

Finance for Integrated Landscape Management:

Processes that support integrated landscape initiatives and make access to finance more inclusive

Methodological guidance



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About Tropenbos International (TBI)

Tropenbos International (TBI) is a not-for-profit foundation that envisions a future in which forests and trees are used sustainably for the benefit of local people and the global community. By making knowledge work for forests and people, Tropenbos International contributes to inclusive and evidence-based decision making for the improved management and governance of tropical forests. TBI's longstanding local presence and ability to bring together local, national and international partners makes it a trusted partner in sustainable development.

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World Agroforestry (ICRAF) is a centre of science and development excellence that harnesses the benefits of trees for people and the environment. Leveraging the world's largest repository of agroforestry science and information, we develop knowledge practices, from farmers' fields to the global sphere, to ensure food security and environmental sustainability. Our vision is an equitable world where all people have viable livelihoods supported by healthy and productive landscapes.

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The opinions and views expressed in this publication are the responsibility of the authors and do not necessarily reflect the opinions and views of the CGIAR Research Program on Forests, Trees and Agroforestry (FTA) or NWO-WOTRO.



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Background

Integrated landscape initiatives have shown promising potential to mobilize and support diverse stakeholders across sectors to work jointly toward shared objectives. These initiatives meet a wide range of human needs, economic goals and ecosystem objectives in Africa (Milder et al. 2014), Latin America (Estrada-Carmona et al. 2014) and Asia (Zanzanaini et al. 2017). Such collaborative frameworks allow participants to pool human, financial and other resources to support landscape-level objectives.

According to a recent literature review, however, few integrated landscape initiatives have had access to the finance needed to achieve their goals (Louman et al. 2020a). There is a clear mismatch between the supply side of private “impact investors” (those who look for social and environmental impacts from their investments beyond a financial return) and the demand side of sustainable land-use investments on the ground (Rode et al. 2019).

One of the major barriers to investments in integrated landscape initiatives is the risk that investors associate with such investments. At the same time, there are cases where investments are available, but do not support shared landscape objectives (social, economic and environmental). Shames et al. (2019) propose a methodology to analyze financial flows at the landscape level. This allows participants to determine if it is a lack of investments or poorly targeted investments that constrain the support for shared landscape objectives. Pilot applications of that methodology showed that, in some landscapes, private finance was readily available, but only a small proportion of it was geared to objectives that aligned with integrated landscape management (Pamerneckyte et al. 2020; Rossanda et al. 2020). These authors suggested that further studies were necessary to shed light on those factors that allowed financial flows to support integrated landscape initiatives.

This report proposes a methodology that helps identify the key stakeholders linked with these processes, their perspectives and motivations, and the mechanisms used to channel funding from investors through brokers or intermediaries to individual or recipient groups that support integrated landscape initiatives. The methodology emphasizes identifying and assessing the risks and barriers perceived by various stakeholder groups; the range of strategies they employ to reduce or overcome these barriers; and the extent to which these strategies have succeeded.

This methodology forms the basis for a series of case studies implemented by the CGIAR Research Program on Forests, Trees and Agroforestry (FTA) and associated partners. The findings of those case studies are expected to inform the design of mechanisms for financing integrated landscape initiatives and, ultimately, to facilitate the flow of finance to support shared landscape objectives in tropical countries.

Objectives

General objective

This report provides insight into the processes linked to financial flows for integrated landscape management, and outlines the mechanisms identified by participants for mitigating the barriers and risks associated with these flows. The ultimate goal is to support multi-stakeholder involvement in integrated landscape finance programs.

Specific objectives

- Determine the expectations of various stakeholder groups with regard to landscape finance, the underlying processes, and the extent to which these processes meet stakeholder expectations;
- Identify risk perceptions in relation to financial flows, mitigation strategies and resulting risk exposure for each stakeholder group; and
- Define the main barriers for expanding integrated landscape finance and options for overcoming them.



Summary of the methodology

This methodology was designed to be implemented by FTA and its partner organizations studying finance for integrated landscape management. While it is useful in a wide range of cases, the authors intend it to apply to the characterization of processes that key informants considered to be successful in supporting landscape initiatives and/or in increasing access to finance for all possible recipients — including marginalized or disadvantaged groups — within landscapes. Applying this methodology in a variety of cases will contribute to generating an information base of comparable results. People can draw lessons from this information base for the design of processes that support inclusive financing for integrated landscape initiatives. Preferably, this methodology should be implemented by a researcher outside the organization that is subject of the study.

The methodology comprises three phases:

1. In-depth interview with the agency that is implementing the studied processes
2. Interviews with key informants
 - a. Representatives of the finance sources identified during Phase 1
 - b. Representatives of recipient groups (e.g., producer organizations or farmer associations)
 - c. Providers of non-financial services engaged with recipient groups and individual recipients
 - d. Interviews with individual recipients and non-recipients of financial flows (online/by phone)
3. Feedback and validation
 - a. Focus group discussions with the implementing agency, recipients and service providers to discuss and validate the results of the interviews in Phase 1 and Phase 2
 - b. Stakeholder workshops for feedback and further validation¹

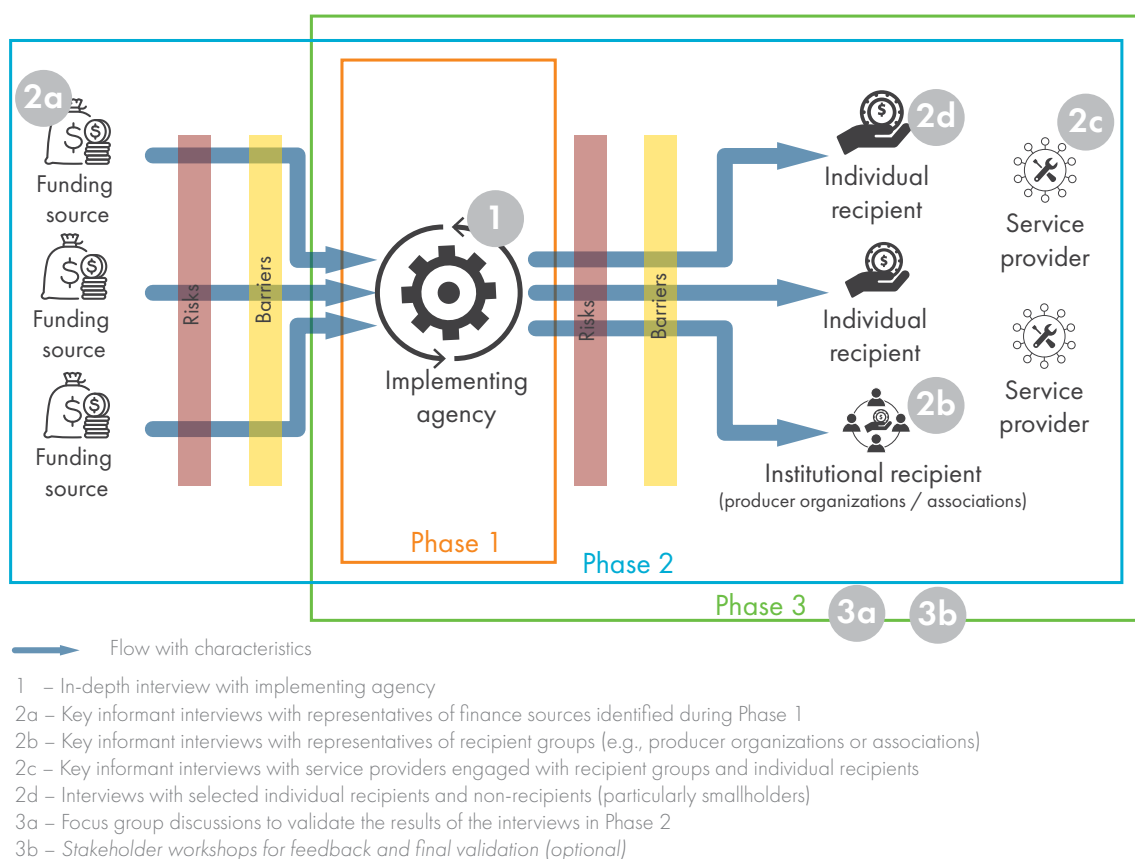
Phase 1 involves an in-depth interview with the implementing agency (IA), which plays a central role as broker or intermediary of financial flows to existing landscape initiatives. This phase aims to define six things: 1) the main sources of finance and their characteristics; 2) the principal groups of recipients; 3) the financial flows associated with the different sources and groups of recipients; 4) the process of managing and channelling funds; 5) the financial mechanisms applied and their underlying rules; and 6) the risks and barriers involved from the perspective of the IA. In addition, the interview in Phase 1 will result in a list of stakeholders to be interviewed in the subsequent phases.

¹ Phase 3b is optional in view of restrictions related to the COVID-19 pandemic, and is not discussed further.

Phase 2 comprises collecting data related to the sources of finance, recipients (groups and individuals), and the providers of non-financial services who engage with them. It includes interviews with four types of key informants, which were identified during Phase 1: 2a) representatives of the finance sources; 2b) representatives of recipient groups; 2c) service providers engaged with recipients; and, 2d) selected individual recipients and non-recipients (particularly smallholders). Phase 2 focuses on risk perceptions, barriers perceived by each of the stakeholder groups, and ways to overcome these barriers and reduce the (perceived) risks. It also seeks to determine the extent to which the financial flows have met stakeholder expectations, as well as the perceived effects of the financial flows on sustainability goals in relation to the landscape.

Phase 3 involves validating the information gathered in Phase 2. Focus group discussions involve representatives of principal groups of recipients, service providers, the implementing agency, and other stakeholders who are relevant to the financial flows. Where appropriate and feasible (see Footnote 1), stakeholder workshops (Phase 3b) will be held for feedback and further validation of results (See Figure 1).

Figure 1: Actors, financial flows and possible interactions addressed in this methodology



Note on modifications in view of the COVID-19 pandemic: Each part of the methodology must follow the relevant regulations in relation to the COVID-19 pandemic. Interviews can be held remotely, using telephone, Skype, Zoom or similar communications means. This will depend on the access of various stakeholder groups and actors to specific devices and online access. For the focus group discussions, videoconference software such as Zoom can be used. In-person stakeholder workshops can be considered only if COVID-19 restrictions allow them.²

² Interviews may need to be held face-to-face due to lack of good internet connections and/or telephone network. In those cases, local COVID-19 regulations must be followed.

