Financial Mechanism Design

Design of a financing mechanism that integrates investment criteria in biodiversity and climate change for small producers

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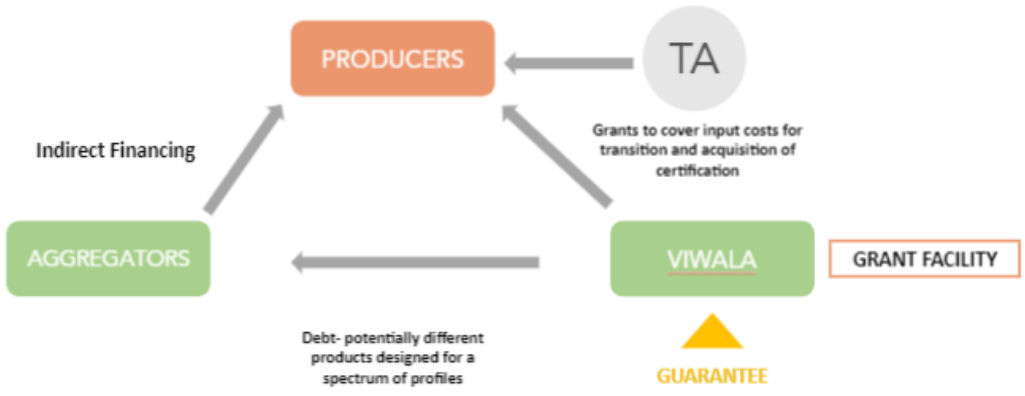
Why do we propose this structure?

Through the conducted desk research and interviews to different actors of the three selected value chains we came up with four different considerations: indirect financing, patient capital, risk mitigation, and sustainability integration.

- Patient capital: Growth cyclicality and length, particularly for agave, demands more long-term forms of capital that can help to smooth cash flows for producers.
- Indirect financing: it will be difficult to finance producers directly, as most are too small and ask for small amounts of capital, which translates into high transaction costs. Instead, there are opportunities to finance through intermediaries or cooperatives, which already provide a trusted (though limited) source of finance to producers.
- Risk mitigation: Commodity production is high-risk (climate, volatility of global prices, etc.) and will require some level of risk mitigation through guarantees and Technical Assistance (TA).
- Sustainability integration: Some commodities have too many sustainability certification options (coffee), while others have none (agave). Helping producers navigate integration of sustainability practices will require significant TA from third-party experts. Moreover, it remains unclear to what extent sustainability certifications help producers capture premium prices, once cost of certificate and change in practices is factored in. Grants may be crucial to transition producers.

Structure and components



The financing will be deployed by Viwala in a debt product, this product will be granted to an aggregator who meets certain criteria. A set of milestones will be

established along with the aggregators, if these milestones are met impact discounts will be implemented on the overall payment. These milestones will be related to the producers' implementation of regenerative practices leveraging the relation between the aggregator and the producer. The goal is that the financing can permeate and have an indirect impact on the producers. Within the overall financial mechanism a technical assistance component targeted to producers will be included and it will be facilitated by partner organizations.

Components:

Viwala: debt product design within Viwala's scope and infrastructure, the main goal is to have a set of profiles that vary in size, stage, revenue, and needs. Given the size of some of the entities we have analyzed we envision a debt product that will vary depending on the profile.

Aggregators: the product will be mainly (due to the size) directed actors that aggregate groups of producers that could be cooperatives, commercial aggregators, etc.

We propose three categories:

-The different actors can potentially be part of the three different categories depending on their growth:

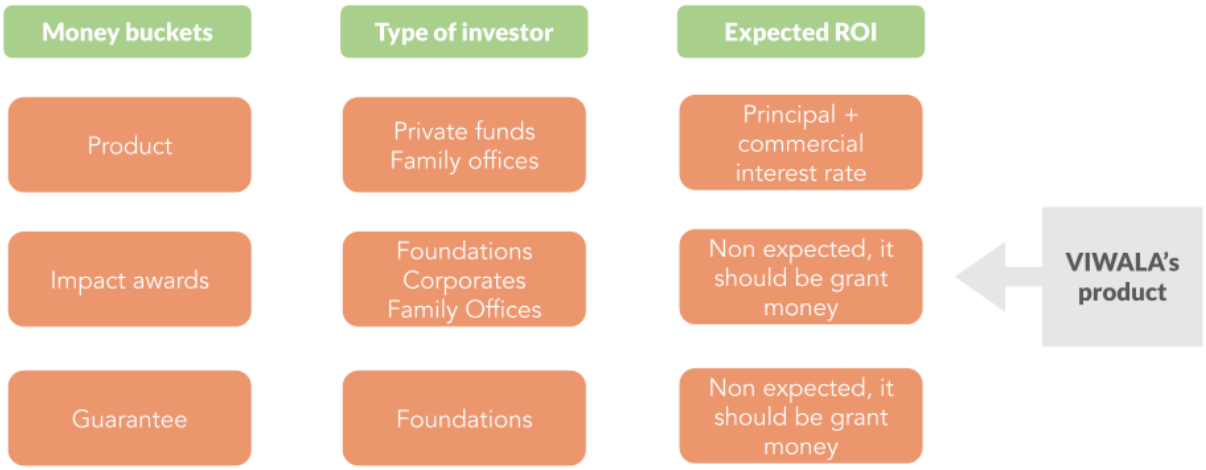
1. Early stage: annual sales between $250,000-$500,000 MXN, recurrent clients, expected growth in sales, legally constituted.
2. Growth stage: annual sales between $500,000-$2'000,000 MXN, corporate legal entity (SC, SAPI, SA), recurrent clients, variety of clients, AAA client category, administrative papers, expected growth in sales, growth plan.
3. Mature stage: annual sales >2'000,000 MXN, registered billing at the SAT, corporate legal entity (SC, SAPI, SA), good fiscal record, credit history, updated financial statements, updated fiscal declarations, recurrent clients, variety of clients, AAA client category, administrative papers, expected growth in sales, growth plan.

General conditions: term: 5 years, fixed payments, monthly payments, impact discount (this can be assigned once we have the capital for the project), the lowest rate for Viwala has to be 10% however we suggest a higher one which would mean there's more capital involved.

Producers: the producers will not be directly financed by the mechanism however the idea is to permeate the aggregator financing to producers in order to impact the growth, some of the impact milestones (see the impact section) will be designed to impact the producers, and they will have access to the technical assistance components.

Technical Assistance (TA): we have found that a technical assistance component will be required in two ways: regenerative practices and business strategy. We have identified that many of the aggregators we have talked to have areas of opportunity regarding the business and growth strategy, through the accelerator at New Ventures we are able to design specific workshops targeted to their needs. Regarding sustainability and regenerative practices we have identified that some aggregators would need capacity building on the matter, for this TA component we would be looking for strategic partners to complement (Earthworm, Solaridad Network, Rainforest Alliance.) In order to finance this component we will have to look for a grant facility. Both TA components will be directed to the producers working with the aggregators.

Capital needs for the mechanism



The mechanism contemplates three different money buckets that would require different types of investors.

- Product: the type of investor needed will be a private fund or a family office expecting a certain return of investment.
- Impact Awards: the type of investor envisioned for this would be foundations, corporations, or family offices. They do not expect a commercial return of investment and are in fact willing to provide the funds as a grant. These funds will serve to blend the products and provide more flexible characteristics for the aggregators.

- Guarantee: this will serve as a risk mitigating mechanism to offset the potential loss of investors. It will minimize the risk of the sector (seasonal, vulnerable to climate change,etc.) and of the investees. The type of investors are normally foundations and the anchor funder of the project. There is not an expected return of investment.

Additionally, the mechanism will require a grant facility to fund the technical assistance component for producers and aggregators.

Environmental impact

As part of our analysis, we conducted a sustainability and impact research in order to understand at which level producers and aggregators were implementing practices to conserve biodiversity and tackle climate change through agricultural practices. It was found that the three value chains have different levels of sustainability practice implementation and awareness. Most producers are not considering sustainability as part of their production process due to the costs it represents, and the benefits/results are not as tangible. Moreover, we evaluated how sustainability criteria could be implemented in the mechanism and if it could be possible to implement them as compulsory to access the financing. We concluded that the mechanism should measure the level of impact the aggregator/producer has and how this could be scaled, however the impact component is not aimed to restrict the financing.

We propose two different impact assessments: the relevance assessment and the environmental scorecard.

Relevance assessment criteria and Scorecard

Seeking to develop environmental criteria to include conservation of biodiversity and climate change perspectives that are relevant to the value chains and target producers, this section addresses a first approach to define which criteria should be considered to access the financial mechanism. It is important to clarify that the approach of this section is from a perspective of sustainability and perception of risk. Broadly speaking, this section considers two topics: principles and criteria. The principles are a guide to achieve responsible long-term investments that benefit both the environment and borrowers. The criteria refer to issues or conditions that must be considered to be a beneficiary.

