As a result, many farmers switched to other crops which have ultimately led to the decline in production.

- Both the Ministry of Trade and the Ministry of Agriculture have their road map to develop the cocoa sector. The Ministry of Trade focusing on the processing and export of cocoa and cocoa products, while the Ministry of Agriculture is focusing on the primary cocoa production; however, there is still a disconnect between the two.

Investment in the downstream sector requires significant capital and in addition to that the needed raw material supply. The scale of the issue is reflected in the lack of new investment in the processed cocoa industry and closing of 10 small-scale industry players between 2010-16.

About 70% of the cacao trees have passed their most productive age, but smallholders (working on 90% of production areas) lack the capital for wide-scale rejuvenation.

Indonesian cocoa farmers have been grappling with disappointing harvests in recent years as a result of crop diseases and pests as well as adverse weather.

Conditions could get worse, as experts predict that climate change could cause prolonged dry periods and more extreme rainfall – and soil erosion – in the wet season.

As a result, both the quantity and quality of Indonesian beans are left wanting. Per-hectare yields have fallen in recent years to around 700 kg/ hectare, far below a potential yield of up to 1,500 kg/hectare.
Global demand for certified sustainable cocoa has been increasing considerably in recent years and the International Cocoa Organization estimates that demand for sustainable cocoa will rise to about 1.5 million tons in 2027, implying that a considerable growth in supply of sustainable cocoa is required to meet future demand.

To meet voluntary targets by key companies, it is estimated that over 25% of Sulawesi’s cocoa crop will need to be traceable and certified by 2020.

Domestic demand for chocolate products

- Indonesia’s cocoa consumption is still low at an average of 0.5 kg/capita/year, much lower than the average consumption of other Asian countries such as Singapore and Malaysia that reaches 1 kg/capita/year, and the European countries of more than 8 kg/capita/year.

- As Indonesia’s middle class continues to expand and disposable incomes rise, so will the consumption of chocolate and other cocoa-based products. With double-digit growth rates, Southeast Asia is the driving force behind worldwide chocolate consumption, according to global confectionary maker Mars.
In 2005, Mars introduced the concept of the Cocoa Development Clinic (CDC) in West Sulawesi, with the aim of establishing ‘outreach’ centres that would expose farmers to the latest technology and regionally appropriate techniques. The CDC was set up as a centre for demonstration and training. The idea was that the CDC would visibly teach nearby farmers how to rehabilitate unproductive cocoa trees through various grafting techniques and better crop maintenance. The CDC would also act as a platform for knowledge-sharing and co-investment between farmers and the private sector. In addition to this technology transfer system, Mars also began working with local vocational high schools and colleges to include sustainable cocoa farming system into their curriculum and to allow students to enrol in an internship program.

Mars has taken a direct approach to ensuring quantity and quality in Indonesia through a programme to develop “cocoa doctors” which teaches farmers modern production techniques focusing on giving cocoa farmers bigger yields and profits to attract the next generation of producers. Indonesian cocoa farmers can now attend its Sulawesi cocoa academy that can teach up to 250 people a year about the latest agronomic techniques. Graduates may go on to become “cocoa doctors”, who not only grow cocoa, but also sell modern seedlings and pesticides and offer tree rehabilitation tips. Farmers using the cocoa doctors may sell their output to any buyer they choose. Once certified, a Cocoa Doctor can run his own Cocoa Village Clinic as a small business. They typically have demonstration gardens, facilities for seed production, and inputs they can sell to local farmers to help them boost production and adopt better cocoa farming practices.

As of 2015, there were 30 such “doctors” trained by Mars, and each is expected to support a minimum 100 farmers in the field. Mars hopes to have 150 “doctors” by 2017 and aims to triple this by working with partners like Ecom, Olam and Cargill.

CDC staff regularly monitors the activities of Cocoa Village Clinics and Cocoa Doctors to ensure they are delivering quality training and support; any that do not meet certain quality standards are disqualified. In theory, a single CDC can deal directly with up to 20 CVCs, while CVCs are expected to work directly with around 100 individual farmers.

Organisations (such as Swisscontact, Rikolto, Mercy Corps etc.), that choose to collaborate with Mars need to commit to a minimum of 5 years of support, and the implementation of the “full package” of interventions.
For companies like Mars, the work being done by NGOs to build the capacities of local farmer groups is a crucial missing link. These companies have neither the time to conduct such development work on the ground, nor the development concepts to fit their cocoa-trading activities into a framework to promote sustainable livelihoods and farming systems.

