

SDM: Cargill Cocoa & Chocolate Ivory Coast

Case owner: **Cargill**

Location: **Ivory Coast**

Commodity: **Cocoa**

Services:



Farmer
training



Fertilizer &
Crop
protection



Replanting



Certification



Truck
leasing



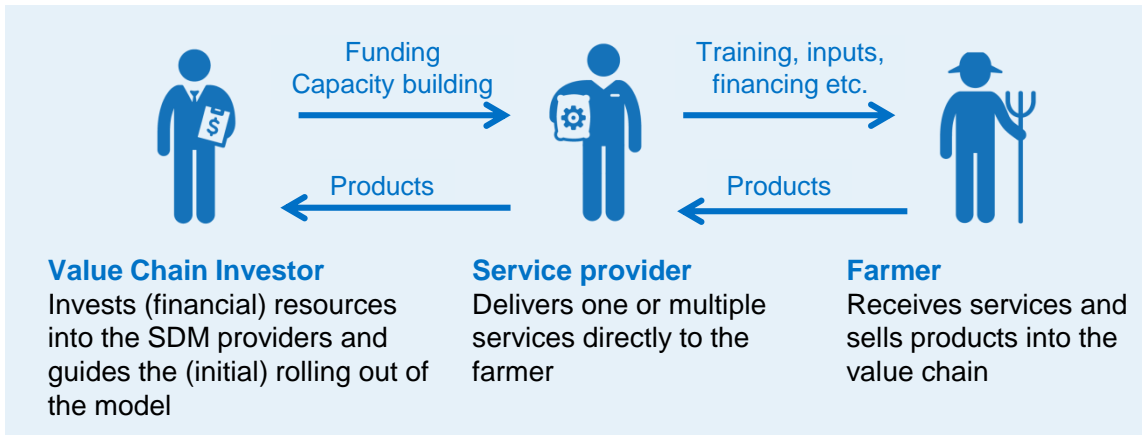
Other
services



Introducing Service Delivery Models

Service Delivery Models (SDMs) are supply chain structures which provide services such as training, access to inputs and information to farmers required to increase their performance and sustainability.

SDMs aim to achieve or further either economic, social or environmental sustainability in a supply chain.



Focus of this study

- 1 **Map variety of SDMs** by different companies in different sectors and geographies; on their objectives, structure and organization, types of services, and delivery approach.
- 2 **Aggregate data** from the individual case studies collected into the database
- 3 **Analyze the economic sustainability** of the SDMs at the level of the farmer, service provider and VCI
- 4 **Extract lessons learned** on topics such as key success factors, risks, scalability, and cost-effectiveness

Purpose of the study and benefits to supply chain



- Design more cost-effective SDMs, through better insights into what works in which cases



- Gain insights into how to design and implement more cost-effective SDMs



- More efficient services delivery and impact generation (better livelihoods, higher productivity, etc.)
- More transparency on whom to work with



- Benefit from strategic learning trajectory within and across sectors, based on a unifying methodology
- Opportunity to join learning platform

The Cargill Ivory Coast SDM objectives and structure



Cargill is active in Côte d'Ivoire since 1997 and is present in Abidjan, Daloa, Gagnoa and San Pedro. In 2014/15, around 95% of cocoa sourced came from 500 coops.

Objectives of Cargill's SDM:

- The overriding objective of the Cargill Cocoa Promise (CCP) SDM in Cote d'Ivoire is to improve the living conditions for cocoa farmers. The means through which the SDM hopes to achieve this are to empower cooperatives and farmers, and improve farm productivity and profitability.
- With empowered, sustainable cooperatives, the services of the CCP SDM are intended (and expected) to become sustainable independent of Cargill

General SDM information:

Location: Ivory Coast

Start of the program: 2008/09 - ongoing

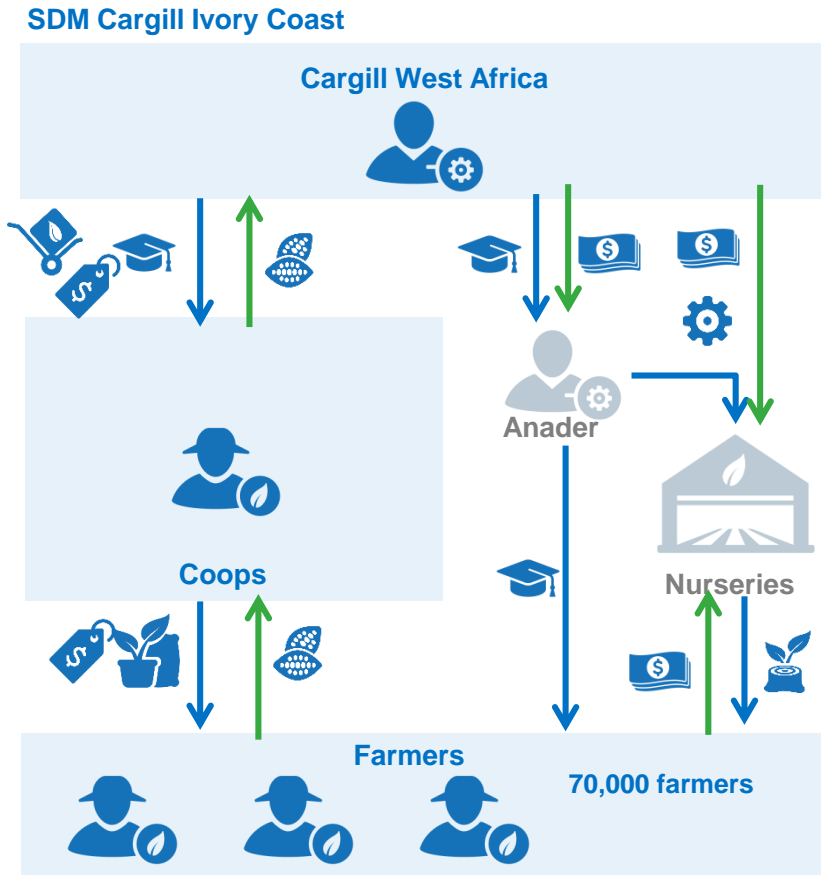
Scale: ~70,000 farmers

Funding: Cargill Cocoa Promise

SDM operator: Cargill through Cargill Cocoa Promise










Services provided to the farmers (and coops):

- Leadership, management training and coaching of cooperatives (Coop Academy)
- Farmer training through Farmer Field Schools
- Establishment of nurseries and coordinating seedling sale to farmers providing access to farm inputs, facilitation of partnership structure with agro-input provider, and coordinating payments on behalf of coops
- Certification
- Facilitation of truck leasing