Principles

When reviewing the literature for this section, two types of principles were defined: those that can help the financial mechanism incorporate environmental, social and corporate governance (ESG) issues, and principles to specifically incorporate biodiversity issues into the financial mechanism. For ESG risks, two of

the six Principles for Responsible Investment (PRI) developed by the PRI Collaboration Platform, an initiative developed by the Finance Initiative of the United Nations Environment Program (UNEP), were chosen.) in association with the UN Global Compact. In this sense, it is considered that the entity hosting the financial mechanism must incorporate:
1. ESG matters in investment analysis and decision-making processes.
2. Reports on activities and progress regarding ESG matters.

To incorporate biodiversity principles, the financial mechanism must consider that its investments avoid:
1. The destruction and degradation of the habitat of original species and ecosystems, in particular of threatened or endangered species (IUCN) or included in Appendix I of CITES and does not involve the collection of such species;
2. The change of land use or degradation of vegetation cover;
3. The loss of genetic diversity without adequately supporting conservation groups and establishing national gene banks to guarantee the preservation of that diversity.

In addition to these principles, it is recommended that prior to any investment a baseline assessment of biodiversity, ecosystem and soil condition be performed at the beginning of the investment as a benchmarking.

Criteria for relevance assessment

The first approach to these criteria was based on five steps: (1) identification of landscape conditions and selected value chains; (2) criteria approach, proposed to include the five capitals –financial, natural, social, human and physical–; (3) design of criteria methodology; (4) selections of general criteria and by value chain; and, (5) prioritization of criteria. It was also agreed that all criteria should be: measurable; realistic or with sufficient opportunity to be fulfilled; and be limited to a specific time or moment, according to the periods under which the evaluations are made and the financial mechanism is implemented.

However, due to the complexity of complying with each of these steps from the beginning, the methodology was redesigned to: (1) contextualize, through the establishment of criteria according to terms of objectives, decision makers and other parties interested; (2) prioritize, identifying the most relevant criteria, to avoid exhaustive lists that are not feasible to fulfill; (3) weigh, assigning each of the criteria to reflect their relative importance in the decision; and (4) evaluate, evaluating the criteria as a whole to obtain a number that allows making decisions.

Based on this new methodology, the following general criteria are proposed, based on which it is proposed to make an evaluation system with the scores and weightings considered in Table 1.

1. *Key Biodiversity Areas (KBA).* KBAs are areas that host critical habitats for threatened species in the world. The idea of mapping and protecting KBAs is to ensure the conservation of the largest and most important populations of species to give them a real chance for survival. Applying the KBA criteria ensures that global populations of a species are assessed and the most important ones identified, including maintaining the genetic variation necessary to adapt to a changing planet. For this exercise, it is considered whether the beneficiary is located within a KBA or not.
2. *Zoning of ANP.* Protected Natural Areas (ANP) have been, up to now, the best public policy instrument for the conservation of biodiversity. Unlike other countries, the concept of ANP in Mexico contemplates a variety of landscapes and managements that range from strict conservation to the management and sustainable use of certain areas within the ANP. For this exercise, the six categories recognized in the General Law of Ecological Balance and Environmental Protection (LGEEPA) and the sub-zoning contemplated in the ANP regulations of the law in question are identified. Therefore, it is recommended not to grant any credit in ANP under the category of National Park, Sanctuary or National Monument. For the categories of Biosphere Reserve, Flora and Fauna Protection Area and Natural Resources Protection Area, it is recommended not to grant credits in core areas. For buffer zones, only include beneficiaries in traditional use zones, sustainable use of natural resources and sustainable use of agroecosystems. For this exercise, two values are considered: 0, if it is not advisable to grant credit on that site, 1 if it is feasible.
3. *Ecosystem Integrity.* In an unprecedented effort, in 2014 the Government of Mexico began to develop the National Biological Monitoring System with the objective of estimating the conditions of the country's ecosystems. The Ecosystem integrity approach allows estimating, in a practical and disaggregated way, the concept of biodiversity. It is made up of three general components: function, structure and presence of biological entities observable in the field (for example, the species protected by NOM-059-SEMARNAT). Based on this, the models show a prediction about the current state of ecosystems throughout the national territory. The index considers values between 0 and 1, where 1 is the highest integrity value. For this exercise, the index is divided into 5 classes ranging from 0 to 4.
4. *Vulnerability to climate change.* Vulnerability refers to the inability of a system to cope with the adverse effects of climate change, climate variability and extreme phenomena and is made up of three variables:

exposure (character, magnitude and speed of change and variation of the climate that affects the system under current conditions and with climate change), sensitivity (degree of impact by climate change and variability) and adaptive capacity (institutional capacities to reduce potential impacts of climate-related threats). For this exercise, it is proposed to use the information from the National Atlas of Vulnerability to Climate Change, a tool designed for decision-making and that allows to know if the municipality where the beneficiary is located is vulnerable to climate change. The following coverage of vulnerabilities to climate change are considered: (a) vulnerability of human settlements to floods and (b) vulnerability of human settlements to landslides (see maps in Annex 1). According to each of the maps and in order to give a number from 0 to 2, the municipalities are grouped in low, medium and high vulnerability.

5. *Indigenous zone.* In order to consider variables of biocultural wealth, it is proposed to identify the municipalities with the presence of some indigenous people . For this purpose, the coverage of the Atlas of the Indigenous Peoples of Mexico is used. For the purposes of this exercise, a binary identification of presence and absence is made, if it is not a municipality with an indigenous people, a score of 0 is given, otherwise a value of 1 is given.

Table 1. Values and ponderation for each criteria

Criteria	Values	Points
KBA	0 y 1	1
PA zonification	0 y 1	2
Ecosystem integrity	0 al 4	2
Vulnerability of human settlements to flooding	0 a 2	2
Vulnerability of human settlements to landslides	0 a 2	2
Indigenous zone	0 y 1	1

For the coherent implementation of the financial instrument with other investments and in compliance with article 24 of the General Law of Sustainable Forest Development (LGDFS), it is proposed to work together with SEMARNAT and SAGARPA to have access to the National System for Consultation of Concurrent Incentives (SINACIC), an automated cartographic information system to evaluate applications for national subsidies / incentives based on operating rules, executed using spatial analysis tools. This tool uses the following coverage: current agricultural frontier (SIAP), administrative information of states and municipalities (INEGI), federal Protected Natural Areas (ANP, CONANP), areas under forest use (SEMARNAT), lands with payment for environmental services (PSA

, CONAFOR), fires (AQ, CONAFOR), natural vegetation and land cover of Mexico: Base map 2015 (CONABIO), Ecological integrity (CONABIO), priority attention sites (CONABIO) and mangroves (CONABIO). Based on this information, it will be possible to review the polygon considered by the financial instrument and generate a report to define if the site to be benefited is in a suitable site to be benefited through a higher level of blending.

Evaluation tool.

Based on the general criteria and for each value chain, it is proposed to make a dashboard that, with columnar radial graphs, makes it easy to evaluate the potential beneficiary and, based on the final score, obtain a degree of relevance in a scale from 0 to 4 (Fig. 1).

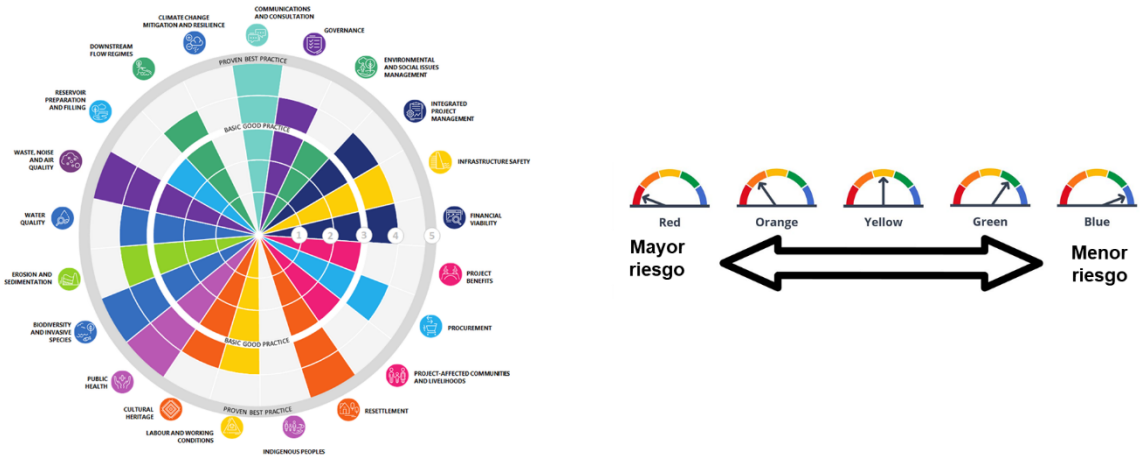
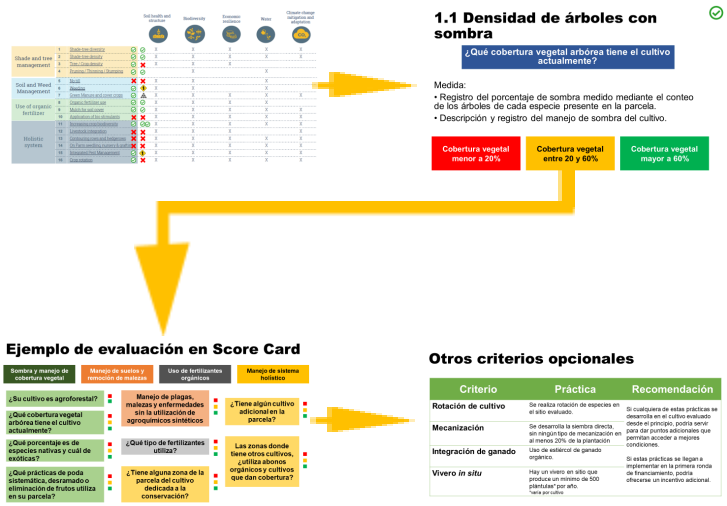