RIKOLTO

Rikolto (previously known as VECO/Vredeseilanden) is an NGO with Belgian roots. They were the first NGO in Indonesia to work with Mars Food to train ‘cocoa doctors’. Vredeseilanden selects potential cocoa doctors; Mars provides them with the necessary technical training to enable them to become professional service providers to the cocoa farmers in their community, distributing fertiliser and planting material, and giving production and business-related training. The farmers have set up a price information system, which means that they receive the world market price on their mobile phone every day. There are clear price agreements between the farmers and Mars.

The work of Rikolto with farmers and farmer groups facilitates improvements in quality, traceability, labelling, and collective selling. Rikolto is also working together with another NGO based in the field: Wasiat (Wahana Sukses Pertanian Terpandang = Centre of Success for Excellent Agriculture).

WASIAT

WASIAT organizes trainings and farmer learning visits to improve production techniques and address farm management issues. WASIAT also provides support in capacity building and organizational development in other trajectories of Rikolto: cocoa villages, outsourcing model.

Exit strategy: There are different exit strategies Rikolto is following for the different commodity chains. For example, in case of coffee, Rikolto is a supporting actor and when trading relationship between farmers and exporters is established, there is a direct contract and both are happy with the quality of relationship, Rikolto phases out. In case of cocoa, there is currently only raw material production. Rikolto plans to phase out when Amanah produces chocolate as finished goods.
**AMANAH**

AMANAH is a farmers’ cooperative centre (a “cooperative’s cooperative” of sorts) which acts as an administrative coordinator in the collective marketing enterprise in the cocoa chain. The program is being run in eight sub-districts, six of which are involved in collective marketing of cocoa that has been certified sustainable. The program aims to strengthen farmer organization access to market and finance (i.e. shortening the value chain), and build farmer’s post-harvest management skills.

AMANAH was officially registered as a farmer-owned multi-business cooperative on 12 February 2007 with 11 farmer groups (about 250 members), currently it has 3250 members. Because of its broad program area, AMANAH developed cooperative clusters in each sub-district. The activities of the sub-district cooperatives are similar, covering production, postharvest management and collective marketing as well as housing.

On Sulawesi, at least half a dozen international traders buy beans from smallholder cocoa farmers. However, the farmer groups are largely price takers and cannot significantly influence the prices these traders offer. To date, AMANAH is the only strong farmer organisation working on cocoa in Sulawesi, and there is no strong national federation to protect cocoa farmer interests. Therefore, farmer organisations need to get stronger and better organized at both national and local levels to improve their bargaining capacity.

The cooperative has two criteria for selecting farmers: they must have an operating cocoa farm, and must have experience with cocoa production. In mid-2011, 67 AMANAH farmer groups qualified for UTZ certification of the unfermented cocoa beans they produce after a rigorous 10–month process. Only 5–10% of members sell cocoa currently to AMANAH, which is actually acceptable for the time being. If all 3200 members would bring produce to AMANAH to sell (average are 1 ha, average yield 500 kg/ha), AMANAH would need IDR 100 billion (USD 7.5 million) to be able to pay for produce and wait for 2–3 days until they get paid by Mars. Currently, AMANAH needs less than IDR 30 million (USD 2,250) to manage the process of buying and selling.

Breakeven point for farmers: 750 kg/ha/year (1 ha can support a family with 2 children). Typically holding less than one hectare, smallholder farmers lose out on economies of scale because it makes little sense for them to introduce sophisticated equipment. The largest cost element in both establishing and maintaining a plantation is the labour. According to the cost analysis, the production cost, at an annual production of 100 tons of dried cocoa beans, comes to IDR 79.50/kg dried beans.

**VISION OF THE COOPERATIVE:**

Provide better income for farmers and improve services offered by the cooperative. Services provided to farmer by AMANAH

- Saving and credit
- Collective marketing: collection, repacking, quality control, sale (cocoa; organic pesticide, organic fertilizer)
- Advance payment to some farmers in form of rice, deduct it later from farmer’s cocoa sale
- Health service to farmers (potential future service)
Current challenges of AMANAH as organization:

Still low average production of cocoa: Trainings and mentoring from Armajaro, Mars and the NGOs brought increased awareness of farmers on a good quality of the product and adoption of the required internal control system (ICS). Results from the good production practices have increased farmer’ incomes and improved farmers’ health through proper chemical use. Previously, the average of cocoa productivity was 0.3 ton per hectare and now after trainings and mentoring some farmers have been able to produce up to 0.8 ton per hectare. However, this is still far from the expectation of 2 ton per hectare.