Dealing with privacy

Specific case study reports, along with one or more synthesis documents, will be published as part of this initiative. Each case study is part of a larger effort to understand the barriers to and risks for landscape finance. The case study reports will bear the name of the implementing agency (IA). The focus and content of the case study report will be discussed with each of the IAs prior to publication, and the researchers will ensure that no confidential information is included in the reports. The content will be responsibility of the researchers and will not necessarily reflect the opinion of the IA or the organizations the researchers are affiliated with. Any synthesis publication that results from the combined case studies will use only anonymous, non-confidential information and will be the sole responsibility of the researchers involved, unless IAs or key informants have explicitly given their permission to use their names, or any other information conveying their identity. For both the case studies and the synthesis publications, the authors will follow the guidelines of their organizations for ethically and scientifically sound research, transparency, accountability and confidentiality. This includes free prior informed consent (FPIC) procedures.

All the representatives of finance sources, group and individual recipients, and service providers who are interviewed will remain anonymous. Their names and contact details will be recorded by the research organization, but will be kept confidential and used for internal purposes only by the organization for the purpose of the research. Although representatives of the IAs and other resource persons will provide lists of names to the researchers, the researchers will not disclose the names of the interviewees actually selected to the IA or to any other party (finance sources, recipients, service providers), unless specific permission is given on a case-by-case basis by the individuals/organizations. This will be clarified at the beginning of each interview or focus group discussion. Participants in the focus group discussions will be asked not to share any personalized information from the discussions with persons or organizations outside the focus groups (under the Chatham House Rule³).

Selecting recipients

The methodology collects information from a number of perspectives in order to get a comprehensive and wide-ranging view of the drivers and financial mechanisms in the landscape. This requires in-depth interviews with respondents at different points along the financial value chain. At the end of the value chain (the recipients) the number of people involved is too large to allow for interviewing them all, so a range of recipients should be surveyed. The sample size should allow for the results to be generalized for the case studied (Robinson 2014), although the main interest lies in the range of possible outcomes rather than in being able to estimate a representative average.

For that reason, this methodology applies Quota Sampling for selecting stakeholders (phases 2b, 2c and 2d), which assigns a representation of each of the existing categories of respondents (Mason 2017). Quota sampling is appropriate, since for some categories it may be difficult to include more than one respondent due to a lack of members (e.g., young farmers), less accessibility (e.g., of farmers with small-sized farms) or language barriers. Also, in a category with a high number of potential respondents, quota sampling does not restrict the number of respondents; in most cases this will lead to a better representation of the specific group and will decrease uncertainty.

3 Under the Chatham House Rule, anyone who comes to a meeting is free to use information from the discussion, but is not allowed to reveal the name or affiliation of the person who made the comment. It is designed to increase openness of discussion.

Possible criteria for selecting individual recipients

- **Gender:** Female and male recipients may have different perspectives, perceived risks and barriers, and goals. Female participation is an integral part of landscape initiatives, and including gender considerations is a high priority of this methodology. A minimum quota for female and male respondents may need to be applied.
- **Age:** Age may constitute a bias. Young recipients may well have a different vision of the landscape and may experience different risks and barriers than their older counterparts. Dividing the recipients into two age categories; for example, one with individuals younger than 26 years old and the other with individuals older than 26 — helps ensure that young recipients are represented in the methodology.
- **Entity size** (farm size): Recipients from different sizes of entities (farms in most cases) may well experience different risks and barriers to finance. They may also have different circumstances, which may lead to different expectations of the same flow. The size of an entity can be measured through the number of people employed or the size of the area managed.
- **Type of assistance received:** The type of assistance received may also have different results. Besides direct monetary support, types of assistance include technical assistance, marketing support and capacity building, or any combination of these. This research aims to address the monetary flows in particular, but if recipients of monetary flows receive different types of additional assistance an effort should be made to include recipients for each type of additional assistance received.



Phase 1

Phase 1:

In-depth interview with the implementing agency

The implementing agency (IA) is the broker or intermediary that channels money to recipients in the landscape. The IA may be a fund manager, but often it will be an NGO that raises money to fund a bundle of incentives for landscape stakeholders; or an agri-food company that aims at sustainable sourcing. It could also be a local financial entity (e.g., microfinance unit or credit union) that raises funds to be used for micro- or medium credits within the landscape. Phase I comprises a detailed interview with the IA, focusing on the main financial flows that it facilitates.

Selecting the implementing agency

The implementing agency must be an organization with extensive knowledge of and experience in the landscapes where it channels its financial flows. This knowledge should include insight about the key stakeholders and the main drivers of changes in the landscapes. Furthermore, the IA must have a central role (as an intermediary or broker) in the financial flows in a landscape. These flows, in turn, should constitute a significant portion of the overall financial flows in the area where the landscape is located. In view of the nature and sensitivity of the information required, and the time and effort needed to conduct the in-depth interview, it is critical for researchers to have at least a minimum level of information about the IA before beginning the process. For this reason, it is recommended that researchers choose an IA who is a known partner of the organization that is coordinating the study, and that the IA has shown an interest in collaborating. The organization that coordinates the study should involve the IA in a two-phase process: 1 a) interview with the CEO (or equivalent); and 1 b) interview with a person delegated by the CEO.

Phase 1 a

Interview with the CEO (or equivalent)

The organization that coordinates the study should approach the chief executive officer (CEO) of the IA, or equivalent (e.g., director, president), introducing him or her to the goals of the study and to the possible benefits of participating.⁴ Once free, prior informed consent for participation has been established, the research team will ask a set of strategic questions that focus on the IA's view and goals. These questions should relate to how funds are channelled into a given landscape, how the main financial flows are facilitated by the IA, who the sources and recipients are, which main financial mechanisms are used (e.g., loans, share issue, venture capital), what their conditions are (e.g., interest rates, collateral, payback period) and what elements/strategies have been used to reduce barriers and risks by investors, the IA and the recipients in order to facilitate the financial transactions.

During phase 1 a, it is also useful to ask the IA for documentation of financial flows for further analysis and to reconfirm the confidentiality of the information provided. Documentation could include the geographical range of the programme, the main financial inflows to and outflows from

4 For example, suggestions to improve the effectiveness or efficiency of flows or make the broader public aware of the effects of the flow.

the IA, the characteristics of these flows, and current and future strategies for the recipients and the landscape. Given the time constraints facing the CEO (or equivalent), detailed questions should not be asked at this stage and the interview should be limited to about 30 minutes. Next steps, including determining whether there is a need for a follow-up interview, should be discussed at the end of this interview.

Expected outputs of the interview with the CEO

1. General description of the flows that it brokers (type, size, source, mechanisms, conditions, recipients)
2. Expectations of the IA in terms of the effects of these flows (e.g., contribute to reduced poverty, sustainable supply, emission reduction, forest and biodiversity conservation, water conservation, food security, stable work, sustainable production)
3. Outlook of the IA with respect to future financial flows
4. Documentation of flows and their context

Phase 1 b

Interview with a delegated person

The CEO or equivalent of the IA will delegate an employee who will serve as the main contact between the research team and the IA. Before Phase 1 b begins, the project team should tell the contact person what is necessary to prepare for the interview, and provide the contact person with the opportunity to indicate whether he or she will not be able to respond to certain questions due to confidentiality issues.

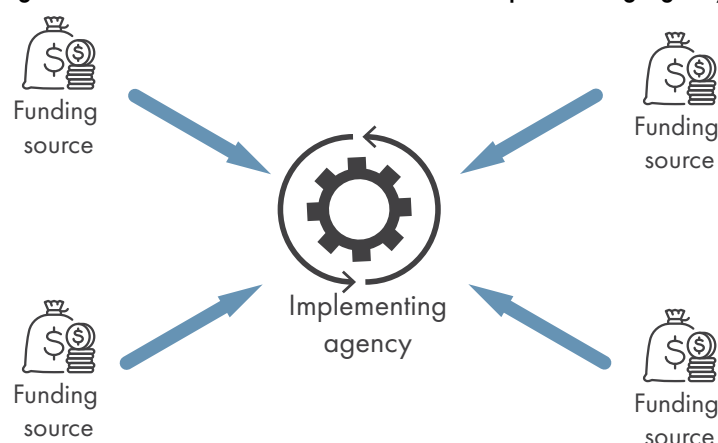
Phase 1 b involves acquiring more detailed information on specific financial flows and the IA's internal processes. The contact person must be aware of the IA's operations and have access to specific information about the financial flows to be studied, including their conditions, terms, source and recipients. The contact person may be head of partnerships, head of the financial mechanism, or a financial/economic expert at the IA. The contact person may be able to provide further documentation in advance (in response to questions), which could shorten the time needed for the interview.

The interviews in Phases 1 a and 1 b should result in a list of potential interviewees for Phase 2 and 3.

The interview in Phase 1 b will be divided into three sets of questions.

Phase 1 b: First set of questions

The researchers will ask the contact person to identify the main sources of finance to the Implementing Agency, along with their main characteristics, such as size, instruments and mechanisms involved, terms of the agreement, and expected outcomes. Of particular interest for the case study are the questions that relate to the risks perceived by the IA in relation to the financial mechanisms employed to transfer money from the source to the IA, as well as any risk management strategies adopted by the IA, any barriers between the source and the IA, and what has been done to overcome these barriers. See Figure 2.

