

# SDM: TechnoServe / Nestlé Ethiopia

Case owner: **TechnoServe**

Location: **Ethiopia**

Commodity: **Coffee**

Services:

	
GAP training	Business skills and financial management

for farmers

		
Quality improvement	Management	Sustainability

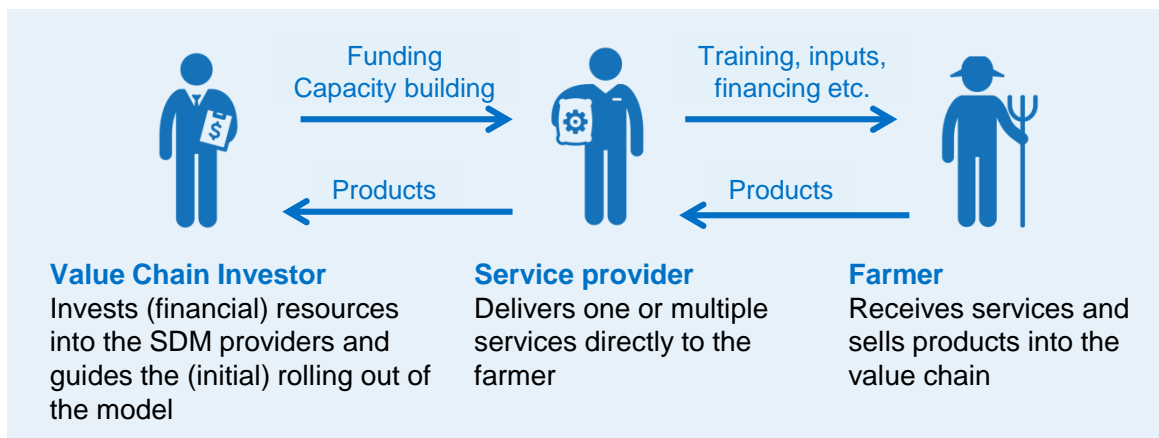
for cooperatives



# 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, delivery approach etc.
- 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 key success factors, risks, scalability, cost-effectiveness etc.

## 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

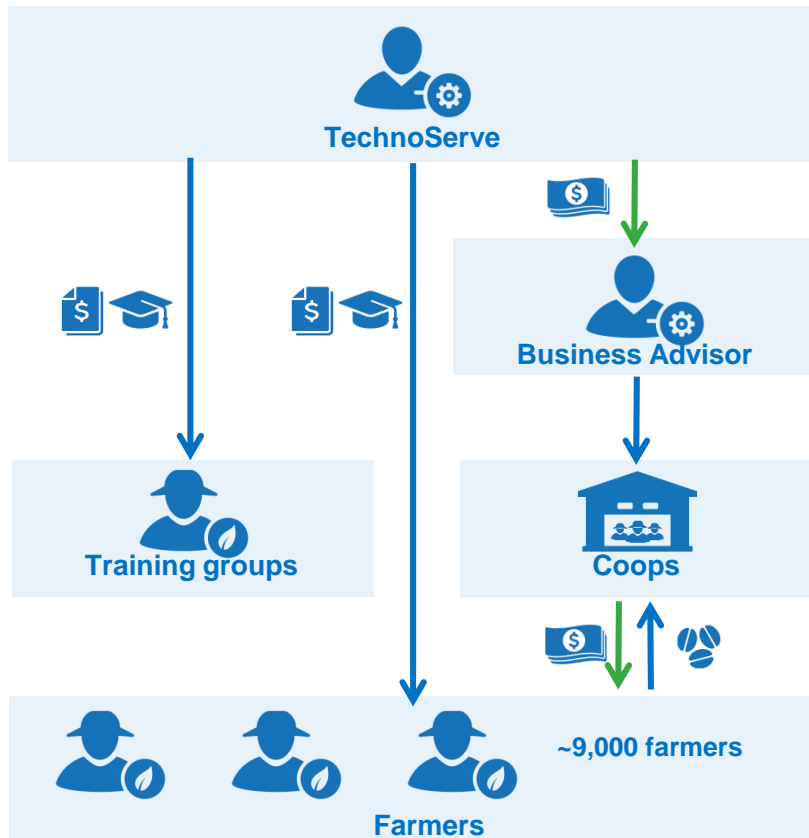


- Benefit from strategic learning trajectory within and across sectors, based on a unifying methodology
- Opportunity to join learning platform

# The TechnoServe Ethiopia SDM objectives and structure



## SDM TechnoServe



**Legend** ← Flow of goods and services → Cash flow

TechnoServe (TNS) has been operating in Ethiopia since 2008 and, to date, has supported more than 150,000 coffee farmers countrywide.