Figure 1. Spider chart proposal and investment risk meter.

Environmental Scorecard

Based on the sixteen regenerative practices identified by Renature, a scorecard was developed for nine specific practices that are feasible to evaluate in a short field trip by a consultant. Each practice of the scorecard is composed of three sections: 1) a questions that addresses a specific practice, 2) a description of the measures that the producer is implementing to fulfill that practice, and 3) a light system (red, yellow, and green) that easily allows to evaluate if the producer is developing or not that practice effectively. Depending on the overall evaluation of the nine practices, benefits on the repayment models or other profits could result from implementing these practices and score most of the practice on the yellow or

green sectors. Additional criteria were considered in case the evaluator finds any of these apply to the plot being evaluated.



Impact milestones

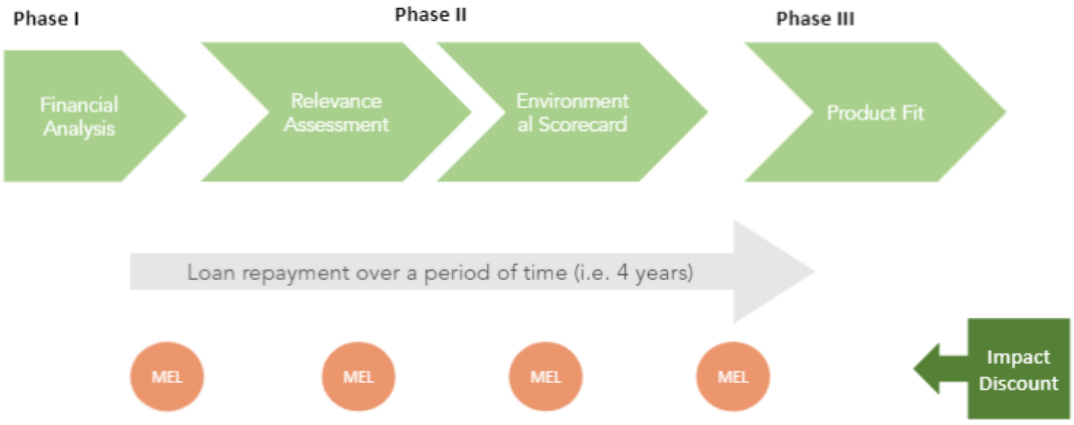
Once the aggregator has been financially approved for the product (depending on the product) the aggregator will qualify to the impact repayment model, it is important to mention that this component will be further analyzed through phase II of the project. The main purpose is to assign a set of milestones based on the Environmental Scorecard.

Regenerative Practices

The main purpose is to have a list of regenerative practices that directly relate and help meet the milestones assigned to each aggregator. This list will be provided by ReNature, some factors that need to be taken into account for the practices are: implementation time and cost for the aggregators. These practices will be linked to the impact milestones and to the awarding of the impact discount.