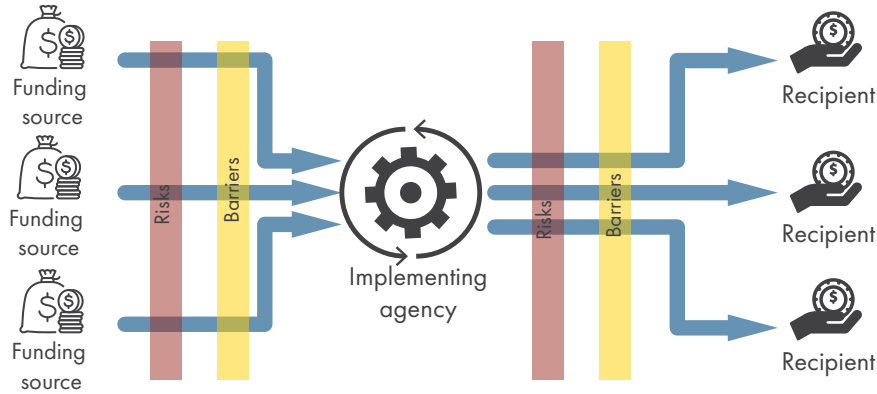
Figure 2: The main financial inflows to the implementing agency**Expected results, first set of questions**

- Sources of finance related to the program the study focuses on and their characteristics (legal name, type of entity, size, etc.), to be cross-checked with the information provided by the CEO in Phase 1a
- Information about financial inflows (from the source to the IA) and their characteristics (size, terms of the agreement, financial mechanisms used, etc.)
- Importance of these inflows in the IA's total finance
- Risks perceived by the source, if these risks are known to the IA, and the risk management strategies adopted by the source (for example, guarantees, incorporation of risk level in interest rates, etc.) to address them — It may be useful to add a question such as: what would the source do if the IA cannot provide the agreed-upon benefits?
- Risks perceived by the IA regarding whether to accept finance from sources (for example, risks related to image, debts, commitments) and risk management strategies adopted by the IA
- Strategies adopted by sources to make finance accessible and recent changes to these strategies, if any (if known to the IA)
- Barriers perceived by sources with regard to providing finance to the IA (if known by the IA), and ways to overcome these
- Expected effects of the flows by 1) the IA; 2) the source; and 3) recipients (this can later be used to explain any discrepancies between expected effects and actual effects)
- Outlook of the IA with respect to future financial flows that it may facilitate

Phase 1b: Second set of questions

These questions focus on why the IA is involved (i.e., what motivates it) and how the IA uses the finances it receives from its source, how it blends the money from various sources (when this is the case), how the IA brokers financial flows between sources and recipients, and what other services it provides to recipients (for example, technical assistance). Other questions will relate to the specific risks of the IA in managing the money and any risk management strategy it has adopted. Further, the questions aim to identify the main barriers encountered by the IA in obtaining funding from sources and how these barriers were overcome. See Figure 3.

Figure 3: Focus of the second set of questions



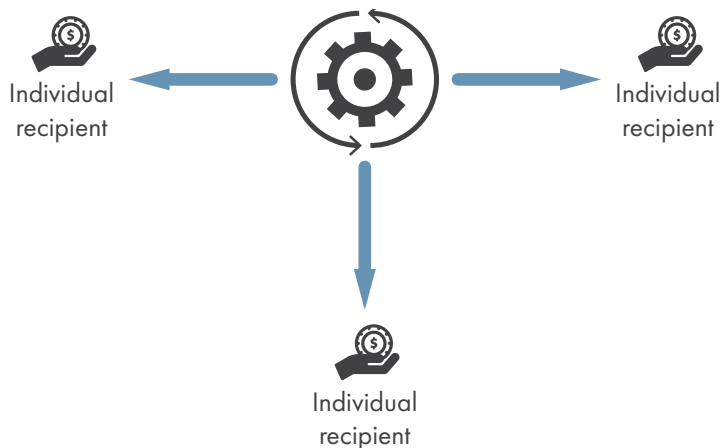
Expected results, second set of questions

- The approach used by the IA (mechanisms, the importance of each flow in the IA mix of finance, etc.)
- Financial structure and mechanisms employed for transactions between sources and the IA
- Risks experienced by the IA in managing the money received and the risk management strategies it has adopted
- Barriers (between IA and sources) experienced and ways to overcome them
- The IA's future relationship with the same sources or new sources

Phase 1b: Third set of questions

These questions focus on the financial flows (and services) from the IA to the recipients. The aim is to get an overview of the IA's expectations in providing the identified flows, to identify the main recipients, and to determine the main flows (and their characteristics and mechanisms), with an emphasis on what risks and barriers exist and what strategies the IA uses to overcome them. Also, the answers should narrow down the various types of recipients, such as groups of recipients, individual recipients and service providers, and indicate if there are other sources or intermediaries that channel finance to them. This procedure should be repeated for each financial flow that channels money from the sources identified in the first set of questions to the beneficiaries of the programme studied. See Figure 4.

Figure 4: Focus of the third set of questions



Expected results, third set of questions

- Information about the main groups of recipients, individual recipients and service providers (legal name, type of entity/farm, size); how they were identified/selected; and, for the group recipients, which individual recipients they represent (e.g., farmers, in the case of co-ops)
- Characteristics of the financial flows from the IA to recipient groups and individual recipients (size, mechanisms involved, terms of agreement)
- Risks perceived by the IA with regard to these group and/or individual recipients and strategies employed by the IA to reduce such risks — It may be useful to add a question about what would happen in case of default; i.e., if the recipient does not comply with the actions/benefits agreed upon
- Barriers encountered by the IA in its relationship with group and/or individual recipients and ways to overcome these barriers. This includes providing support for recipients in forming local organizations and provision of other services/incentives in addition to financial flows (e.g., bundling incentives such as provision of loans in combination with assistance for financial literacy, and/or technical support for actions paid for by the loan)
- Other sources of finance that are accessible to recipient groups and individual recipients
- Whether flows to individual recipients differ from those to recipient groups (in terms of characteristics, risks and barriers)
- Expected and actual effects of the financial flows in the target landscapes
- Ways (and indicators) to measure impacts in the field and to incorporate these findings into future actions and strategies in order to support adaptive management
- The IA's view of future access to finance by recipient groups and/or individual recipients and the IA's role in this

The results of Phase 1a (interview with the CEO) should be combined with the additional documentation provided by the IA in the three sets of interviews in Phase 1b. At the end of Phase 1, team members should have a good overview of the main financial flows passing through the IA, the main sources and recipients of these flows, and the expected outcomes. In addition, the interviews in Phases 1a and 1b should result in a list of potential interviewees for Phases 2 and 3.



Phase 2

Phase 2: Interviews with key informants

Key informants include sources, recipients, service providers and other relevant actors in a financial flow. Depending on how many sources, recipients and other relevant parties are identified by the IA in Phase 1, researchers may select all of them as key informants, or may need to select just some of them. Key informants must be selected in close consultation with the IA. Selection criteria may vary for sources, recipients and other relevant actors.

The interviews in Phase 2 (and the focus group discussions in Phase 3) must be as inclusive as possible; therefore, gender and youth issues must be considered when selecting key informants. In this way, researchers can ensure that a range of voices and perspectives are considered and that the report includes varied views and challenges as well as opportunities in the landscape. In addition, team members should include landscape actors who are not receiving benefits from each flow, but who could be potential recipients. This will provide further insights to the needs of these actors, the barriers to access that affect them, and the risks of each flow.

Phase 2a

Key informant interviews with sources

Phase 2a comprises detailed interviews with the sources that were identified in Phase 1.⁵ If there isn't time to interview all the sources, they should be prioritized by the size of the flows involved, prospective effects of the flows (positive and negative), innovation of the financial mechanisms used, and the potential for positive effects on marginalized or disadvantaged groups such as women, youth and ethnic minorities.

The interviews should follow the same guidelines as those proposed for Phase 1. Researchers should ask a first set of strategic questions of the CEO of the source. If applicable, a person assigned by the CEO will be the main contact between the research organization and the source. The contact person must be aware of the organization's operations and may have access to specific information about the financial flows from the source to the IA that is the subject of this study, and the characteristics, terms and recipient entities of these flows. The contact person may be, for example, head of partnerships, head of the financial mechanism, or financial/economic expert of the organization. Researchers should ask in-depth questions of this contact person, to be supplemented by documentation.

The interviews should focus on the investment risks, barriers and expected effects of the financial flows between the source and the IA. The interviews should seek to validate the preliminary data gathered in Phase I, such as information about the source and characteristics and terms of the financial flow. The interviews should also collect information on any risks perceived or encountered by the source, what risk management strategies were adopted to minimize these risks, and suggestions for reducing the risks of future investments. Also, the interviews should identify the main barriers to reaching recipients that the source has experienced, and should indicate how

5 If funding is mixed, and thus difficult to trace back to its various sources, the main contact person between the IA and the funding consortium may be selected for the key informant interview. Since funding sources may be diverse, a representative of each of these sources may need to be interviewed to capture variation.

these were overcome and provide recommendations for tackling such barriers in the future. Finally, the interviewers should ask about expected effects of each flow on landscape objectives, and how to adapt the flow to increase its positive effects.

Expected results, Phase 2a

- Validation of information provided in Phase 1 about the characteristics of the financial flows
- Risks to sources and risk management strategies adopted by them in relation to each relevant financial flow — It may be useful to add questions such as: What would you do in case of default (non-compliance)? How often do you expect this to happen?)
- Barriers normally encountered by sources, and ways that these have been overcome
- Expected effects of the flows in the landscape
- How the source sees the way ahead for this type of financial flow, for the source itself and in general

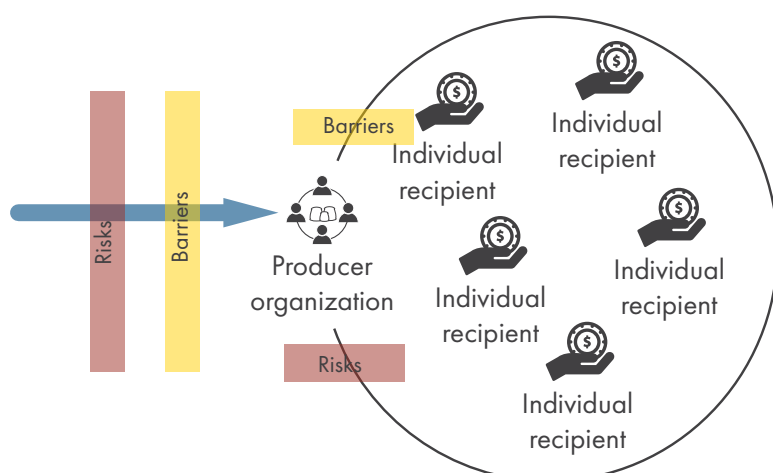
Phase 2b

Key informant interviews with representatives of recipient groups

Phase 2b aims to obtain data about the specific financial flows to various recipient groups. Key informant interviews should be held with the representatives of groups such as producer organizations, cooperatives and associations. These groups combine at least two (but usually many more) individual participants with the aim of improving their business potential, counteracting their lack of size and increasing their capacity. Two interviewees (e.g., the manager of the organization and a participating member) may be selected for each group. This will help avoid response bias, since different people in the organization may have different hands-on experience and contact with the IA and participating members and thus have different perceptions of the barriers and risks of the financial flows.

The selection procedure must consider gender and youth diversity, to capture the maximum variation in views and perspectives. Disadvantaged groups such as women or youth should be selected. Entities that support women's empowerment or that have a large share of women employees should be prioritized. Specific groups of young entrepreneurs/farmers can also be prioritized.