## Objectives of TNS Ethiopia's SDM:

1. To improve the coffee quality, efficiency and sustainability of coop-operated wet mills
2. To improve the quantity of coffee produced through supporting farmers' agronomic and business skills

## General SDM information:

Location: Ethiopia

Start of the program: 2012-2015

Scale: ~9,000 farmers and 7 coops with 15 wet mills are part of the program directly, ~23,000 receive dividends

Client/funder: Nestlé

SDM operator: TechnoServe



Services provided to coops:

- Quality improvement: by improving coop-run wet mill management and operations, reducing operating costs and improving quality
- Management: supporting the coop in building its governance and financial management capabilities
- Sustainability: supporting adoption and monitoring of sustainability practices

Services provided to the farmers:

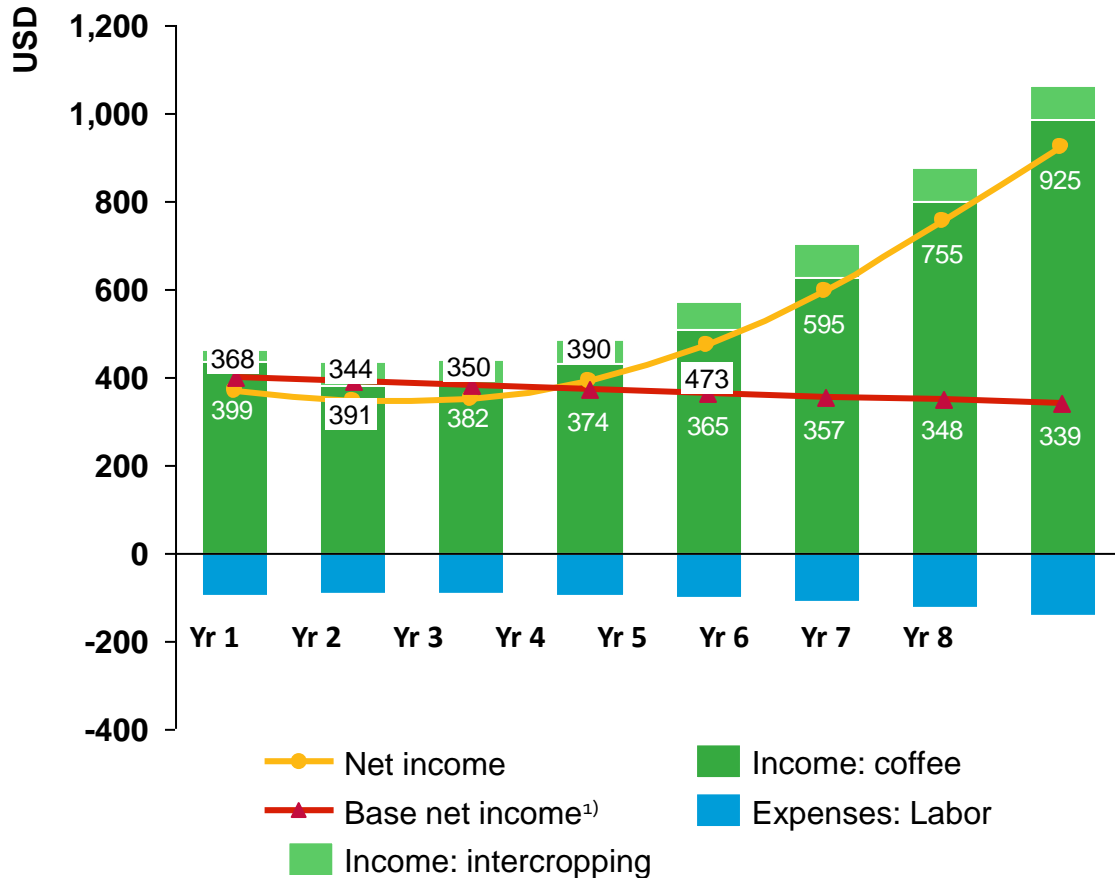
- GAP training
- Business skills and financial management