Financial viability regarding collective marketing of cocoa is at risk: Armajaro offered guarantees to enable Amanah to access bank credit. This has not been continued by Mars, leading to serious cash flow problems and effective prohibiting to offer sale services to a large number of farmers as farmer are paid directly by Amanah, while the cooperative has to wait for a couple of days to get paid by Mars. The result is decreased sales (200 t/year).

There are many members with different income, different vision, different background; yet 1 member 1 vote applies, which hamper decision-making when it comes to investments on cooperative level.
COCOA SUSTAINABLE PARTNERSHIP

CSP is a public–private forum for the advancement, communication, collaboration and mutual benefit of stakeholders actively engaged in cocoa development initiatives in Indonesia (CSP 2013).

Members of CSP include the Government of Indonesia (GoI), national and multi-national companies, national and international NGOs, donors, research agencies, certification labels and academics working together towards sustainability of Indonesian cocoa sector. The vision of CSP is to serve as a coordination forum for the development of a sustainable, profitable and competitive Indonesian cocoa industry, for the mutual benefit of all stakeholders.

Specifically, CSP provides good agricultural practices (GAP) guidelines for the farmers to implement, to ensure that their produce meets the buyer’s demand. These guidelines also help farmers obtain UTZ4 certification, which is a prerequisite of the buyers. Rikolto’s work on the sustainable cocoa chain is more focused on the farmers, farmers groups and cooperatives. The foundation of CSP’s role is the 2020 Cocoa Roadmap, which aims to improve the cocoa chain as a whole, including supporting farmer level capacity building.

Mars and Rikolto are among the members of the board of platform. The main objective of the platform is to share information of the relevant programs implemented by the members and provide policy advice to the government, including strategy on development and implementation of the national curriculum of cocoa (NCC).
Evaluation of inclusiveness of the Mars–Amanah trading relationship based on the new business model principles of the LINK-methodology

The LINK-methodology has been used to evaluate the inclusiveness of the trading relationship between Mars and Amanah, more specifically tool number 3 on New Business Model Principles. This tool is generally used to interview both buyers and sellers, the filed work in Indonesia did not present the opportunity for the researchers to meet Mars staff. Therefore the conclusions below are based solely on the interview with the seller (Amanah), NGO staff and desk research.

The tool consists of 6 New Business Model Principles:

1. Chain-wide Collaboration
2. Fair and transparent governance
3. Effective market linkages
4. Equitable access to services
5. Inclusive innovation
6. Measurements of outcomes

For further reference on the LINK-Methodology, please refer to https://cgspace.cgiar.org/handle/10568/49406
INCLUSIVENESS OF MARS-AMANAH BUSINESS RELATIONSHIP

1. Chain-wide collaboration

Explanation of the principle: the resolution of problems, in both commercial and social aspects of the New Business Model, means that all, or most, of the actors in the chain need to establish shared goals for collaboration. The development of a systemic view of the chain recognises and values the interdependence of the actors. Reaching and implementing agreements often involves identifying one or more "champions" along the chain who will lead the process.

Application to Mars-Amanah: There is clear movement to get the sector organized to solve sector-wide issues, which is shown by the establishment of the Cocoa Sustainability Partnership. Part of the original purpose of the CSP was to align the many cocoa programs taking place across Indonesia through broader agreement on the key issues and solutions for the industry. It was also established to act as a forum and national network for sharing key core learning and developments in order to improve the condition of cocoa estates. As part of its ongoing role, the CSP is tasked with increasing communication, coordination and collaboration between public and private stakeholders engaged in activities promoting the development and transfer of cocoa farming technology and cocoa farming business skills.

One of the key challenges in the sector is ensuring sustainable quality supply. Mars clearly communicates the requirements for farmers and supports them in achieving the required quality providing knowledge and technology transfer (cocoa doctors, etc.). One of the weaknesses of Amanah is that the cooperative lacks a much needed IT system for faster and more efficient record keeping and communication with Mars.

