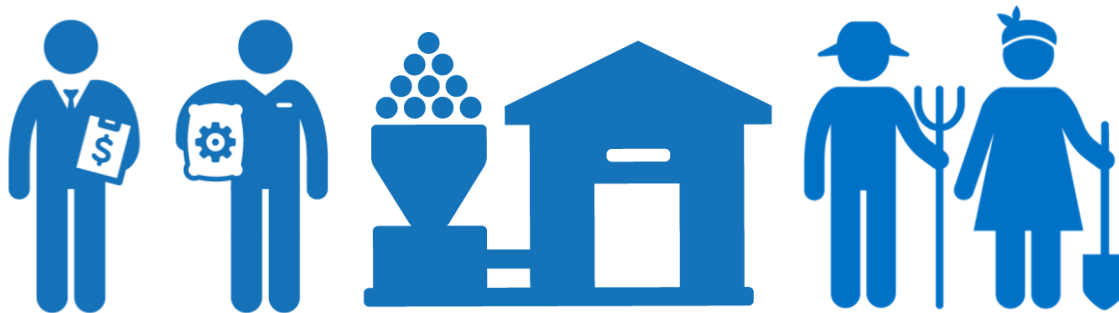


SDM: Case Report Sangany

Service Delivery Model assessment: Short version
July 2017

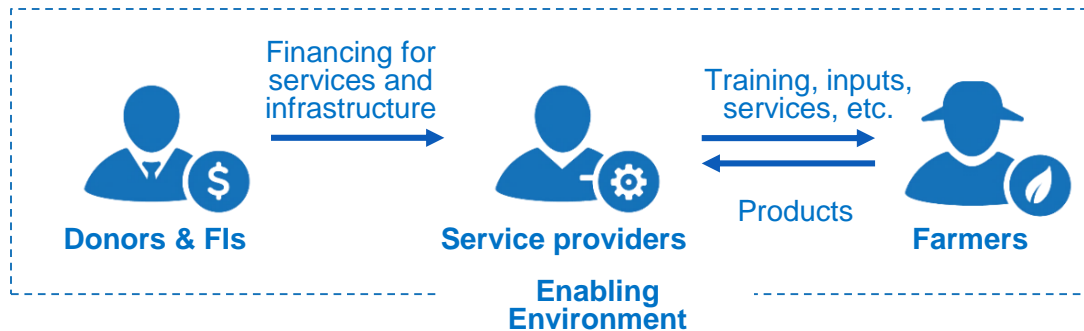
Location: Madagascar
Commodity: Coffee, cloves
Services: Training, financial services, organizational support,
rejuvenation, crop diversification, processing



What are SDMs and why are we interested in analyzing them?

Service Delivery Models (SDMs) are supply chain structures which provide services such as training, access to inputs and finance to farmers. The aim is to improve farmers' performance, and ultimately their profitability and livelihoods.

A SDM consists of service providers, often supported by donors and financial institutions (FIs), and farmers receiving the services. All are set within a specific enabling environment.



By analyzing SDMs, we aim to support **efficient, cost-effective and economically sustainable SDMs at scale** through:

Key drivers for success of SDMs benchmarking



Innovation opportunities to support



Cross-sector learning, learning community



Convening at sector and national level



Analyzing SDMs brings a range of benefits



Farmers and farmer organizations

- **Enhanced services**, which lead to improved farmer income and resilience, through higher productivity and product quality
- **Improved SDM outcomes**, which lead to an improved social and environmental environment



SDM operator

- Better understanding of your **business case**
- Insights to **improve service delivery**
- Insights to develop a **cost-effective SDM**
- Identification of opportunities for **innovation** and **access to finance**
- **Comparison** with other public and private SDM operators operating across sectors/geographies
- Ability to communicate **stories of impact and success** at farmer level



Investors/FIs

- **Common language** to make better informed investment decisions
- Insights to achieve optimal **impact, efficiency and sustainability** with investments and partnerships in SDMs

The Sangany SDM and objectives

General SDM information:

Location:	Madagascar
Timing and analysis scope:	2016
Scale (start of analysis):	2,700 farmers
Scale (end of analysis):	20,400 farmers
Funding:	Sangany
SDM Archetype*:	Local trader / processor



Sangany is a Malagasy limited company specialized in the sourcing, drying, cleaning, grading and marketing of coffee and spices (cloves, pepper and cinnamon).