# Types of services delivered within the SDM

Value Chain Investors & Service Provider	Other
	 
 <p><b>GAP training</b></p> <ul style="list-style-type: none"> <li>• Training groups consist of 20-30 farmers, with a Focal Farmer who hosts training sessions and the demonstration plot</li> <li>• TechnoServe trains Farmer Trainers, youth from the local community, who are recruited after a selective training process to train farmer groups</li> <li>• Training modules are delivered monthly</li> </ul>	<p>Nestlé funds TechnoServe activities in order to improve the quantity and the quality produced. Nestlé aims to increasingly source sustainably produced coffee in order to protect the future of coffee growers</p>
 <p><b>Business skills and financial management</b></p> <ul style="list-style-type: none"> <li>• In addition to GAP, farmers are trained on financial management of the farm (financial planning, record-keeping, budgeting, saving, calculating profit and financial decision-making)</li> </ul>	
 <p><b>Quality improvement</b></p> <ul style="list-style-type: none"> <li>• TechnoServe assigns a Business Advisor to each coop (typically one BA provides all three services to a coop)</li> <li>• The Business Advisor supports on improving coop-run wet mill management and operations, reducing operating costs and improving quality</li> </ul>	
 <p><b>Management</b></p> <ul style="list-style-type: none"> <li>• The Business Advisor supports the coop in building its governance and financial management capabilities</li> </ul>	
 <p><b>Sustainability</b></p> <ul style="list-style-type: none"> <li>• The Business Advisor supports adopting, monitoring and fixing sustainability practices</li> </ul>	

# The SDM's economic sustainability at farmer level

Individual early adopter farmer (0.45 ha coffee farm) entering the program in year 1



## Economic sustainability at farm level

### Main revenue drivers

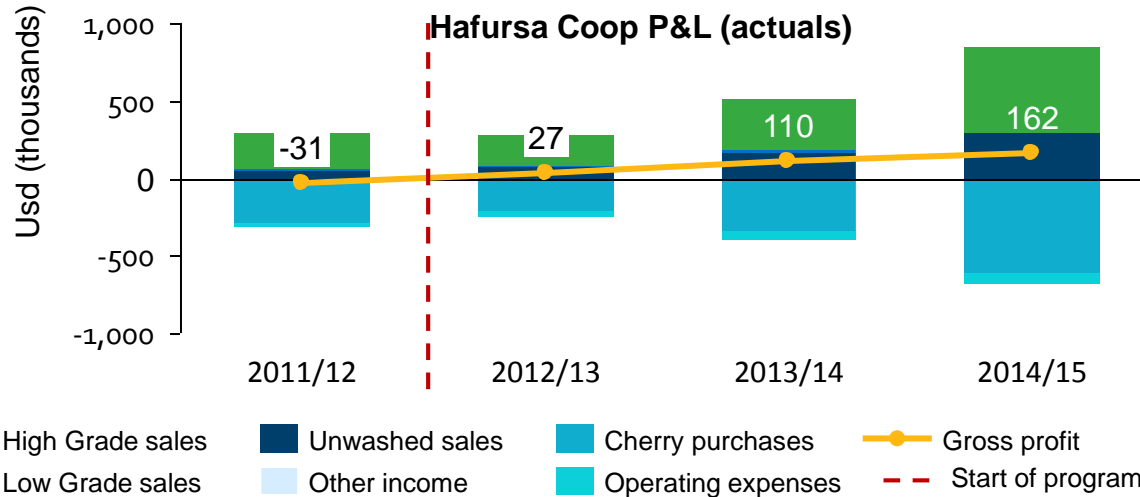
- The main driver of increased net income for farmers is stumping; cutting old trees back to bring up new stems. While in the initial years revenues drop slightly (as the stumped trees require 3-4 years to reach peak production), in later years net income is drastically increased relative to the baseline
- During the initial 2 years following stumping, farmer income is supplemented with income from intercropping with crops like chili pepper and beans.
- Note that the stumping rate for farmers is assumed to be 10% in the initial 4 years and 15% in the final 4 years. In the 9<sup>th</sup> year, the cycle can be repeated.
- On the ground, the actual stumping rates vary significantly. Some farmers rejuvenate 50% or more in a single year, while other farmers do not implement until several years into the program.

### Main cost drivers

- The main cost item for farmers are labor costs; smallholder farmers do not use agro-inputs in Ethiopia so labor is the only cost item included in the P&L analysis on the left
- Labor expenses increase, as the implementation of best practices requires more labor, and increased yields increase the amount of labor required for harvesting. 50% of this additional labor is assumed to be hired labor