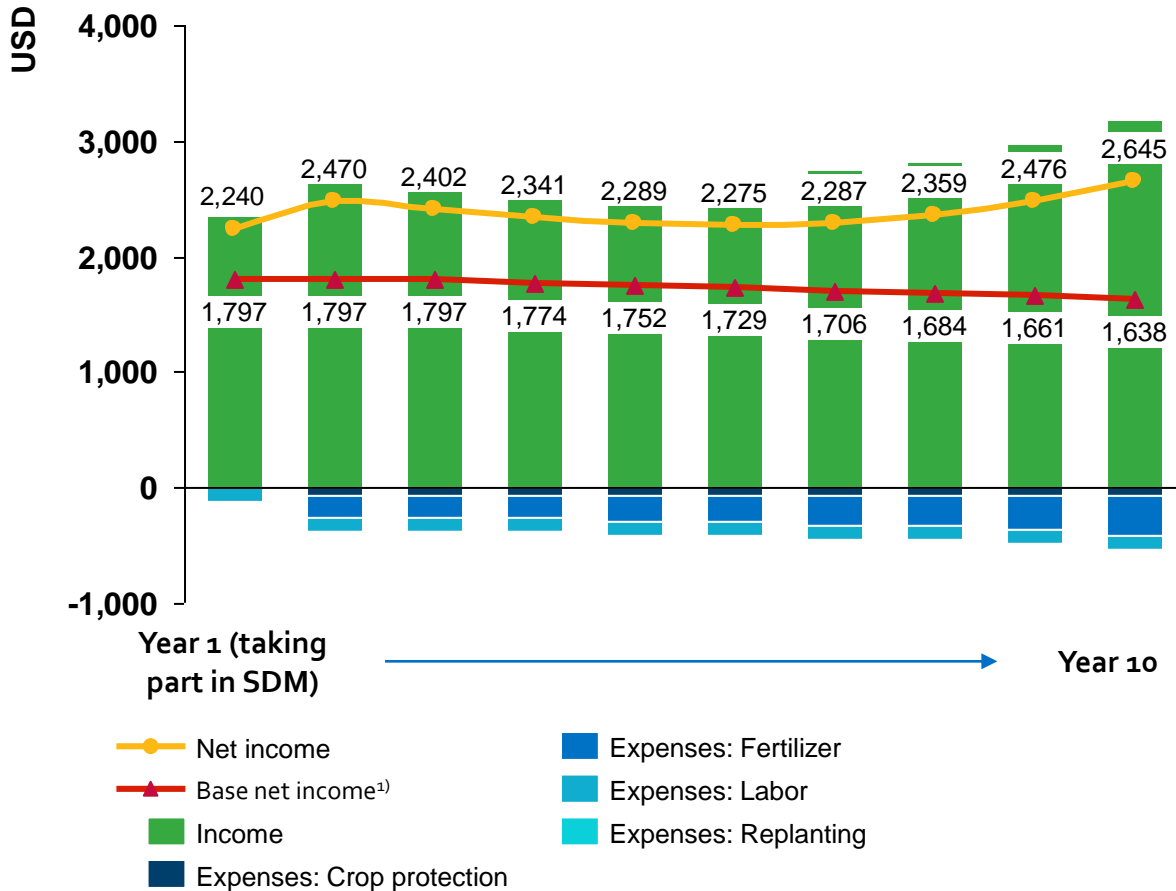
Legend ← Flow of goods and services → Cash flow

Types of services delivered within the SDM

Value Chain Investor & Service Provider	Service Providers	Other
 <p>Training (FFS and Coop academy)</p>  <ul style="list-style-type: none"> • Trains Anader agents and pays training fees • Develops methodology and training material • Design of Coop Academy concept, financing, development • Coordinates and selects coops 	 <ul style="list-style-type: none"> • Anader: Sets up FFS, conducts initial inspection, delivers training to farmers • Coops: Coordinate trainings • Technoserve: Provides training 	 <ul style="list-style-type: none"> • IFC: Provides financing for Coop Academy • SCOPEinsight: conducts coop assessments
<p>Fertilizer & crop protection</p>  <ul style="list-style-type: none"> • Coordinates & ensures training with Anader • Shares risk with Syngenta and LDC by giving a guarantee to pay a small % of lost income when coops fail to pay for materials • Pays reduced price for cocoa bought, to pay Syngenta and LDC for materials on behalf of coops 	<ul style="list-style-type: none"> • Syngenta: Sells insecticides and pesticides to coops, provides training to Anader, provides financing. Develops training material (with Cargill) • LDC: Sells fertilizer to coops 	
<p>Replanting</p>  <ul style="list-style-type: none"> • Pays for the establishment costs of the nurseries • Sets price at which seedlings are sold to coops/farmers 	<ul style="list-style-type: none"> • Anader: Operates nurseries, sells seedlings to coops • Coops: Sell seedlings to farmers 	<ul style="list-style-type: none"> • Conseil du Café-Cacao: Provides pods at cost • IDH: Provides financing
<p>Certification</p>  <ul style="list-style-type: none"> • Pays for internal inspection and external auditing, for certification • Funds ICS advisors and pays premium for certified cocoa 	<ul style="list-style-type: none"> • Coops: Perform internal inspection 	<ul style="list-style-type: none"> • Independent assessor/UTZ / Rainforest Alliance: Conducts external audit
<p>Truck Leasing</p>  <ul style="list-style-type: none"> • Design of program (with IFC, SIB and CFAO) • Takes delivery of trucks from CFAO • Delivers trucks to coops and handles repayment 	<ul style="list-style-type: none"> • Coops: Order trucks, pay 10% down payment, repay over 3 years via cocoa deliveries (to Cargill) 	<ul style="list-style-type: none"> • SIB: Provides financing • CFAO: delivers trucks • IFC: provides funding
<p>Other</p>  <ul style="list-style-type: none"> • Design of the Cargill Cocoa Promise • Innovation, design, implementation, financing of all the services • M&E to monitor performance of CCP Operation of demo farms to prove efficiency 		