To promote sustainability, Sangany collaborates with the Global Coffee Platform (the 4C Association), the International Pepper Community and the Sustainable Spices Initiative (IDH). Sangany aims to increase production and improve quality of the Robusta coffee and spices to enhance living conditions of farming families.

The company has a production site of 2 ha, a warehouse of 1,200 m², with hulling and grading equipment for coffee, 80 m² office space and areas for drying and cleaning of agricultural products.

* For more info on SDM archetypes, see the [IDH Smallholder Engagement Report](#)

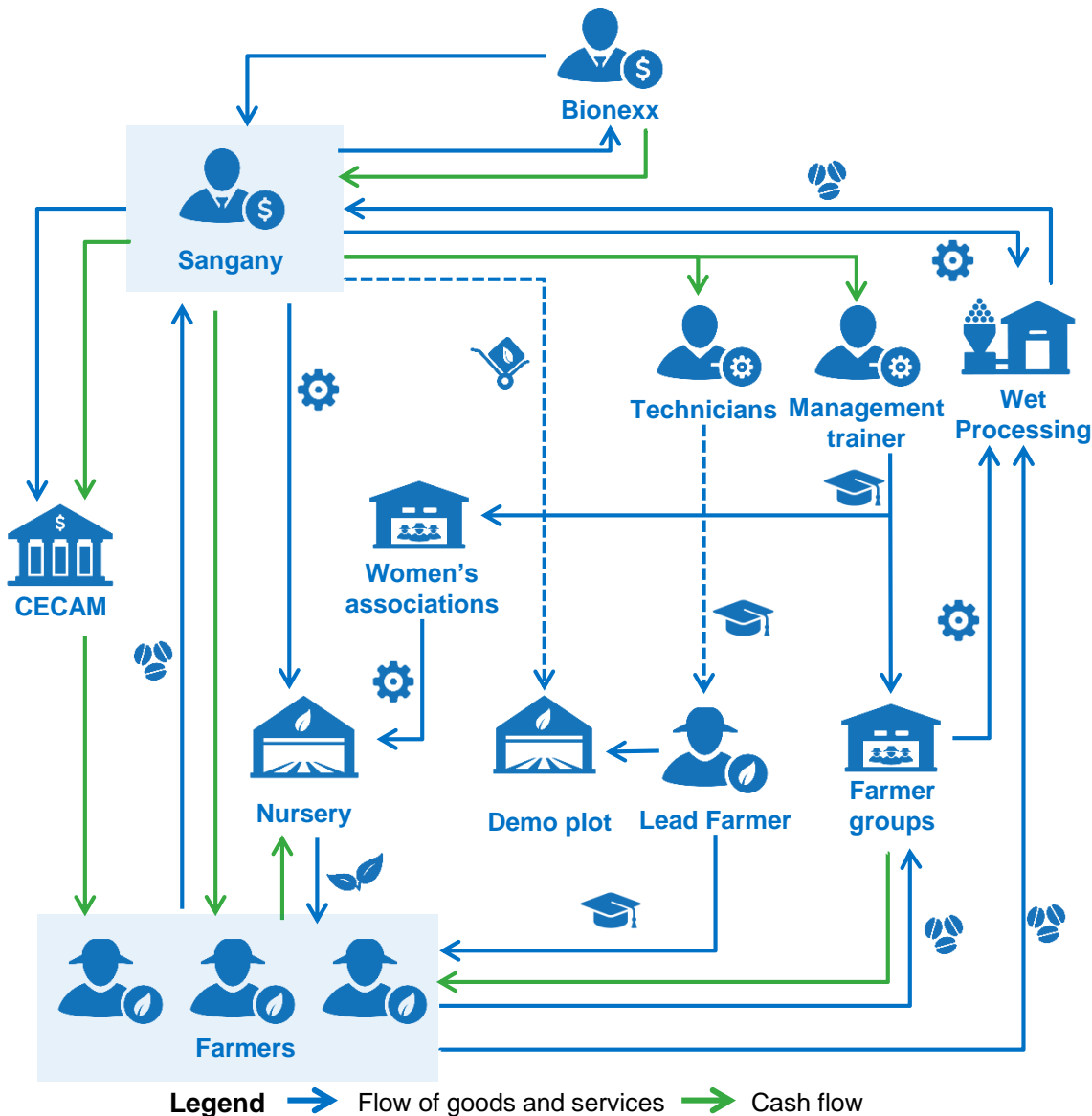
SDM objectives:

- 1 Improve quality of coffee and spices produced
- 2 Empower farmers and facilitate more direct sourcing
- 3 Improve farmer livelihoods
- 4 Empower women's association and farmers organizations

SDM rationale:



SDM structure and enabling environment



- Sangany and NGOs support nurseries and local farmer groups. If these perform well, Sangany supports them to set up their own wet-processing facilities, under the condition that they sell a certain amount of coffee to Sangany. The aim is to build capacity and increasingly source from the aggregate level.

Enabling environment

Farmers and Sangany are impacted by several factors within their enabling environment. Most important are:

1. Infrastructure

Roads and bridges in the region are in bad condition. Coffee washing stations are in disrepair and noteworthy infrastructure for drying and storage is absent in remote areas.

2. Pricing & competitiveness

Domestic prices for poor quality coffee are relatively high, leading to little incentives for farmers to invest in quality. Also, production costs decrease Malagasy competitiveness as a global supplier. Farmers are often unaware of (export) prices.

Services delivered



Nursery and wet processing support

- Sangany promotes the set-up of nurseries for women associations. These women's associations receive technical and management training, seeds, and a set-up subsidy.
- Farmers are encouraged to decide themselves whether or not to diversify into different crops.
- Women's associations in villages with a high coffee production potential will benefit from support for the re-introduction of wet-processing.



Organizational support

- Advisory services to Farmer Organizations on organizational aspects enabling them to respond to Sangany's requirements (e.g. product quality, financial management).

This service is provided as part of the nurseries support service.



Financial services

- Sangany facilitates access to finance for smallholder through a partnership with CECAM.
- Sangany handles the identification of farmers and repayments to CECAM through coffee/cloves sourced from these farmers (repayment to CECAM is deducted from payments to farmers for their product).
- Sangany promotes the use of mobile payment systems for traceability and security reasons.
- Sangany has partnerships with the main providers to improve the availability of "cash points" in remote villages. Sangany's collection centers will also serve as cash points up to a certain sum for those delivering products to Sangany.



Farmer training

- Sangany offers trainings on diversification into Artemisia, recovering the costs of the trainings with the price of the sourced product.
- Sangany also works with partners who provide additional trainings to farmers (e.g., Bionexx).

Service delivery:

Farmer segmentation

Farmers are not officially segmented in this SDM. Instead, the offering of services delivered depends on product, locality, individual producer and/or farmer organization.