1) Farmers not part of SDM

# The SDM's economic sustainability at coop level 1) 2)



## Economic sustainability at coop level

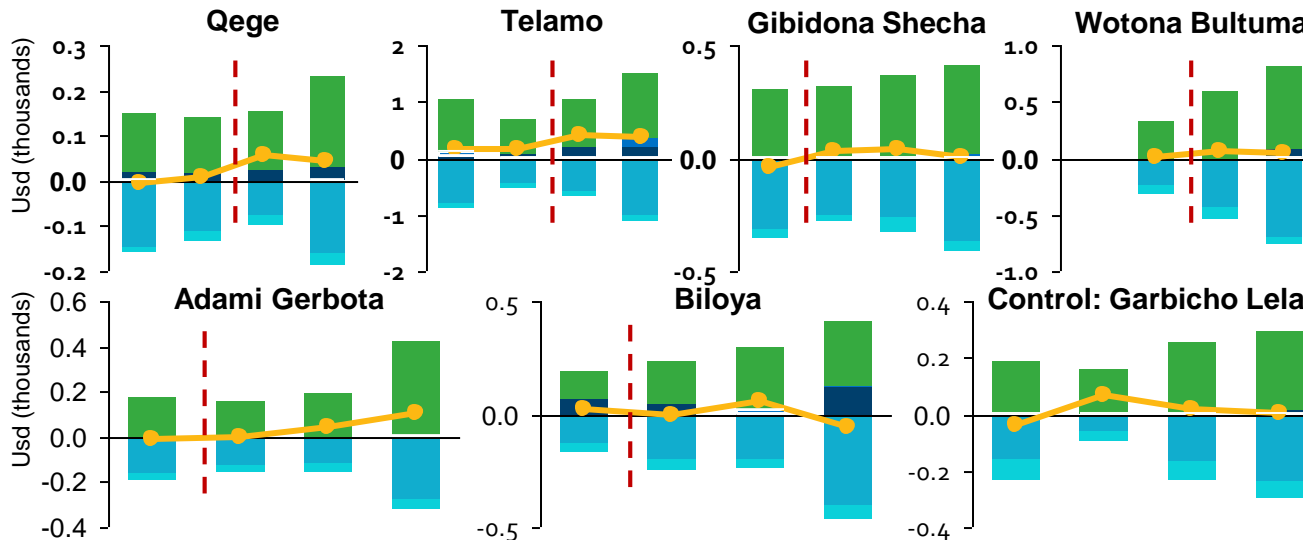
- One of the main objectives of the TechnoServe / Nestlé SDM is improving coop coffee quality, efficiency and sustainability (more detailed analysis on this on next slides), resulting in an improved P&L.
- Analysis of the data shows that like Hafursa, almost all coop P&Ls have improved since the start of the program.
- 2014/15 was a tough year for all wet mills, as international prices were very high during harvest season (high cherry prices) but fell during marketing period (lower parchment prices). For Biloya, additional costs were also incurred due to malfunctioning and unaligned machinery in this year.

## Main revenue drivers

- Growth in profit mainly comes from larger sales volumes of high grade parchment
- As from 2011/12 to 2014/15 parchment sale and cherry purchase prices develop along similar paths, on average prices have little impact on coops' P&Ls. In 2014/15 cherry prices rose sharply due to high international prices but a sudden price decline between the harvest and marketing period resulted in stagnate profit growth for most coops.

## Main cost drivers

- For most coops, cherry purchases are the main cost driver. While increased volumes lead to steady cost increases over time, cherry price fluctuation can have strong sudden impacts.