Score 3

2. Fair and transparent governance

Explanation of the principle: Farmers and their organisations need to be linked to a stable market that not only provides them with access to key services but also has clear signposting in terms of quality standards, volume and price (Principle 4). These linkages should contribute to improved livelihoods for the producers. For buyers, the linkage must provide a consistent supply of safe, quality products at competitive prices. In practice, achieving both producer and buyer goals entails creating and delivering social and commercial value along the entire length of the chain.

Lack of formal contract: originally there was a contract with the buyer, Armajaro.

However, ECOM bought Armajaro in 2013 and no longer bought cocoa from Amanah. The terms of the trading relationship have changed when Mars took over the role of Armajaro. Currently, there are no formal contracts between Mars and Amanah. Sales has been decreasing since Amanah has been selling cocoa to Mars. Sales to Mars were 400 t in 2015 and 220 t in 2016. Farmers did have more cocoa, however they rather sold it to others, who offered better price.

Quality assurance: Until mid-2008, Armajaro collected the cocoa to transport it to Makassar – an eight-hour drive away. Farmers had little market information and the quality control was done at the destination in Makassar. It regularly happened that the quality assessment in Makassar was below the farmers’ own assessment - which bred discontent. In 2008 Armajaro agreed to put a warehouse in Polman district and to organize quality control there in the presence of the farmers. Transparency and trust increased between farmers and the company. This has been continued by Mars, offering training to Amanah staff on sampling and assessing quality.

Score 4

Price: Starting in 2009, Armajaro began sending daily mobile phone text messages containing cocoa market price information to the farmer group leaders. This practice has been continued by Mars until now. The company sends market price information to Amanah, and the cooperative distributes them among members via mobile phone after discounting a fee for the cooperative, which is between IDR 800-2000 depending on competitors’ prices and operational costs of the cooperative.

As cocoa prices are very volatile, having storage to wait for better price can improve farmers’ income. Both Amanah as well as Mars offer this kind of services to farmers up to 3 months so that farmers can achieve better price.

Certification: In 2010 Armajaro began supporting the certification process to enable AMANAH farmer groups to meet UTZ Certified requirements for Nestlé. Later, farmers also acquired Rainforest Alliance certification. For the farmers in Polman district, Armajaro proved to be an important lead buyer whose increased proximity has facilitated better prices, terms, and flows of market and quality information. Armajaro wanted to see 50-100% of its total volume procured through this mode of sourcing by 2020. Amanah established an internal control system (ICS) to ensure compliance with certification requirements. An external auditor checks record keeping on regular basis and if auditor needs more information system, they send an expert to farmer. Certification cost IDR 70 million (USD 5.2 million), maintaining the ICS costs 60 million (USD 4.5 million).

Traceability: farmers provide signature on the back of sacks, and they record what they sell to Amanah. Farmer groups bring sacks to Amanah with numbers and signatures. At handover, Amanah records number and sign as well. This way, Mars can trace back produce to farmer groups in sub-district based the numbers, not yet to individual farmers.
Explanation of the principle: farmers and their organisations need to be linked to a stable market that not only provides them with access to key services but also has clear signposting in terms of quality standards, volume and price (Principle 4). These linkages should contribute to improved livelihoods for the producers. For buyers, the linkage must provide a consistent supply of safe, quality products at competitive prices. In practice, achieving both producer and buyer goals entails creating and delivering social and commercial value along the entire length of the chain.

While Mars provides market for the farmers, the price it offers are not always the best, therefore farmers might sell to other buyers. There is no strong commitment on the farmers’ side to build strong trading relationship with Mars, which is shown by the declining sales, and as the farmers explained also due to lack of guarantee by Mars towards the bank so that Amanah could get access to pre-finance their operating costs. Thus, the trading relationship is so profitable for farmers on the wider scale. However, as cocoa can be harvested out of the main season as well, it can contribute to the generation of stable income for farmers.

The introduction of the quality system also opened doors with other buyers, opening up opportunities for farmers, and they sell their producer where it is more profitable to do so.

Score 2

However, farmers appreciate the certification system and internal quality system of Amanah, as it provides environmental value (less chemicals used) for them.

Explanation of the principle: One of the special challenges faced by small-scale producers is gaining access to services such as finance, market information and best agronomic practices that could improve quality, yield, food safety and environmental practices. Successful solutions enable smallholders to access credit, knowledge and technology and develop incentives that encourage producers to invest in their own production based on market needs.

Finance: Access to finance is key issue for the cooperative rather than for the farmers. The latter face financial challenges mostly when they want to start cocoa production (land, seedlings). When the plants are in place, farmers no longer report financial challenges. However, the cooperative is struggling with lack of operating capital on ongoing basis.