Minimum criteria

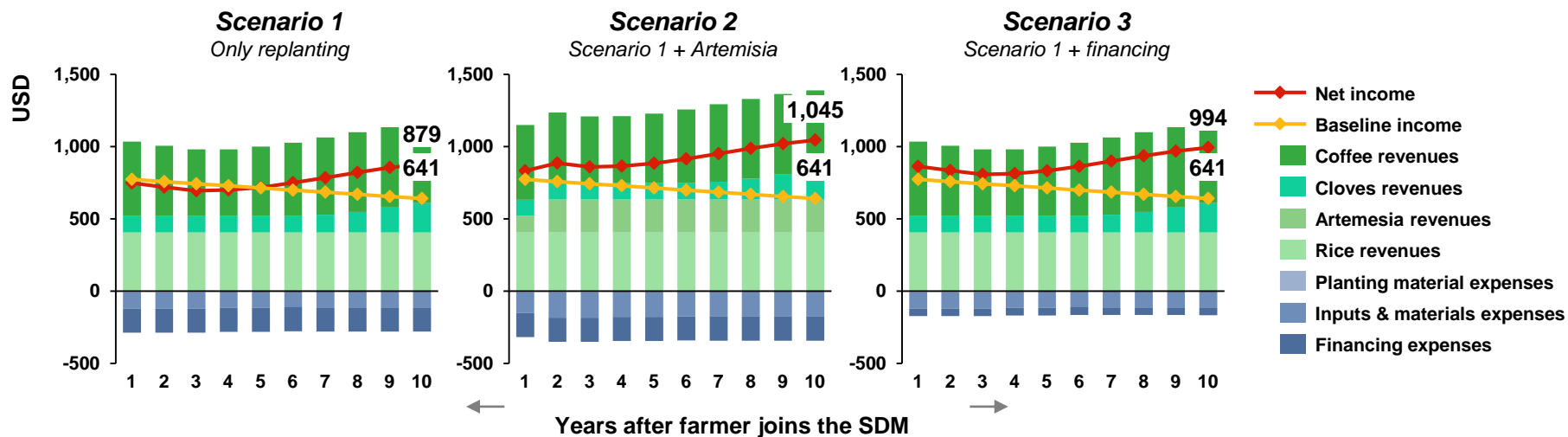
Before farmers can join this SDM, there are some minimum criteria:

- Farmers must have a significant number of trees / production of coffee and / or spices, and produce must meet quality criteria.
- Farmers are interested in improving the quality and quantity of his/her production.

Service sequencing

The evolution of groups will determine activities to be stimulated by Sangany. Needs and readiness of groups will be taken into consideration, rather than a predetermined sequence of services. Farmers will evolve towards independent commercial groups, able to formally register as commercial entities.

Overall SDM impact: Farmer P&L



Economic sustainability at farm level

While farmers in the baseline scenario see a steady decline in farm profitability due to ageing of trees, the three farmer scenarios in this SDM all see their bottom line improve over ten years. In all three cases, net income dips slightly initially, before rising steadily up to twice the baseline income. This can be explained by an initial drop in coffee production as a result of replanting. Overall, all three scenarios assessed create a significant profitability improvement for farmers relative to the baseline.

Main revenue drivers

- **Replanting and rejuvenation:** Cultivating additional land with additional clove and coffee trees, as well as partially replanting ageing coffee trees, enables farmers to raise production and income compared to the baseline.
- **Crop portfolio:** In the case of Scenario 2 farmers, the additional planting and selling of Artemisia brings in additional revenues. For all farmers, rice constitutes the single biggest source of income. Rice production and income are not impacted by the SDM.
- Availability of new land is rarely a limiting factor as land is still available in most communities. It is a limiting factor for landless farmers (tenants).

Main cost drivers

- **Inputs and materials:** Non-labor production costs are a considerable expense in all scenarios. Costs of rice production make up a very significant (>75%) portion of these input & material expenses for farmers.
- **Financing:** Farmers in Scenario 3 benefit from lower interest rates, leading to lower financing costs. Other farmers have high financing costs due to much higher interest rates when borrowing from local sources.
- **Planting material:** Farmers need to purchase planting material in the first three years after joining the SDM. The costs are small at \$17 or less per year per farmer, as only a relatively small additional number of trees are planted.
- **Labor:** No hired labor is used.

* Based on a combination of real data, assumptions and projections. Figures will be checked periodically against actual data