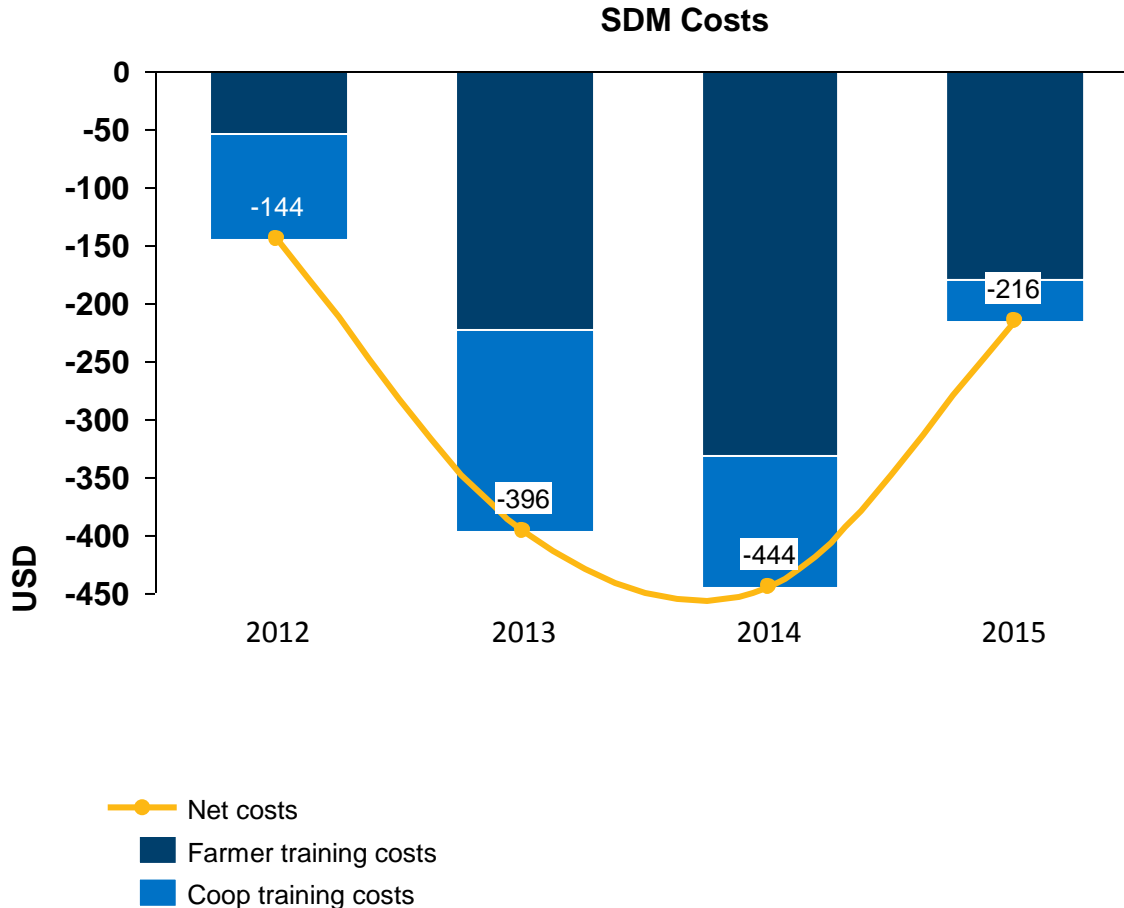


1) Unusually rich coop data from TechnoServe (including financial data) made detailed coop P&L analysis possible

2) Calculated profits exclude dividends received from and outstanding loans paid out to unions

Source: Analysis based on data provided by TNS

# The SDM's economic sustainability at service operator level



## Economic sustainability at value chain investor level

### Main revenue drivers

- TechnoServe does not derive revenues from the SDM; rather, its costs are covered through financing received from other parties (mainly Nestlé)

### Main cost drivers

- The main costs in the SDM are related directly to the delivery of services: training to coops and farmers
- Total costs per farmer trained amount to ~Usd80 and total costs per coop trained amount to ~Usd 58,800.

### Value Chain Investor P&L

- This report does not cover the (commercial) return to the Value Chain Investor, which in this case is Nestlé

Source: Analysis based on data provided by TNS

# Conclusions and lessons learned

## Key drivers of success



- On the farm side, there is a clear business case for stumping. Convincing farmers to rejuvenate their farms in this manner is the key success factor to success on the farm side of the SDM.
- Given that stumping reduces income temporarily in the short term, intercropping during the initial years following stumping can help farmers bridge the income gap.
- From conversations with farmers, a key driver of adoption of good practices is the principle of 'seeing is believing.' It is therefore important that the benefits of GAPs are visible to farmers.

## Key risks



- Speculation by private mills that cherry prices will rise may compel farmers to sell to private mills instead of coops.
- Several coops expressed concern about a lack of working capital to enable them to pay farmers on delivery rather than on credit.
- Training of coop staff and management may be lost if coop management / staff changes after the end of the TechnoServe program.
- Several coops expressed concern about the ECX grading system –it often takes too long, in some cases coops feel the grading is too low.

## Key factors in replication of the model



- For replication and continuation of the model, if the benefits can be quantified and proven, commercializing the model (i.e., farmers and/or coops pay for the services on a commercial basis) could be considered. This would make the model more easily replicable and, given that the development of training materials and content is easily scalable, the costs per farmer/coop could be reduced

## Impact on objectives



Improved coop coffee quality, efficiency and sustainability

- Based on this case study, the SDM is successful at realizing the first objective.
- The coops see their cherry purchase volumes expand while operating efficiency improves.
- For most years high grade parchment volumes increase relative to low grades.



Improved farm yield

- The TechnoServe SDM appears successful at generating positive impact and reaching its objectives at the farm level.
- Stumping in particular appears successful at rejuvenating aging farms.
- The key challenge remains adoption rates.





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