The aim is to understand the characteristics of the flows that reach these recipients, the terms of the flows, and the expected, perceived and measured (if applicable) effect of the flows from the perspective of various actors. As in other phases of the methodology, the interviews will emphasize the risks associated with the flow for each kind of recipient, the risk management strategies used, and how the flow could be improved to better achieve positive effects, reduce negative effects and lower risks. Interviewers should ask recipients about the barriers they frequently encounter and the ways they have overcome these barriers. They should also ask for recommendations on how to make finance more accessible to recipients. See Figure 5.

Figure 5: A sample institutional organization composed of several individual recipients**Expected results, Phase 2b**

- Information on characteristics of financial flows from the intermediary to recipient groups
- Information on other sources of finance for recipient groups
- Main risks relative to the financial flow to the recipient groups, and risk management strategies they adopted
- Barriers to obtaining finance for recipient groups, and ways to overcome them
- Barriers and risks for the individual members of the group
- What can be improved in the flows
- Expected and perceived effects (positive and negative) of the financial flows on landscape objectives
- Measured effects, if any effects have been measured

Phase 2c**Key informant interviews with service providers or other stakeholders in the landscape**

The interviewers may want to select additional key informants who are service providers to any of the direct actors in the financial flow studied, stakeholders in the landscape, or can provide a general overview of the circumstances in the landscape even though they do not directly participate in that flow. These may include government officials, NGOs, public service employees, academics, financial institutions, shop owners, and consulting firms. Preferably, one stakeholder/service provider should be carefully selected from each of these sectors, in order to get a broad representation of opinions within the landscape.

These interviews involve validating the data collected in the other interviews, and getting an outsider's view on the flow(s) studied, such as its broad outcomes in the landscape. Interviewers should aim to get information on the role of the financial flow administered by the IA within the target landscapes. More specifically, they should ask how important the flow is in achieving the objectives defined by the IA, or to other goals that the interviewee feels are important.

Also, the interviewer should ask their opinion of the reasons behind the success (i.e., positive effects) or failure (i.e., negative effects) of the flow. Reasons may include driving forces and enabling conditions (inside or outside of the IA's sphere of influence), and the flow's strengths,

weaknesses and sustainability. Finally, the interviewer should ask the stakeholder or service provider about what could be changed in the flow to achieve a better landscape impact, or to increase its efficiency and effectiveness.

Expected results, Phase 2c

- Information on main issues in the landscape that the studied flow addresses
- Information on the risks involved and who experiences those risks
- Identification of barriers for other stakeholders to access these flows
- Any suggestions to improve the impact of the flows

Phase 2d

Online or phone survey with individual recipients and non-recipients

Interviewers should conduct surveys (online or by phone) with individual recipients of the financial flows and with non-recipients, selecting the interviewees as indicated in the summary of the methodology. The aim is to get information on the expectations, risks, barriers to and effects of the financial flows from the perspective of a range of recipients. Non-recipients can be asked to provide information on their view on the flow and about the possibilities of and barriers to being included in the flow.

The surveys should be short and concise, and preferably have closed questions such as multiple choice.

The surveys may take several formats, depending on the capacity of the respondent and on access to technological devices such as smartphones or computers, as well as access to online services. The surveys may be conducted through in-person visits (if COVID restrictions allow), or through a phone call, WhatsApp, or a digital online survey platform.

Expected results, Phase 2d

- Views on financial flows of those interviewed
- Views on the terms of financial flows
- Main expectations of flows
- Whether the interviewees' expectations are being met
- Risks
- Barriers
- Perceived effects of flows

Phase 3



Phase 3:

Focus group discussions with the implementing agency, recipient groups, service providers and other interviewed stakeholders

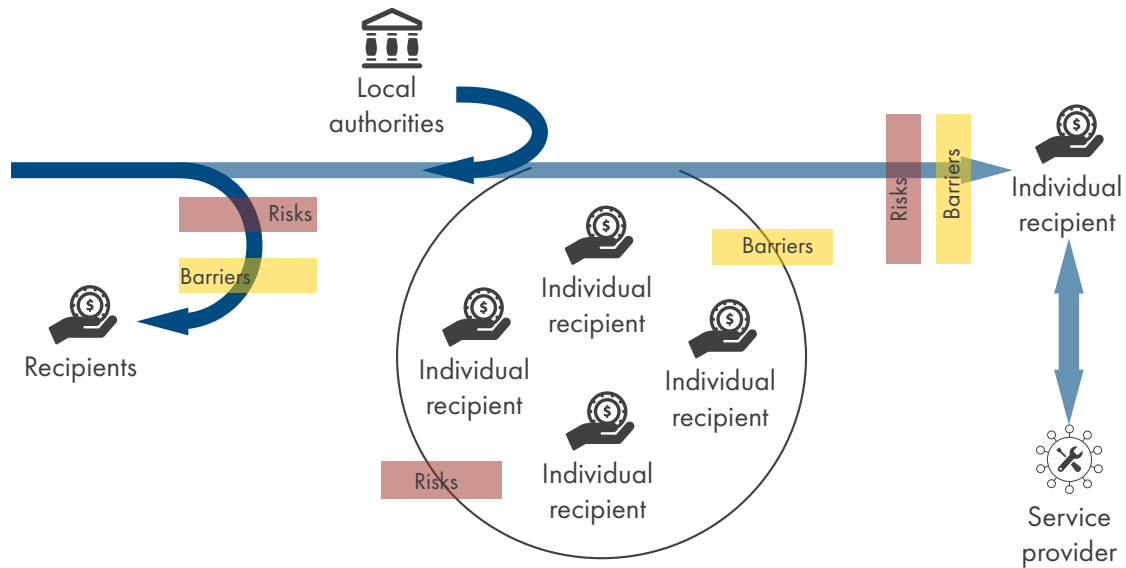
In Phase 3 researchers aim to validate the data collected in Phase 1 and Phase 2. Researchers should create focus groups by selecting individuals according to predefined criteria (see page 12), rather than by choosing a representative sample of the population. These individuals may be representatives of groups of recipients (cooperatives, associations, village groups, producer organizations), individual recipients or other actors who may influence or have a stake in the financial flow, such as service providers or local authorities and the implementing agency. Focus group participants will discuss their overall satisfaction with the flow as well as its perceived advantages and disadvantages.

The use of focus groups is considered an effective qualitative approach to gain an in-depth understanding of social issues (Nyumba et al. 2018). According to Nyumba et al. (2018), a focus group should have between six and eight participants. Such a group size is large enough to get a good spectrum of perspectives and small enough to avoid fragmentation within the group. Since there is no guarantee that all those invited will be able to attend, Rabiee (2004) recommends that researchers over-recruit by 10 to 25 percent.

The selection procedure must consider gender and youth, to capture the maximum variation in views and perspectives. Also, evidence suggests that having mixed-gender groups tends to improve the outcome of discussions (Nyumba et al. 2018). When selecting participants, team members should not look at who is the head of the household, but instead should consider a gender- and age-balanced representation of a family. Entities that support women's empowerment and those that have a large number of female employees should be prioritized. If specific groups of young entrepreneurs/farmers exist, they should also be prioritized.

Preferably, each focus group will have two participants from each selected type of stakeholders (recipient, non-recipient, IA, source, service provider, other landscape stakeholder), and as much diversity as possible in gender and age.

To validate the information previously collected, interviewers should ask the same type of questions as they did in the key informant interviews. Validation of information will depend on the overall responses of the group to the questions. If the information gathered in the key informant interviews matches the information provided by the focus group, it is considered validated. If the data does not match, interviewers need to ask additional questions to find out why the information differs. Once the validation phase is complete, the data can be analyzed. See Figure 6.

Figure 6. Actors and possible interactions along a financial flow of interest

Given COVID-19 restrictions, focus group discussions should be held remotely using an online platform such as Zoom or Skype. The discussions may involve a single moderator asking the questions and guiding the discussion. The moderator must give about the same amount of time to every respondent. To reduce the risk of biased results (e.g., domination by one or more participants) the moderator should encourage participation by people at risk of being under-represented in the group.

Expected results, focus group discussions

- Validation of the results of Phase 1 and 2 in terms of
 - > characteristics of the financial flow from intermediary to recipient
 - > expectations of the financial flow by different actor groups and extent to which these were achieved
 - > levels of risks and barriers perceived by different actor groups
 - > strategies to reduce or overcome these risks and barriers
 - > unexpected effects of the financial flows
- What can be improved in the flows to improve their effects in the integrated landscape initiative

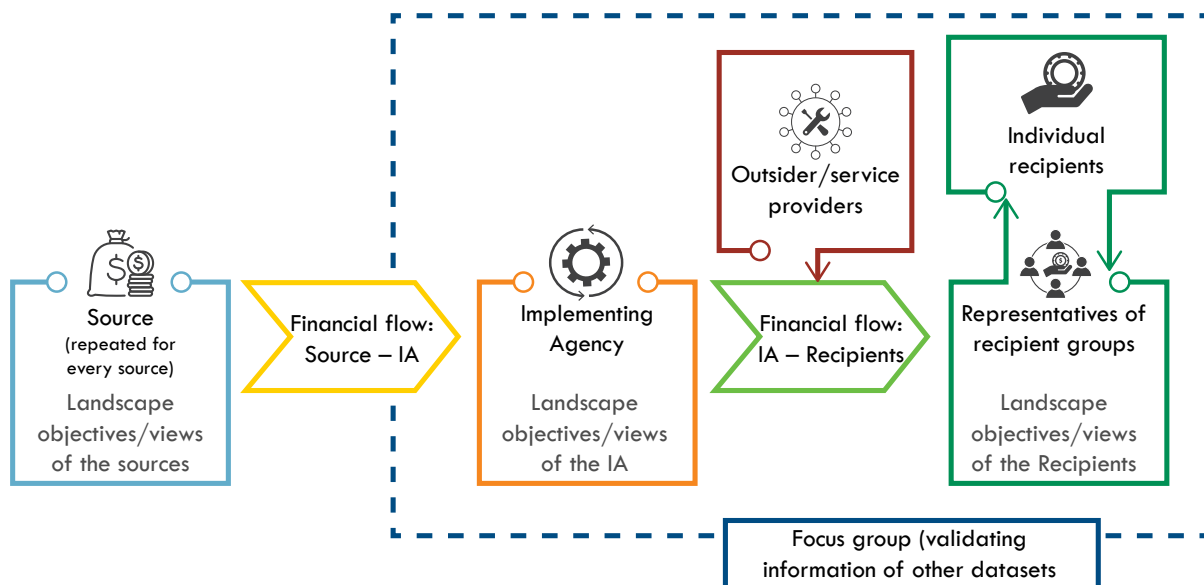
Data collection and analysis

Data collection

The questionnaires (Annex 1 and 2) should be semi-structured and provide guidance for the interviewers. To check the internal consistency and reliability of the answers, the same question may be repeated with the same interviewee with different wording (Sanders et al. 1994). Questions should be short and concise, especially in the surveys of individual recipients, to increase the reliability of the results (Pérez et al. 1998).