Overall Process

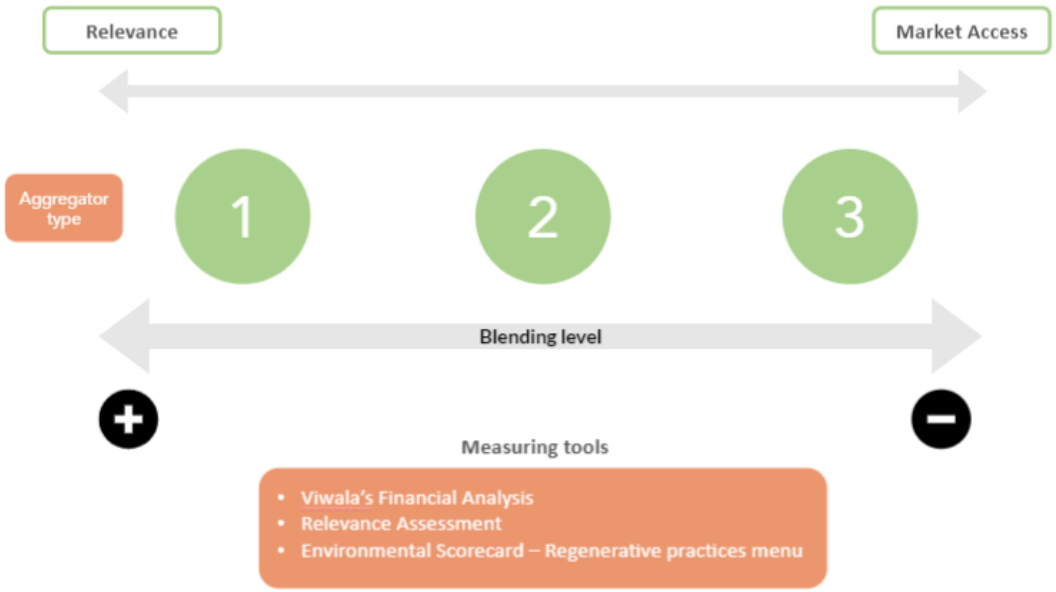
The process will have three phases to establish the viability of granting a loan and which characteristics (level of blending, repayment features, etc.) should the loan have. Through phase I a financial analysis will be conducted to the aggregator. In parallel in phase II a diagnosis will be conducted the main goal is to assess their relevance level and their implementation of regenerative practices. Once Viwala has completed the financial analysis and the impact assessment, it will be decided which is the product that best fits the aggregator. Both the financial analysis and the impact assessment aim to provide a holistic analysis of the aggregator and will serve as a tool to assign the product that will have the greatest impact.



Product Allocation Process

The process to decide which product is the most suitable for an aggregator will rely on the relevance assessment and the financial analysis. If the level of relevance of the aggregator turns out to be high that will indicate that the most suitable product is a more blended one. Moreover, if through the financial analysis it is seen that the aggregator's model is in an early stage this will also reflect in the level of blended financing needed.

In the diagram below shows the three different products and the level of blending depending on the relevance/market access. The aggregators will be divided into three different types using the financial analysis and the relevance assessment.



Sustainability Strategy for the Mechanism

In order to implement and provide sustainability to the fund we would need to raise capital among different types of investors. Moreover, the process to launch and implement a project this size will take place around a year. We highly recommend to undergo a piloting phase of the product, the impact schemes, and to know the sector better.

Types of funders:

- Anchor funders: a foundation or corporation who would be willing to provide the initial funder for the project.
- Class A: more traditional investors who are expecting a competitive return. ie. DFI's
- Class B: investors who are expecting a lower return.
- Class C: investors who are not expecting a return just their initial capital. ie. family offices and foundations.
- Class D: money coming from grants who do not expect a return.

Many of the previously mentioned terms, such as the expected return of investment, could be designed once we have the terms and conditions with the investors.

Recommendations

The following recommendations and assumptions should be taken into consideration into further stages of the project.

- The ideal next step after phase II is to get funding to pilot the product and the impact integration on a small pool of enterprises. The main goal of this is to test the financial mechanism before launching it with a bigger scale.
- The period of time needed to raise capital and launch the financial mechanism is approximately a one year period.
- The technical assistance and the impact measurement are expected to be done through third parties that have the technical capacity to train and monitor the aggregators and producers. For this component New Ventures will generate alliances for the different value chains.
- It is recommended that the GIZ get involved in the further development of the mechanism, once phase II is over the New Ventures' team will be handing a list of specific involvements for GIZ.