In 2006, Armajaro began giving financial incentives to AMANAH to promote collective selling by the farmer groups. AMANAH received a fee of IDR 50 per kg sold to Armajaro. These funds allow AMANAH to reach out to other villages. From 2007 onwards, Armajaro raised the fee to IDR 100 per kg if the quality was good and IDR 50 per kg if the quality was below expectation. In three years’ time, AMANAH earned IDR 30 million (USD 3,500) and used this money to buy fertilizers and other inputs for its members.

In 2006, the farmer groups also received pre-financing from Armajaro amounting to 70% of the value of their projected sales. However, this was later stopped because the farmers also sold their cocoa to local traders when they receive better prices or have borrowed money from them (local traders can offer individual farmers credit in emergency situations and claim a long-term commitment in return). Although Armajaro no longer offered pre-financing to individual farmers, it did offer guarantees to enable Amanah to access bank credit. This has not been continued by Mars, leading to cash flow problems and effective prohibiting to offer sale services to a large number of farmers as farmer are paid directly by Amanah, while the cooperative has to wait for a couple of days to get paid by Mars.

Capacity building

Mars offers the 6-month long training for farmers to become cocoa doctors and serve their communities as such in the future.

Score 3
Explanation of principle: New Business Models promote innovation in products, services and the processes that underpin both by multiple actors along the chain. Innovations should be developed with smallholder farmers, rather than for them. Inclusive innovation development provides the means to remain competitive in dynamic markets, to improve the commercial value of goods and services, and for innovation gains to be shared among partners, all of which build business durability.

Mars takes on a one-way approach in this dimension; provides information to farmers on the latest innovations as long as production can be boosted, but farmers seldom feedback ideas to Mars on where else could innovation happen in cocoa production.

Score 2

Explanation of the principle: A business axiom states that you cannot manage what you do not measure. Our sixth principle is to incorporate tailored indicators and monitoring plans to assess the health of the ongoing trading relationship, both as a for-profit business and in its effectiveness as a vehicle for community development. Constant monitoring of the health of the trading relationship reduces the risk that minor problems will destroy the business.

Improved monitoring for improved performance: Cocoa production volumes and quality vary a lot among groups and among farmers within the same groups. AMANAH has worked on mapping farmers’ production by collecting data from the different farmer groups since 2005. AMANAH’s farmer groups also routinely record elementary data for themselves as well as traceability-related data for Armajaro. Based on these data, the best-performing members today produce an average of 750 kg/ha per year, which exceeds the average of 500 kg/ha for Sulawesi, but falls far below the potential of 2000 kg/ha.

The challenge lies, however, in lack of appropriate IT system to record, store, retrieve, analyse and distribute relevant data. Until now, record keeping happens manually not only at farm level, but also at cooperative level.

Score 4
LESSONS LEARNT

The added value of collaboration

Companies have neither the time to conduct development work on the ground, nor the development concepts to fit their cocoa-trading activities into a framework to promote sustainable livelihoods and farming systems. The PPP approach can leverage company expertise in accessing market and while the NGOs can focus on the development work, such as setting up and working of NGOs with farmer groups, facilitating improvements in quality, traceability, labelling, and collective selling, etc.

Added value of farmers’ organization

Farmers need peers to with whom they can exchange information and share knowledge. They also need support in terms of access to market information marketing, and other services. The farmers’ organization clearly fulfills that role.

Lack of financing as deal breaker

Farmer groups used to receive pre-financing from Armajaro amounting to 70% of the value of their projected sales. However, this was later stopped because the farmers also sold their cocoa to local traders when they received better prices. Although Armajaro no longer offered pre-financing to individual farmers, it did offer guarantees to enable farmer groups to access bank credit. When Mars stepped in, after the ECOM bought Armajaro, Mars did not offer financial services to farmer groups, and in addition to that, ended offering of financial guarantees to AMANAH, thereby putting a limit on the marketing operations of the cooperative. Without the guarantees, the cooperative cannot access the needed operating cash to be able to buy up farmers’ cocoa beyond 200 tons/year. The cooperative pays faster to farmers than it receives payment from Mars. Thus, on one hand, Mars supports farmers in increasing their quality and sustainable cocoa production, on the other hand, the company does not seem to facilitate the purchase of cocoa from the cooperative in sufficient manner.

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