Interviewers will collect data during the interviews and focus group discussions. These data will be recorded and transcribed, and used to fill in the templates. (Several templates were developed for the information to be collected and the expected results; see Annex 3). There are one or more templates for each phase of the methodology and different templates were made for different data entities (landscape actors, and financial flows that link several landscape actors). See Figure 7.

Figure 7: Data model showing links between templates provided in Annex 3.



Data analysis

Actors will be analyzed according to type and to the level of risk they perceived and risk mitigation strategies they adopted. The analysis will consider various types of actors, entities and sectors of activities as well as age and gender (in the case of individual recipients) when assessing risks. The same type of analysis is conducted for the barriers mentioned by interviewees.

Each financial flow will be analyzed according to the views of different actors and their perceived effects on the flow. This analysis will be descriptive; where possible, with the use of simple statistics. Above all, interviewers should identify the range of responses, rather than the most important or most frequent responses. Descriptions should include the financial flows' effects on and their influence in the landscape (direction and dimension of effect, how many people are affected by or depend on it). Consultation with the actors involved during the interviews and focus group discussion should also result in information about the enabling conditions that need to be in place and/or the financial mechanisms that will be useful to either improve existing flows in the landscape or initiate new flows.

Expected result, data collection and analysis

- Description of issues related to the flows, highlighting successes (what elements made the flow successful) and remaining challenges
- Analysis of differences between actors in terms of:
 - > expectations of the same financial flow
 - > levels and types of risks and therefore the likelihood of adopting different risk mitigation strategies
 - > levels and types of barriers and strategies adopted to minimize or avoid them
- Lessons learned from the case study in terms of:
 - > matching expectations of different stakeholders
 - > how existing risk reduction mechanisms help stakeholders share risks
 - > enabling and disabling landscape conditions



Main output

The main output of the methodology is a **report** composed of several parts. Although results and lessons learned may differ according to the landscape studied, it is recommended that researchers consider including the following main components in the report.

- Main description of the landscape (where the flows go to) and its social, economic and environmental drivers
- Main results of the data analysis
 - > analysis of financial flows in the landscape
 - > main objectives/expectations perceived by different actors
 - > risk analysis by various actors
 - > barrier analysis by various actors
 - > mechanisms to reduce risks and barriers and the perceived outcomes of these mechanisms
- Main lessons learned about financial flows
 - > matching the expectations of different actors
 - > reducing or sharing risk among different actors
 - > tackling barriers to finance
 - > financial structures and instruments that fit the needs of all actors involved
- Other considerations

Bibliography

- Estrada-Carmona, N., A.K. Hart, F.A. DeClerck, C.A Harvey and J.C. Milder. 2014. "Integrated landscape management for agriculture, rural livelihoods, and ecosystem conservation: An assessment of experience from Latin America and the Caribbean." *Landscape and Urban Planning* 129: 1–11.
- Louman, B., A. Meybeck, G. Mulder, M. Brady, L. Fremy, H. Savenije, V. Gitz and E. Trines. 2020a. *Innovative finance for sustainable landscapes*. Working Paper 7. Bogor, Indonesia: The CGIAR Research Program on Forests, Trees and Agroforestry (FTA).
- Louman, B., M.A. Naranjo and D. Stoian. 2020b. *Opportunities and challenges for de-risking investments in sustainable smallholder land use systems*. Tropenbos International Wageningen University & Research and World Agroforestry (ICRAF).
- Mason, J. 2017. *Qualitative researching*. Third edition. Sage Publishing.
- Milder, J.C., A.K. Hart, P. Dobie, J. Minai and C. Zaleski. 2014. "Integrated landscape initiatives for African agriculture, development, and conservation: a region-wide assessment." *World Development* 54: 68–80.
- Nyumba, T.O., K. Wilson, C.J. Derrick and N. Mukherjee. 2018. "The use of focus group discussion methodology: Insights from two decades of application in conservation." *Methods in Ecology and Evolution* 9(1): 20–32.
- Pamerneckyte, G., K. Sekyere and B. Louman. 2020. *Report on implementation of the Landscape Assessment of Financial Flows (LAFF) in the Juabeso–Bia and Sefwi–Wiawso Landscape*. Wageningen, the Netherlands: Tropenbos International.
- Pérez, R.G., L.E. Ascaso, J.M. Doménech Massons and N. De La Osa Chaparro. 1998. "Characteristics of the Subject and Interview Influencing the Test-Retest Reliability of the Diagnostic Interview for Children and Adolescents-Revised." *Journal of Child Psychology and Psychiatry* 39(7): 963–972.
- Rabiee, F. 2004. "Focus-group interview and data analysis." *Proceedings of Nutrition Society* 63: 655–660.
- Rode, J., H. Wittmer, J. Pirker, M.C. Stabile, S. Bauch, A. Pinzon and A. Iribarrem. 2019. Why 'blended finance' could help transitions to sustainable landscapes: Lessons from the Unlocking Forest Finance project. *Ecosystem Services* 37: 100917.
- Robinson, O.C. 2014. "Sampling in interview-based qualitative research: A theoretical and practical guide." *Qualitative Research in Psychology* 11(1): 25–41.
- Rossanda, D., G. Pamerneckyte, I. Koesoetjahjo and B. Louman. 2020. *Report on implementation of the Landscape Assessment of Financial Flows (LAFF) in Gunung Tarak Landscape, Indonesia*. Wageningen, the Netherlands: Tropenbos International.
- Sanders, G.D., D.K. Owens, N. Padian, A.B. Cardinalli, A.N. Sullivan and R.F. Nease. 1994. A computer-based interview to identify HIV risk behaviors and to assess patient preferences for HIV-related health states. In *Proceedings of the Annual Symposium on Computer Application in Medical Care* (p. 20). American Medical Informatics Association.
- Shames, S., B. Louman and S. Scherr. 2019. *The Landscape Assessment of Financial Flows: A methodology*. Wageningen, the Netherlands: Tropenbos International and EcoAgriculture Partners.
- Zanzanaini, C., B.T. Tran, C. Singh, A. Hart, J. Milder and F. DeClerck. 2017. Integrated landscape initiatives for agriculture, livelihoods and ecosystem conservation: An assessment of experiences from South and Southeast Asia. *Landscape and Urban Planning* 165: 11–21.

Annexes

Annex 1. Developing the questionnaires

Risks

Different actors will often encounter different risks, depending on the nature of their role in the landscape. To better develop the questionnaires and guide the interviews and group discussions, it is useful for researchers to know beforehand the risks that various actors are vulnerable to. This will make the interview or discussion more efficient and to the point.

Table 1 lists some of the most common risks, to help guide the development of the questionnaire.

Table 1: Risks commonly experienced by smallholders/ small and medium enterprises (SMEs) and investors

Type of risk	Source	Intermediary	Recipient
Production risks			<ul style="list-style-type: none"> • Weather risks (floods, droughts) • Biosecurity risks (pests, contagious diseases) • Technology (restricted use of inputs) • Soil contamination (heavy metals, agrochemicals)
Financial risks	<ul style="list-style-type: none"> • Lack of liquidity • Changes in interest rates • Changes in the inflation rate • Loss of value of financial assets 	<ul style="list-style-type: none"> • Lack of liquidity • Lack of access to credit • Changes in interest rates • Changing conditions for accessing credit • Changes in the inflation rate 	<ul style="list-style-type: none"> • Loss of value of financial assets • Lack of access to credit • Changes in income from other sources (non-farm)
Market/price risks	<ul style="list-style-type: none"> • Risks due to trade policies and regulations • Changing market requirements (e.g., safety standards, certifications) • Currency exchange rates • Market shocks 	<ul style="list-style-type: none"> • Risks due to trade policies and regulations • Changing market requirements (e.g., safety standards, certifications) • Currency exchange rates 	
Institutional risks	<ul style="list-style-type: none"> • Political risks • Sovereign risks • Trade agreements 	<ul style="list-style-type: none"> • Changes in national policy and regulation • Trade agreements 	<ul style="list-style-type: none"> • Changes in local policy or regulations • Changes in national policy and regulations
Human risks		<ul style="list-style-type: none"> • Social conflict 	<ul style="list-style-type: none"> • Health issues • Carelessness/negligence • Social conflict

Source: Based on Louman et al. 2020b

Interviewers should not share Table 1 with interviewees to avoid automatic responses. However, the interviewers may use it as a reference to help the interviewee to think of risks, while keeping questions on risk open.

Barriers

Different actors will likely encounter different barriers to obtaining or providing finance. Table 2 summarizes some of the most common barriers encountered by smallholders, SMEs and investors in terms of access to finance or markets.

Table 2: Barriers commonly experienced by smallholders/SMEs and Investors

Actor	Barrier types	Specific barriers
Smallholder/ SME	Nature of financial instruments	<ul style="list-style-type: none"> • Ease of implementation • Legitimacy • Transparency • Coherence of investor objectives and stakeholder objectives
	Financial literacy	<ul style="list-style-type: none"> • Being productive, generating an income, saving and spending wisely • Understanding key financial concepts • Able to make decisions based on financial information
	Scale	
	National policy and regulatory framework	<ul style="list-style-type: none"> • Enabling conditions for monetary transactions
	Physical access	<ul style="list-style-type: none"> • Distance from financial services • Ease of access through virtual means
	Own capital	
	Ability to ensure the sustainability of practices	<ul style="list-style-type: none"> • Organization • Risk management • Certification • Knowledge and experience
Investors	Limited number of bankable projects	<ul style="list-style-type: none"> • Scale • Risk • Rate of return
	Limited understanding of sector	
	Limited interest in complex investments	

Source: Based on Louman et al. 2020a

Interviewers should not share Table 2 with interviewees to avoid automatic responses. However, the interviewers may use it as a reference to help the interviewee to think of barriers, while keeping questions open.

Risk management strategies

Louman et al (2020b) classified risk management strategies (Table 3) based on a review of literature. Researchers can use the same classification in the context of the case study methodology.