The SDM's economic sustainability at farmer level

Individual farmer (2.5 ha cocoa farm)



1) Farmers not part of SDM

Source: Data provided by Cargill West Africa

Economic sustainability at farm level

- In this model, declining yields due to aging trees, coupled with relatively slow replanting (3%) means that net income increases gradually. Relative to the baseline, there is a clear improvement in every year

Main revenue drivers

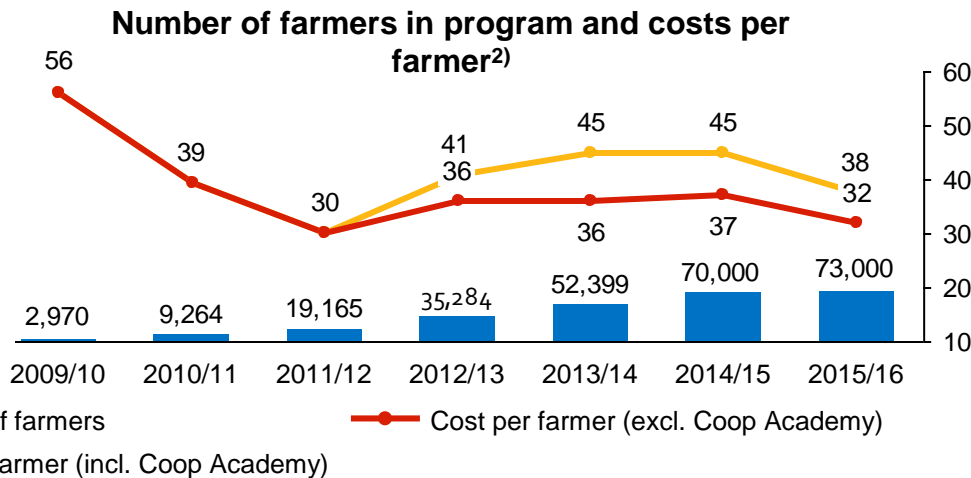
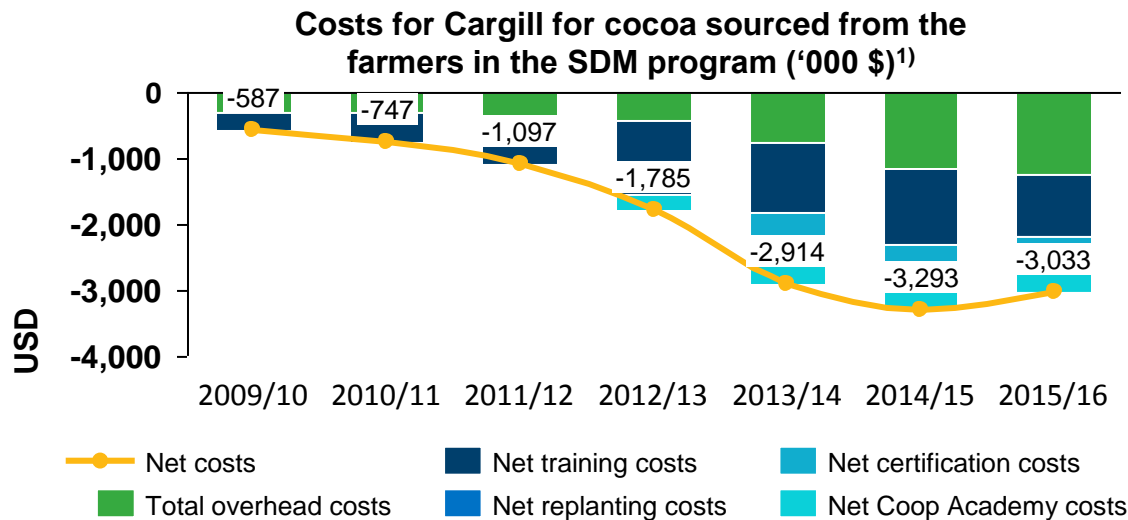
- In this model, the cocoa price is assumed stable, therefore the driver of revenues is changing production. This is impacted by replanting (replacing aging trees) at 3% per year starting in year 2, as well as productivity impacts from training (+20%), crop protection (+22%) and fertilizer (+40%)
- Fertilizer is only used from year 2 and each year on an increasing portion of the farm (from 25% in year 2 rising to 50% in year 10)