Commercial viability analyses

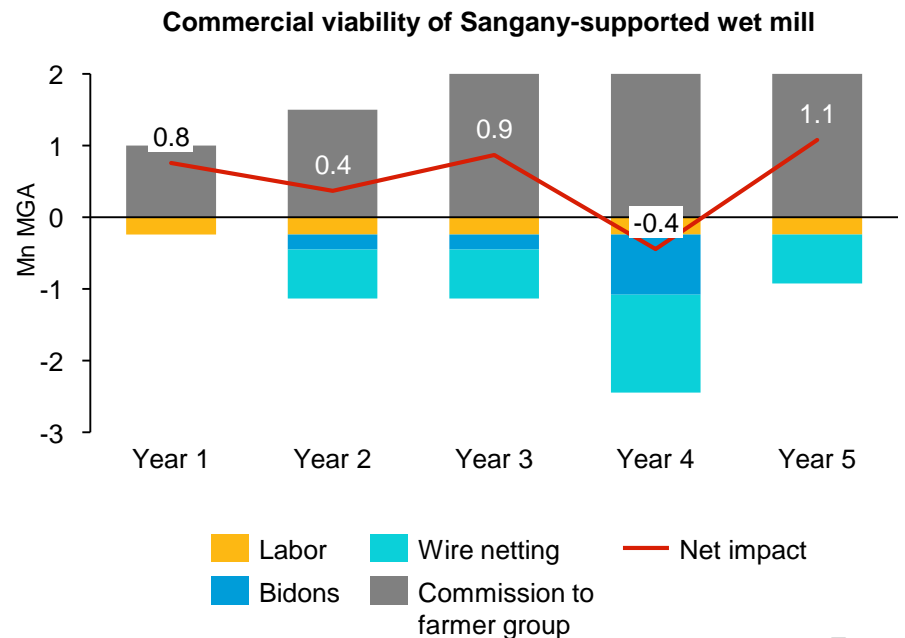
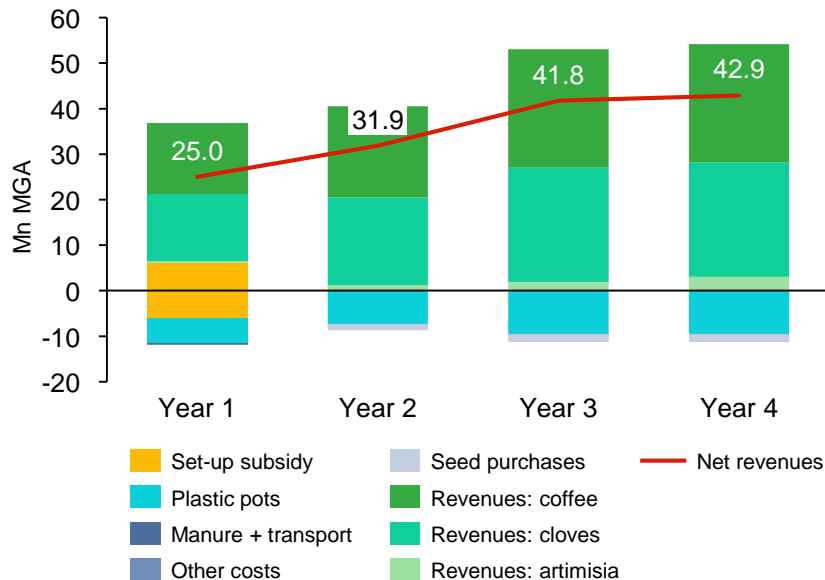
Supported nursery viability

Under the used assumptions, Sangany-supported nurseries appear to have a viable business case. In particular, producing and selling coffee and cloves seedlings appears to be financially viable, whereas Artemisia production does not. The production of Artemisia seedlings involves almost no costs, as seedlings are received free of charge and seedlings are grown in seed beds rather than pots, but revenues are also very low.

Supported wet-mills viability

Under the used assumptions, Sangany-supported wet mills appear to have a viable business case. The main cost drivers for these wet mills are the capital investments needed, and support in the initial year would seem a prerequisite. For the wet mills, the offtake relationship with Sangany can create a stable and predictable flow of revenues, and beneficial leasing conditions for the capital equipment.