Table 3. Types of risk management strategies pursued by smallholders and land-use investors

Type of risk		Farm-level strategies	Regional strategies	National/ international strategies
Production	ex-ante	<ul style="list-style-type: none"> • Change in cropping patterns • Adoption of new technologies • Integrated crop management • Proactive pest and disease monitoring and prevention • Diversification (on-farm) • Low input/low cost production • Agricultural insurance (individual) 	<ul style="list-style-type: none"> • Social organization and learning • Technical assistance • Cooperation through farmers' groups and cooperatives • Education and training in risk management • Agricultural insurance (collective) 	<ul style="list-style-type: none"> • Macroeconomic policies • Disaster prevention • Prevention of diseases (biosecurity) • Agricultural insurance (national/sub-national) • Subsidies for insurance premiums
	ex-post	<ul style="list-style-type: none"> • Reactive pest and disease management 	<ul style="list-style-type: none"> • Financial support from support networks (family) 	<ul style="list-style-type: none"> • Agricultural support programs • Social transfers (state borne)
Financial	ex-ante	<ul style="list-style-type: none"> • Financial literacy (individual) • Access to "soft" credit/ loans • Off-farm investments • Off-farm work 	<ul style="list-style-type: none"> • Financial literacy (collective) 	<ul style="list-style-type: none"> • Tax regime (income smoothing) • Blended finance • International finance policies (IMF, regional development banks)
	ex-post	<ul style="list-style-type: none"> • Precautionary savings • Selling individual natural, physical and financial assets • Borrowing from banks 	<ul style="list-style-type: none"> • Selling collective natural, physical and financial assets 	<ul style="list-style-type: none"> • Disaster relief (nat./int.) • Cash transfers • Waiver (cancellation) of crop loans • Debt reduction, swaps or forgiving (nat./int.)
Market/prices	ex-ante	<ul style="list-style-type: none"> • Futures (individual) • Hedging (individual) • Niche market orientation for higher price stability (e.g., Fairtrade) 	<ul style="list-style-type: none"> • Vertical integration • Diversified production • Stable business relationships between farmers' groups and specific buyers • Spread trading¹ • Futures (collective) • Hedging (collective) 	<ul style="list-style-type: none"> • National market regulations (marketing boards) • International trade agreements (bi-/multilateral) • Price safeguards (nat./int.)

¹ Spread trading is a way of trading where the trader benefits from difference in values of products he buys and sells simultaneously. It often is done with future contracts.

Type of risk		Farm-level strategies	Regional strategies	National/ international strategies
Institutional/ legal	ex-post	<ul style="list-style-type: none"> Increased production (individual) Selling individual natural, physical and financial assets 	<ul style="list-style-type: none"> Increased production (collective) Selling collective natural, physical and financial assets 	<ul style="list-style-type: none"> Similar to financial (see above)
	ex-ante	<ul style="list-style-type: none"> Policy dialogue/lobbying the government 	<ul style="list-style-type: none"> Government dialogue with farmers' groups 	<ul style="list-style-type: none"> Input subsidies
	ex-post		<ul style="list-style-type: none"> Government arrangements with farmers' groups 	<ul style="list-style-type: none"> Input subsidies Tax breaks
	ex-ante	<ul style="list-style-type: none"> Livelihood diversification (off-farm) Health insurance Liability insurance (individual) 	<ul style="list-style-type: none"> Liability insurance (collective) 	
Human	ex-post	<ul style="list-style-type: none"> Selling individual natural, physical and financial assets 	<ul style="list-style-type: none"> Transfers from safety networks Selling collective natural, physical and financial assets 	

Source: Based on Louman et al. 2020b

Annex 2. Questionnaires

These questionnaires are meant to serve as a guide. Researchers should contextualize and refine them according to the circumstances.

Annex 2, Phase 1

In-depth interview with implementing agency

Implementing agency	
Legal name and type of entity (interviewee)	a. What is the name of the entity? b. What is the size of the entity? c. What type of entity is it?
The program to which the financial flow being studied belongs	a. What is the objective of the program? b. Where is the program being implemented? c. Who are the main actors in the program? d. How do they relate to each other? e. What specific activities are being financed? f. What is the scale of these activities?
Main objectives/priorities for the landscape where the program is being implemented	Define landscape objectives/priorities if not yet documented and select up to 3 that are important to you, or that you focus on, or that need more attention in the landscape
Sources	
Sources (Repeat these questions for every flow)	a. Source's legal name b. How large is the flow? c. What is the relative importance of the flow in the IA's mix of finance? d. What is the type of finance mechanism? For-profit or not-for-profit? e. Does the source provide inputs other than money (e.g., TA, capacity building)? f. Where does the source receives its financial capital? g. What is the timing of the agreement? h. What are the terms of the agreement? i. What would happen if you cannot provide the agreed benefits to your source? j. How is this money channelled to recipients? (is it blended with other money? if so, how?) k. Repeat this for every source of the implementing agency related to the program being studied
Recipients	
About the recipients (Repeat these questions for every recipient)	a. Recipient's legal name b. How large is the flow? c. Type of financial mechanism d. What are the origins of the flow? (Which if any flows is it combined with)? e. Does the IA work with this recipient in any other way (e.g., TA, capacity building)

	f. What does the recipient use this money for? Which activities and locations? g. What happens if the recipient does not comply with the actions agreed on? h. How does this flow fit into the recipient's mix of finance? Does the recipient have other sources of finance? (if so, list them) i. Are any other intermediaries involved in this flow?
Risks	
What risks do you perceive in receiving money from the source?	a. What is the level of the risk perceived? b. Which type of risks exist? c. Provide practical examples
What risk management strategies have you applied to overcome these risks (receiving money from source)?	a. At which level (farm, landscape, district, regional, national/international) have these strategies been applied? b. What was planned and what strategy was actually applied? c. What worked and what did not? d. What could be further improved in this flow to reduce your risk?
What risks do you perceive in the management of the financial flows?	a. What is the level of the risk perceived? b. Which type of risks? c. Provide practical examples
What risk management strategies have you applied to overcome these risks?	a. At which level (farm, landscape, district, regional, national/international) have these strategies been applied? b. What was planned and what was actually applied? c. What worked and what did not? d. What could be further improved in this flow to reduce your risk?
What risks do you perceive in channelling money to recipients?	a. What is the level of the risk perceived? b. Which type of risks exist? c. Provide practical examples
What risk management strategies have you applied to overcome these risks (channelling money to recipients)?	a. At which level (farm, landscape, district, regional, national/international) have these strategies been applied? b. What was planned and what was actually applied? c. What worked and what did not? d. What could be further improved in this flow to reduce your risk?
What resources and capacity do you have for effective risk mitigation?	a. Number of resources and extent of capacity b. How can risk mitigation be improved?
Barriers	
In which of these flows (from source to you or from you to recipient) have you encountered barriers to the use of financial mechanisms?	Which barriers were the most common, based on your experience? Could you provide practical examples?
Were these barriers overcome? How? Who was involved? What strategies were used?	a. What worked and what did not? b. What were the main advantages of these strategies?

Innovation and effects	
Perceived effects of the flow on the landscape <i>Repeat for every flow</i>	<ul style="list-style-type: none"> a. Positive and negative effects (social, economic and environmental) b. Magnitude of the effect (very low to very high) c. Can you provide practical examples where you see those effects? d. Is there a monitoring scheme in place? e. How could the effects be monitored or better monitored? Ideas for a new monitoring scheme?
What financial flows (that you are involved with) are innovative and how?	Provide examples of innovation, such as blended funds, green bonds, crowdfunding
What could be improved in the flow to achieve better effects?	<ul style="list-style-type: none"> a. Which flows could be improved and how? b. Which flows need innovation? What kind of innovation?

Annex 2, Phase 2: Interviews with the key informants identified during Phase I

2a. Source of financial flow (to the Implementing Agency)

Source	
What is the name of the source entity?	Legal name
What is the size of the source entity?	Dollar value
What type of entity is it?	Individual, cooperative, corporation, private company, partnership, government agency (indicate for-profit or not-for-profit)
Where are the activities being implemented?	Country, jurisdiction, spatial coordinates (if available)
What specific activities is the source financing?	
What is the scale of these activities?	Value of sales, amount of product
Main objectives/priorities for the landscape where the activities are being implemented	Define landscape objectives/priorities if not yet documented and select up to 3 that are important to you, or those that you focus on, or those that need more attention in the landscape
Financial flow and financial mechanisms	
How large is the flow that the source provides?	Size in monetary terms, in local currency or U.S. dollars
What type of financing mechanism is used: debt or equity?	a. Debt mechanism (bank loan, corporate bond, revolving credit) b. Equity mechanism (share issue, shareholding, venture capital)
What are the terms and timing of the agreement?	a. Payback period, interest rate (if a loan) b. Relevant terms of the agreement (if equity) c. Start date and end date (if there is one)
Is there anything innovative about the flow?	Any kind of innovative financial mechanism, such as crowdfunding, green bonds, blended finance
Are there any environmental and/or social safeguards associated with the agreement?	a. Required disclosure of ESG policies? b. Limits on certain activities (e.g., deforestation)? c. Requirements for certain activities (sustainable practices)? d. Participation in the Global Reporting Initiative's G4 Financial Services Sector Disclosure Framework?
Are any terms of the agreement designed to protect the implementing agency?	Limits on interest rates charged, etc.
What would happen if the recipient cannot provide the agreed-upon benefits?	
Risks	
What types of risks are involved in this flow?	Production risks, financial risks, market/price risks, institutional risks, human risks

What risk management strategies have been adopted, if any? By whom?	What is planned and what is actually carried out?
What resources and capacity are available for effective risk mitigation?	
What could be improved in this flow to reduce the risk to the source?	
Barriers	
What are the main barriers encountered when looking for bankable projects in the area? What barriers are the most prevalent, based on your experience? Could you provide practical examples?	
To what extent and how were these barriers overcome? Who was involved? What strategies were used?	a. What worked and what did not? b. What were the main advantages of these strategies?
What could be done to improve the ease of implementation of landscape financing schemes?	
Effects of the flow (social, economic, environmental)	
What are the expected effects of this flow on the social/economic realities of the landscape?	Food security, economic benefits for local people, strengthened social capital
What are the expected environmental effects of this flow in the landscape?	Climate change mitigation, biodiversity conservation, decreasing deforestation
How do the communities/recipients perceive the effects of the flow? How aware are you of their perceptions?	
Do you have any way of measuring the actual effects of the flow in the area?	
What changes could be made to this flow to improve its potential positive effects?	Improve terms of the agreement, financial governance, spatial targeting, bring in other partners, use more innovative financial mechanisms