Main cost drivers

- By far the biggest cost component for the farmer is the fertilizer category. While the productivity impact of using fertilizer is estimated to be significant (+40%), using fertilizer on aging trees with relatively low yields is not economically sustainable.
- Cargill mitigates against this risk by advising farmers to only use fertilizers when they are fertilizer-ready. In this model, this is captured by assuming fertilizer is only used on the most productive parts of the farm

The SDM's economic sustainability at service operator level

Cargill's P&L



1) The analysis excludes commercial returns arising from the SDM
 Source: Data provided by Cargill West Africa

2) Annual costs divided by number of farmers trained.

Economic sustainability at value chain investor level

- Cargill's aim in the SDM is to gradually make the model self-sustaining and therefore cost-neutral
- Excluding one-off costs such as the Coop Academy, the model is indeed becoming less costly on a per-farmer basis
- In 2015/16 a new training model is adopted explaining the lower costs

Main revenue drivers

- There are no significant (direct) revenue drivers for Cargill in the SDM

Main cost drivers

- Cargill's largest cost categories are FFS training costs and overhead costs. Cargill intends to continue to provide training to farmers for free
- Overhead costs consist fully of staff costs, and also cover activities that are outside the scope of this SDM study (e.g., infrastructure and community development services)

Scalability

- The fact that costs per farmer go down with the number of farmers suggests the SDM is scalable. Once the infrastructure and capabilities are in place (e.g., empowered coops), adding additional services becomes relatively low cost or even no-cost for Cargill while maintaining benefits for farmers (as it the case with replanting, fertilizer and crop protection)

Conclusions and lessons learned

Key drivers of success



- The SDM is low cost (from the perspective of Cargill), scalable and replicable. There is a low risk involved for the investor.
- Coops provide a key function in delivering the services, both directly and acting as an extension of the service providers.
- Once a strong relationship is built with an empowered coop, the program can easily grow with the organic growth of the coop. This relationship benefits both the business relationship and the implementation success of the SDM.
- The SDM aims for a market-based solution, and finding efficiencies through scale and empowerment throughout the value chain

Key risks



- The SDM relies on heavy investment (of time and money) to identify and empower coops to bring into the program. In the case of Cargill, these efforts date back 15 years
- The SDM depends on the capabilities of the farmers and the coops, as Cargill strongly believes in not dictating but rather maintaining freedom of choice.
- Cargill has limited view on the impact at farm level, therefore it is difficult to verify the true impact of the SDM. Cargill is currently developing an M&E system that will make capturing and reporting this data possible

Key factors in replication of the model



- Relationships with empowered coops are key to the success of this model. Companies wishing to replicate it but that lack sufficiently strong relationships with coops, will need to invest in these relationships prior to being able to implement this model.
- The CCP SDM is built on initially investing in building capabilities, the benefits of which allow for lower-cost, higher-impact interventions as the program progresses.

Impact on objectives



Empowered
cooperatives

- Cargill is successful at realizing the first objective. Coops receive strong support from Cargill, including but not limited to the Coop Academies, and their operational and management strength is monitored and supported. Empowered coops make the SDM scalable



Improved
farmer living
conditions



Improved farm
yield and
income

- Cargill can be successful in realizing its objectives at farm level only if interventions are applied in the right way (e.g., right sequence) and at the right levels (e.g., right pace of replanting, right amount of fertilizer).



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