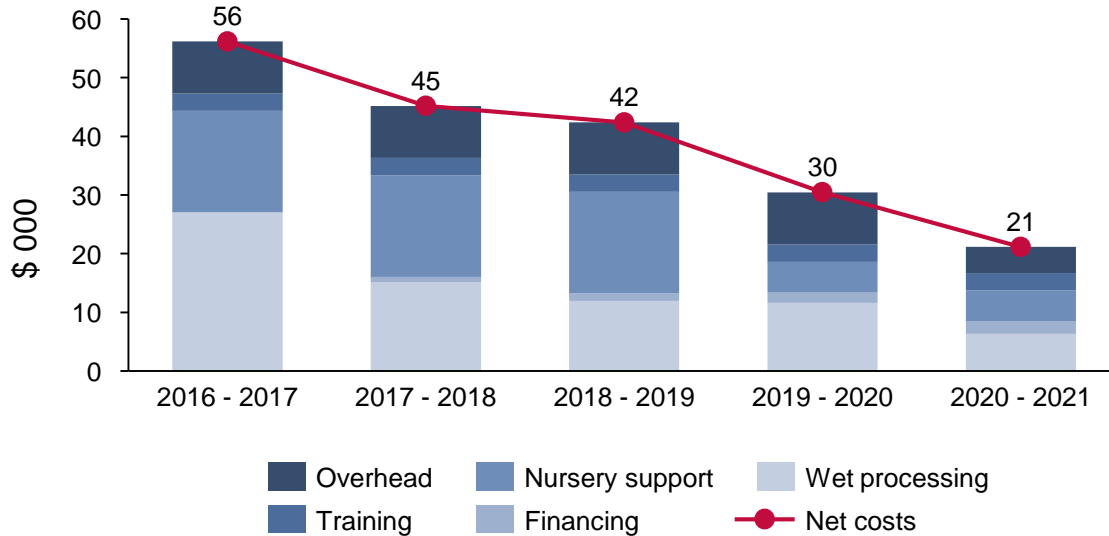
Supporting wet mills appears to also be economically beneficial for Sangany, which can source more efficiently from farmer organizations rather than individual farmers and receive a higher quality product*.



*More information and assumptions used are outlined in the full report

SDM P&L, scale and sustainability

Overall SDM P&L by service ('000 \$)



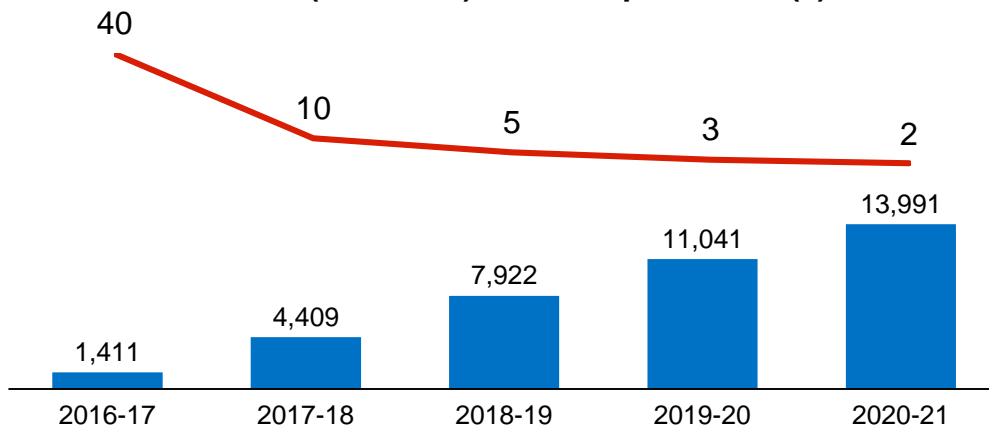
Economic sustainability of the program

Overall, this is an SDM with quite high initial investment costs, which rapidly decline over time. This is due to the fact that the two most costly services, nursery and wet processing support, require significant investments in the initial years only.

Revenue drivers

This SDM does not generate revenues by charging for services. Revenues are assumed to come out of the commercial business that Sangany has with these farmers. For this SDM case study, the commercial return is not in scope. Breakeven margin calculations are done in the full report.

SDM scale (# farmers) and cost per farmer (\$)



Cost drivers

The main cost drivers in this SDM are:

- Wet processing support (37% of total costs)
- Nursery support (32%)
- Overhead (20%).

Interestingly, none of these services are provided directly to farmers, who are assumed to benefit indirectly, for instance by having access to good quality and affordable planting material from the nurseries. This makes the model inherently scalable.