2b. Representatives of recipient groups (repeat interviews for each recipient group)

Recipient	
Which recipient group is being represented?	Legal name
What is the size of the entity?	Number of members, area size and/or monetary value
What type of entity is it?	Cooperative, corporation, partnership, government agency
Where are the activities being implemented?	Country, jurisdiction, spatial coordinates (if available)
What specific activities are being financed?	
Do you receive benefits other than finance?	For example, technical assistance
What is the scale of the activities financed?	Value of sales, amount of product, area
Main objectives/priorities for the landscape where you work	Define landscape objectives/priorities if not yet documented and select up to 3 that are most important to you, or those that you focus on, or those that need more attention
Finance mechanisms	
How large is the flow?	Size in monetary terms, in local currency or in U.S. dollars
What is the type of financing mechanism: debt or equity?	Debt mechanism (bank loan, corporate bond, revolving credit) Equity mechanism (share issuance, shareholding, venture capital)
What are the terms and timing of the agreement?	Payback period, Interest rate (if a loan) Relevant terms of the agreement (if equity) Start date and end date (if there is one)
Is there any co-financing from other financial sources or intermediaries? If so, describe	
Is there anything innovative about the flow?	Any kind of innovative financial mechanism, such as crowdfunding, green bonds, blended finance, guarantees, new type of financial product
Are any environmental and/or social safeguards associated with the agreement?	Required disclosures of ESG policies? Limits on certain activities (e.g., deforestation)? Requirements for certain activities (sustainable practices)?
Risks	
What types of risks are involved with this flow? Is there a specific risk that is faced by all the different members of this recipient group?	Production risks, financial risks, market/price risks, institutional risks, human risks

What risk management strategies have been adopted, if any? Is there a specific risk management strategy that is used by all the different members of this group?	See Annex 1, Table 3
Are any terms of the agreement designed to protect the recipients?	Limits on interest rates charged, adapting interest rates in extreme situations, etc.
What would happen if the recipient is not able to provide the agreed-upon benefits to the provider (either the IA or the source)?	
What resources and capacity are available within your organization for effective risk mitigation?	
What could be improved in this flow to adapt the risk profile of the recipient group to make it more attractive to investors?	
Barriers	
What are the main barriers that recipients have encountered in access to finance? What barriers were the most prevalent? Please provide practical examples	
To what extent and how were these barriers overcome? Who was involved? What strategies were used?	What worked and what did not? What were the main advantages of these strategies?
What could be done to improve access to finance for potential recipients in the landscape?	
Effects of the flow (social, economic, environmental)	
What are the main perceived social and economic effects of the flow, both positive and negative? Are there any unexpected effects of the flow?	Food security, economic benefits for local people, strengthened social capital
What are the main perceived environmental effects of the flow, both positive and negative? Are there any unexpected effects of the flow?	Climate change mitigation, biodiversity conservation, decreasing deforestation, environmental services
What were the recipients' expectations of this flow? Do these differ from the actual results? Please provide examples.	
Is there a monitoring scheme in place to measure those effects?	
What changes could be made to this flow to improve its positive effects?	Improve terms of the agreement, financial governance, spatial targeting, bring in other partners, use more innovative financial mechanisms

2c. Interview with service providers/ other landscape stakeholders

What is your name?	
What is the name of the entity you work for?	Legal name
What type of entity is it?	Government official, NGO, public service employee, academic
How familiar are you with the landscape in question and the livelihoods?	
What aspects of the financial flow being studied are you familiar with?	
What are the main objectives/priorities for the landscape under consideration from your point of view?	Define landscape objectives/priorities if not yet documented and select up to 3 that are most important to you, or those that you focus on, or those that need more attention in the landscape
What is the role of the financial flow within the target landscapes?	
How important are financial flows for achieving general landscape priorities (as defined by landscape stakeholders), or for different goals (defined by the interviewee as important)?	
What are the major strengths of the financial flows studied?	
What are the major weaknesses of these flows?	
What are the reasons behind the success or failure of the flows?	Driving forces and enabling conditions inside or outside of the IA's sphere of influence, strengths and weaknesses, and sustainability of the flow
How would you score the sustainability of the flow?	Score from 1 (not sustainable) to 5 (very sustainable)
What are the major sustainability aspects, both positive and negative?	
What could be changed in the flow for a better landscape impact, or to increase the flow's efficiency and effectiveness?	

2d. Survey of individual recipients

What is your name?	
Which entity do you work for?	
What sector does the entity work in?	<ul style="list-style-type: none"> a. Agriculture b. Mining c. Forestry d. Nature conservation e. Finance f. Other
What is the main practice of the entity?	<ul style="list-style-type: none"> a. Commerce b. Service provider c. Investment d. Other e. In case of other, provide sector:
What is the size of the entity?	<ul style="list-style-type: none"> a. 1–5 people b. 5–15 people c. 15–50 people d. more than 50 people
What is the size of the financial flow from the IA? (If there is more than one flow, provide the sum of all the financial flows from the IA; in US\$ or equivalent value in local monetary units)	<ul style="list-style-type: none"> a. US\$1,000–3,000 annually b. US\$3,000–10,000 annually c. US\$10,000–25,000 annually d. US\$25,000–50,000 annually e. more than US\$50,000 annually
Does your entity have other sources of finance? If yes, what is the name of the entity/entities that provide these flows?	<ul style="list-style-type: none"> a. yes, entity: (if applicable) b. no
What are the financial mechanisms involved in the flow from the IA?	<ul style="list-style-type: none"> a. Loan (if applicable) Time span: short-/medium-/long-term loan (for profit) b. Impact equity investment (for profit) c. Direct purchase (for profit) d. Company self-financing (for profit) e. Grants (not for profit) f. Public finance instruments (direct investment, taxes and subsidies) g. Public budget allocations (not for profit) h. Other. Mechanism:
What are the terms of the agreement that you have to fulfil? (select all that apply)	<ul style="list-style-type: none"> a. Required disclosures of ESG policies b. Limits on certain activities (e.g., deforestation) c. Requirements for certain activities (sustainable practices) d. Others. Requirement
How do you perceive the risk level of the flows from the IA?	<ul style="list-style-type: none"> a. Low b. Medium c. High

What types of risks do you perceive? <i>(select all that apply and provide specific information about each one you select)</i>	a. Production risks: b. Financial risks c. Market/price risks: d. Institutional/legal risks: e. Human risks:
Main barriers to access finance? <i>(select all that apply)</i>	a. Nature of financial mechanisms/instruments (Ease of implementation, legitimacy, transparency, coherence with objectives) b. Lack of financial literacy (lack of understanding of key financial concepts, inability to make decisions based on financial information) c. Scale (Lack of aggregation to be more cost effective and reduce risks; unable to produce results/impacts at scale) d. National policy and regulatory framework (difficult conditions for monetary transactions) e. Physical access (distance from financial services, lack of access, for example virtual methods) f. Requirement for own capital g. Inability to ensure sustainability of practices (lack of organization, risk management, certification and knowledge and experience) h. Other constraints related to gender, age or ethnic group
What are the perceived social and economic positive impacts of the flow? <i>(select all that apply)</i>	a. Creates economic benefits for local people (income, employment) b. Strengthens social capital c. Contributes to food security d. Contributes to secure access to clean water e. Other: f. None
What are the perceived positive ecological impacts of the flow? <i>(select all that apply)</i>	a. Contributes to conservation of biodiversity b. Contributes to climate change mitigation c. Contributes to secure access to clean water d. Other: e. None
What is your level of satisfaction for this flow? 1 (not satisfied) to 4 (very satisfied) *	Level of satisfaction
(if applicable) Do you have any suggestions for improving the flow?	

* 1: not satisfied; 2: somewhat unsatisfied 3: somewhat satisfied; 4: very satisfied

2e. Survey of non-recipients

What is your name?	
What entity do you work for?	
What sector do you work in?	<ul style="list-style-type: none"> a. Agriculture b. Mining c. Forestry d. Nature conservation e. Finance f. Other
What is the size of the entity that you work for?	<ul style="list-style-type: none"> a. 1–5 people b. 5–15 people c. 15–50 people d. More than 50 people
Do you receive any funding from the IA?	<ul style="list-style-type: none"> a. Yes b. No
Do you want to receive funding from the IA? Why or why not?	<ul style="list-style-type: none"> a. Yes, because b. No, because
What are the main obstacles to receiving funding from the IA for your activities?	<ul style="list-style-type: none"> a. Nature of financial mechanisms/instruments (Ease of implementation, legitimacy, transparency, coherence with objectives) b. Lack of financial literacy (lack of understanding of key financial concepts, inability to make decisions based on financial information) c. Scale (lack of aggregation to be more cost effective and reduce risks, unable to produce results/impacts at scale) d. National policy and regulatory framework (difficult conditions for monetary transactions) e. Physical access (distance from financial services, lack of access, for example virtual methods) f. Requirements for own capital g. Inability to ensure sustainability of practices (lack of organization, risk management, certification and knowledge and experience) h. Other constraints related to gender, age or ethnic group
What are the main risks that you perceive? (select all that apply and provide specific information about each one you select)	<ul style="list-style-type: none"> a. Production risks b. Financial risks c. Market/prices risks d. Institutional/legal risks e. Human risks
Are there other reasons that make it impossible for you to receive funding?	<ul style="list-style-type: none"> a. Yes b. No
Do you participate in other finance schemes?	<ul style="list-style-type: none"> a. Yes b. No
How do you perceive the positive or negative social and economic effects related to the flow from the IA?	<ul style="list-style-type: none"> a. Very positive b. Positive c. Neutral d. Negative e. Very negative

How do you perceive the positive social and economic effects of the flow from the IA? (select all that apply)	<ul style="list-style-type: none"> a. Creates economic benefits for local people (income, employment) b. Strengthens social capital c. Contributes to food security d. Contributes to secure access to clean water e. Other f. None
How do you perceive the positive or negative environmental effects related to the flow from the IA?	<ul style="list-style-type: none"> a. Very positive b. Positive c. Neutral d. Negative e. Very negative
How do you perceive the positive environmental effects of the flow from the IA? (select all that apply)	<ul style="list-style-type: none"> a. Contributes to conservation of biodiversity b. Contributes to climate change mitigation c. Contributes to secure access to clean water d. Other e. None
(if applicable) Do you have any suggestions for improving the financial flow?	