SDM projected outcomes

These results do not represent an official assessment of SDM success or failure by IDH or NewForesight. An indication is given based on the analysis done in this forward-looking study and assumptions provided by the SDM operator(s). Actual assessment should be done during and after the SDM, using measured data

SDM objectives

Projected outcomes

1 Improve quality of coffee and spices produced

- The operation of wet processing facilities at farmer group level is expected to increase the supply of higher quality coffee sourced.

2 Empower farmers and facilitate more direct sourcing

- The SDM is taking well-thought out steps towards empowering farmer groups and women's associations, that can eventually take on empowered roles as Sangany business partners.
- Relatively weak farmer organizations, including in previous Sangany experiences, may limit the degree of commercial self-sufficiency of these organizations.

3 Improve farmer livelihoods

- While productivity and net incomes of farmers are projected to increase, the SDM's focus is not primarily on improving farmer livelihoods, therefore results may be limited.

4 Empower women's association and farmers organizations

- See objective 2.

Key insights



Key drivers of success

- Openness to working with other partners in innovative (for the region) approaches (i.e. microfinancing, crop/income diversification, farmer organizations strengthening)
- Relatively low-risk / limited investment approach, whereby Sangany takes a realistic and business-driven approach to investments made, while having a clear trajectory in case of positive results.
- The SDM is relatively low-cost per farmer, with most of the impact coming from working at more aggregate levels.



Key factors in replication

- Sangany has shown a remarkable eagerness and willingness to work together with other partners, from local NGOs to facilitating with local market-based solutions. Also, they are very willing to innovate (for instance, currently exploring opportunities to introduce mobile banking solutions to farmers in the SDM region). This attitude of Sangany could make it an attractive partner for a range of financing opportunities, such as for piloting innovative solutions, but also for scaling up the activities currently undertaken by Sangany.



Key risks

- Low coffee prices in recent years have caused lack of investment in coffee trees. A drop in national coffee production has made local market for coffee more important relatively. As quality requirements on the local market are lower, farmers have little incentive to produce in higher quality production.
- Many farmers lack a business approach to farming, and may therefore not be able or willing to participate in (or buy into) the more market-driven approach of Sangany.
- Farmer organizations are relatively weak, with some cases of inadequate organization despite years of service support.
- Farmers that only make use of planting material see a positive return on investment only after several years. Interviewed farmers viewed lack of bridging finance a key barrier to being able to rejuvenate their farms.



Opportunities for improvement

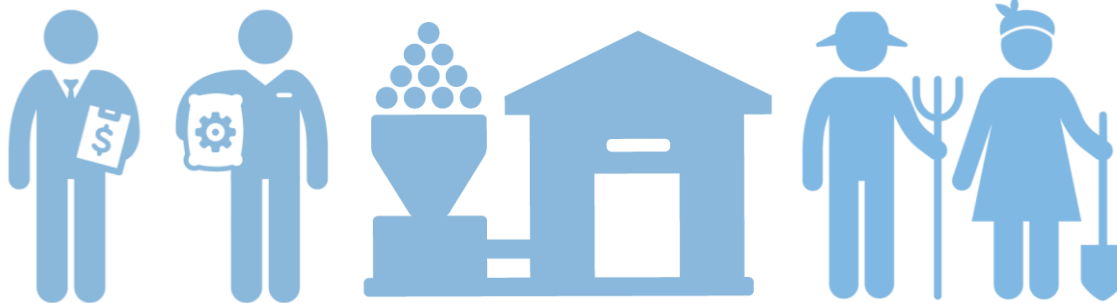
- The SDM does not directly work with farmers for the main services (nursery support and wet processing support), but primarily with farmer groups and women's associations. While the rationale for this is clear, the SDM does not yet have enough of a focus on improving productivity and net incomes at the farmer level. More focus on meeting farmer needs and improving farmer livelihoods could generate more impact at farm level.
- As no phytosanitary products or chemical fertilizers are used in the coffee and clove plantations, there appears to be a potential for organic certification.



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For more information, see the [IDH Smallholder Engagement Report](#). This report, gathered by analyzing over 30 individual SDMs in 16 countries, provides insights into IDH's data-driven business analytics. The findings identify drivers of farmer resilience, cost reduction and financial sustainability in service models and the conditions needed for a supporting enabling environment.