Annex 2, Phase 3

Focus group discussion with the implementing agency, recipients (groups), service providers, and other landscape stakeholders

Ask these questions of everyone individually to identify participants	
Which entities are present at the meeting?	Legal name
What is the size of the entity?	Dollar value
What type of entity is it?	Individual, cooperative, corporation, partnership, government agency
Where are the activities being implemented?	Country, jurisdiction, spatial coordinates (if available)
What type of actor are you relative to the flow?	IA, recipient, service provider
Ask these questions of the group; related to financial flow being studied	
What specific activities are being financed?	
Do you receive other benefits besides finance?	For example, technical assistance
What is the scale of these activities?	Value of sales, amount of product
Main objectives and views for the landscape (drawing/mapping on the screen/board the 3 main objectives)	Define landscape objectives/priorities if not yet documented and select up to 3 that are most important to you, or those that you focus on, or those that need more attention in the landscape
Risks	
What types of risks are involved in this flow? Is there a specific risk that is common to all the different groups of recipients? (write on board/make diagrams)	Production risks, financial risks, price/market risks, institutional risks, human risks
What, if any, risk management strategies have been adopted? Is there a specific risk management strategy that all the different groups of recipients use?	see Annex 1 Table 3
Are any terms of the agreement designed to protect the recipients?	Limits on interest rates charged, adapting interest rates in case of extreme situations, etc.
What could be improved in this flow to lower the risk for the recipient?	Draw a diagram together
Barriers	
What are the main barriers that you have experienced in access to finance? What barriers were the most common? Can you provide practical examples?	Everyone writes three bullet points and discusses them

How were these barriers overcome? Who was involved? What strategies were used?	What worked and what did not? What were the main advantages of the strategies that worked?
What could be done to improve access to finance for potential recipients in the landscape? Could innovative finance mechanisms be the answer?	
Effects of flow (social, economic, environmental)	
What are the main perceived social and economic effects of the flow, both positive and negative? Are there any unexpected effects of the flow?	Everyone makes a list of effects Effects include food security, economic benefits for local people, strengthened social capital Everyone then scores these effects from very negative to very positive, first individually and then as a group
What are the main perceived environmental effects of the flow, both positive and negative? Are there any unexpected effects of the flow?	Everyone makes a list of effects Effects include climate change mitigation, biodiversity conservation, decreasing deforestation Everyone then scores these effects, from very negative to very positive, first individually and then as a group
What were the expectations for the effects of this flow? Do these differ from the actual effects? How and to what extent?	
Is there a monitoring scheme in place to measure these effects?	
To what extent are the finance mechanisms used in this flow appropriate and effective in achieving the goals of the flow?	Very appropriate to not appropriate; indicate why
What changes could be made to this flow to improve its potential positive effects?	Improve terms of the agreement, financial governance, spatial targeting, bring in other partners, bring more innovative financial mechanisms

Annex 3. Templates

These templates are suggested for compiling the information captured during the interviews and group discussions by the researcher.

Annex 3, Phase 1

Landscape objectives/ expectations of the Implementing Agency	
Implementing Agency	
Entity name	
Entity type	<i>private/public/etc.</i>
Perceived internal risks	
Perceived risk level (of managing flows	<i>very low to very high</i>
Risk type	<i>describe (see Annex 1)</i>
Risk mitigation strategy type (IA managing money)	<i>describe (see Annex 1)</i>
Risks perceived by IA about flow from source	
Perceived risk level (source)	<i>very low to very high</i>
Risk type (source)	<i>describe (see Annex 1)</i>
Risk mitigation strategy type (source)	<i>describe (see Annex 1)</i>
Risks perceived by IA about flow to recipients	
Perceived risk level (IA to recipients)	<i>very low to very high</i>
Risk type (IA to recipients)	<i>describe (see Annex 1)</i>
Risk mitigation strategy type (IA to recipients)	<i>describe (see Annex 1)</i>
General questions for IA	
Resources and capacity available for effective risk mitigation	<i>Describe resource and capacity and indicate level very low to very high</i>
Barrier type	<i>describe (see Annex 1)</i>
Perceived barrier level	<i>very low to very high</i>
Strategies used to overcome barrier	<i>describe</i>
Finance mechanisms used	<i>describe</i>
Blended finance mechanisms used, if any	<i>describe</i>
Other innovative mechanisms used, if any	<i>describe</i>

Annex 3, Phase 2a

Landscape objectives/expectations of the source	
Source and flows being studied	
Source being studied (repeat for every source)	
Entity name	
Entity type	private/public/etc.
Entity size	number of employees or size of farm
Sector	
Perceived risk level	very low to very high
Risk type	describe (see Annex 1)
Risk mitigation strategy type	describe (see Annex 1)
expectations and actual results	describe
Resources and capacity available for effective risk mitigation	very low to very high
Barrier type	describe (see Annex 1)
Barrier level perceived	very low to very high
Strategies used to overcome barriers	describe
Expected effects	describe
Financial flow being studied (repeat for every flow from every source to IA)	
Financial flow	describe
Source entity name	
Recipient(s) entity name	
Financial flow size	US\$ or local currency
Financial flow weight in the source's total portfolio	%
Timing of the agreement	time frame
Financial flow requirements	describe
Financial mechanism involved	describe
Level of satisfaction with flow (from source's perspective)	
Inputs other than money?	technical assistance, etc. describe
How could the flow be improved?	describe
Expected effects of the flow (by the source)	
Perceived type of effects of the flow (by source)	describe
Perceived level of effects of the flow (by the source)	very negative to very positive
Perceived type of effects of the flow (by the IA)	describe
Perceived level of effects of the flow (by the IA)	very negative to very positive

Annex 3, Phase 2b

Landscape objectives/ expectations of recipients	
Representatives of recipient groups (repeat for each representative)	
Entity name	
Entity type	private/public/etc.
Entity size	number of employees or size of farm
Sector	
Flow to recipient	
Financial size of flow	US\$ or local currency
Financial flow as percentage of total funding received	%
Timing of the agreement	time frame
Financial flow: Recipients (repeat for every flow and every recipient)	
Flow/benefit discussed	describe
Perceived risk level	very low to very high
Risk type	describe (see Annex 1)
Risk mitigation strategy type	describe (see Annex 1)
Difference between expectations and actual results	
Resources and capacity available for effective risk mitigation	very low to very high
Barrier type	describe (see Annex 1)
Barrier level	very low to very high
Strategies used to overcome barrier	describe
Financial flow requirements	describe
Financial mechanism involved	describe
Level of satisfaction with flow (from recipients' perspective)	very low to very high
Inputs other than money?	technical assistance, etc. describe
How could the flow be improved?	describe
Perceived effects of the flow by IA (from Phase I)	describe
Perceived level of effects of the flow by recipients	very negative to very positive
Perceived type of effects of the flow by recipients	describe

Annex 3, Phase 2c

Service provider/other landscape stakeholder (repeat for every element)	
Name of other landscape stakeholder or service provider	
Type of entity	<i>private/public/etc.</i>
Sector	
Area (landscape)	
Flow	<i>describe</i>
Opinion of the flow	<i>very negative to very positive</i>
Enabling conditions/driving forces	<i>describe</i>
Effects (positive and negative) of the flow on the landscape	<i>describe</i>
Personal objectives for landscape	
Strengths of the flow	<i>describe</i>
Weaknesses of the flow	<i>describe</i>
Sustainability aspects of the flow (positive and negative)	<i>describe</i>
Sustainability score	<i>very low to very high</i>
Ways to improve the flow	<i>describe</i>

Annex 3, Phase 2d

Individual recipients (online/phone surveys)	
Name	
Gender	
Age	
Sector	<i>private/public/etc.</i>
Farm size (if applicable)	
Flow/benefit received	<i>describe</i>
Opinion of the flow	<i>very negative to very positive</i>
Major expectations of flow (why are you involved in it?)	<i>Closed question (see annex 2)</i>
Perceived effects of flow	<i>Closed question</i>
Perceived risk level of flow	<i>Closed question</i>
Risk type	<i>Closed question</i>
Risk mitigation strategy type	<i>Closed question</i>
Resources and capacity available for effective risk mitigation	<i>Closed question</i>
Barrier type	<i>Closed question</i>
Barrier level perceived	<i>Closed question</i>
Strategies used to overcome barrier	<i>Closed question</i>

Non-recipients (online/phone surveys)	
Name	
Gender	
Age	
Sector	
Farm size (if applicable)	
Interest in receiving funding from IA	<i>low to high</i>
Reason	<i>describe</i>
Main barriers to being part of the studied flow	<i>Closed question</i>
Risks of being part of the studied flow	<i>Closed question</i>
Level of risk perceived	<i>Closed question</i>
Other reasons not to be part of the studied flow	<i>describe</i>
Participation in other finance schemes	<i>Closed question</i>
Social and economic effects of the studied flow	<i>Closed question</i>
Environmental effects of the studied flow	<i>Closed question</i>
Suggestions to improve studied financial flow(s)	<i>describe</i>

Annex 3, Phase 3

Recipients in the focus group	
Entity name	
Entity type	<i>private/public/etc.</i>
Entity size	<i>number of employees, surface of farm or monetary value of entity</i>
Sector	
Flow received	
Financial flow size	<i>US\$ or local currency</i>
Financial flow as percentage of the total funding received	<i>%</i>
Timing of the agreement	<i>time frame</i>

Service providers/other stakeholder in the focus group (repeat for every service provider/other stakeholder not previously interviewed)	
Entity name	
Entity type	<i>private/public/etc.</i>
Entity size (number of employees or size of farm)	
Sector	
Flow/benefit it receives	
Financial flow size	<i>US\$ or local currency</i>
Timing of the agreement	<i>time frame</i>

Focus group (repeat for every recipient in each focus group)		Validation
Flow discussed	describe	
Inputs other than money	technical assistance, etc.; #coding	Add in this column observations on whether FG discussions confirm information captured in Phases 1 and 2, and, if not, what the differences are and why
Perceived risk level		
Repeat for each recipient	very low to very high	
Risk type (for recipient)	describe (see Annex 1)	
Risk mitigation strategy type	describe (see Annex 1)	
Difference between expectations and actual results		
Resources and capacity available for effective risk mitigation	very low to very high	
Barrier type	describe (see Annex 1)	
Barrier level perceived	very low to very high	
Strategies used to overcome barrier	describe	
Financial flow requirements	code# for terms of agreement	
Financial mechanism involved	describe	
Level of satisfaction with flow (from recipient's perspective)	very low to very high	
How could flow be improved?	describe	
Perceived level of effects	very negative to very positive	
Perceived type of effects by recipients	describe	
Perceived effects of flow by IA (from Phase I)	describe	



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