How to tailor financing strategies for scaling project-based innovations in agri-food systems in Africa

ActionBook, practices and tools

2025

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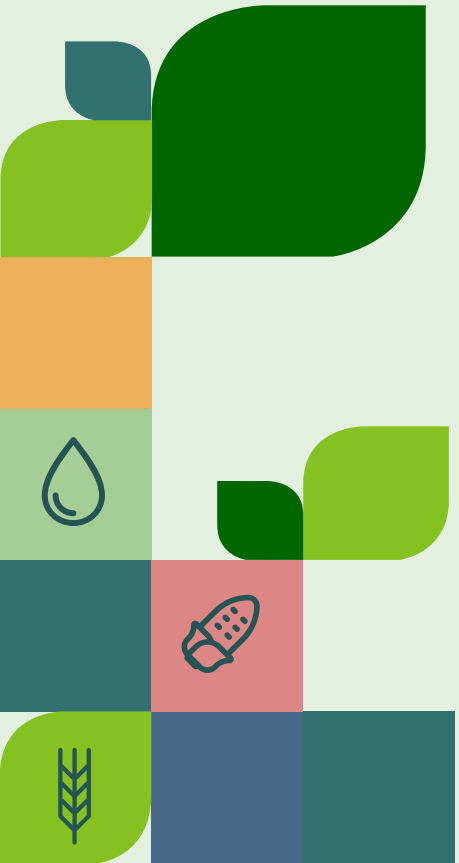

Introducing the ActionBook

Scaling innovations deployed within time-bound projects

In the domain of agricultural development in low- or middle-income countries, the vast majority of innovations are developed through time-bound R&I (research and innovation) projects **(Fig. 1)**, which limits their deployment beyond prototyping and small-scale experiments.

Once researchers have conducted the experiments necessary to introduce new technologies, practices, organisations or services in a given territory or sector, other actors must take over to organise and facilitate all the changes and capacity building that will enable the innovation to be deployed.

This is where tailored financing strategies become critical to ensure that multidimensional and multilevel interventions, activities or services can be pursued to support innovation scaling, moving the innovation from one stage to another. The absence of an adequate financing strategy with an explicit scaling strategy traps innovations in a stagnation chasm before they achieve diffusion and scaling **(Fig. 2)**.

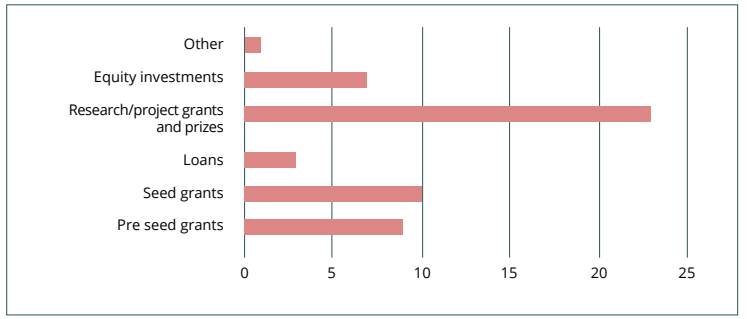

Figure 1: Proportion of financing tools for innovations in a sample of 55 large-scale innovation programmes
Source: IDIA, 2017

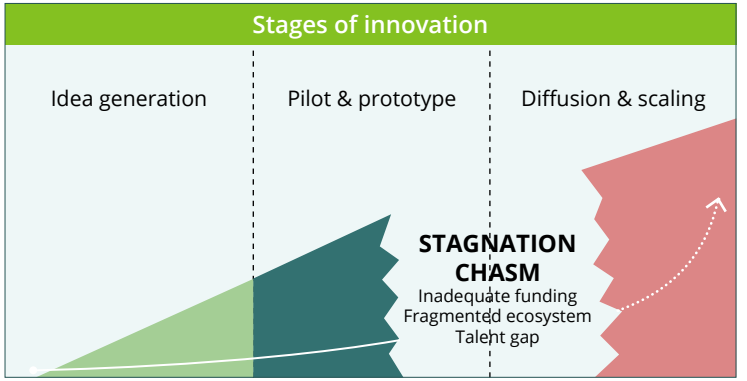

Figure 2: Innovation scale-up stagnation chasm
Source: Stanford Social Innovation Review, 2018

Co-create best-fit financing strategies with innovation project leaders

In the context of European Union-funded DeSIRA Initiative, a € 340 million investment in research and innovation for agrifood system transformation, a **"tailoring process"** has been designed to help R&I project leaders design a financing strategy with a scaling pathway for their innovations.

The tailoring process was designed through close interactions with a sample of R&I project leaders from the DeSIRA initiative over the course of a year.

The scaling pathway and associated financing needs was consolidated through the analysis of the innovation portfolio of 25 DeSIRA projects in Africa, followed by the co-identification with 12 project leaders of suitable financing strategies to scale the innovations deployed during project implementation.

The ActionBook presents the six steps of the tailoring process. These steps were refined through back-and-forth interactions with the project leaders to ensure alignment with their needs and capabilities.

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Framework, concepts and principles of the tailoring process

Agricultural innovation

Agricultural innovation is a process whereby individuals or organisations bring existing or new products, processes and forms of organisation into social and economic use to increase effectiveness, competitiveness, resilience to shocks or environmental sustainability, thereby contributing to food and nutritional security, economic development and sustainable natural resource management (FAO, 2019).

Innovation stages and support services to scaling

Four stages can be distinguished in an innovation trajectory:

- **Stage 1.** Defining the problem and/or opportunity to seize;
- **Stage 2.** The ideation phase, generation and evaluation of ideas;
- **Stage 3.** The prototyping, piloting or testing phase at small scale to make necessary improvements;
- **Stage 4.** The diffusion and scaling phase, in which the innovation is adapted to large-scale conditions, along with the creation of or changes in regulations, market or policy environments that enable its dissemination to a large number of users **(Fig. 3)**.

In order to move an innovation from one stage to another, a set of support services must be continuously delivered to innovation holders, including financing mechanisms **(Tab. 1)**.

Figure 3: Innovation stages

Networking, facilitation and brokering
Networking, facilitation and brokerage are essential at all stages of the innovation process. Coordination among innovation actors is necessary for innovation to succeed, through the consolidation of informal or formal networks of actors. Specific services are needed to facilitate this coordination and the exchanges required to produce knowledge and drive action.
Strengthening actors' capacities to innovate
Innovation actors are the driving force behind transformative change. Therefore, providing key services to strengthen their ability to innovate at various levels (individual, organisational and institutional) is crucial. These services may include building technical and functional capacities to enhance their innovation capabilities.
Knowledge for action
As the generation of new knowledge for action is a key condition of innovation, there is a need to utilise and valorise both indigenous or local knowledge as well as scientific knowledge. In this sense, research – whether applied or fundamental – can play a key role in contributing to the innovation process.
Diversified financing mechanisms
A variety of financing mechanisms is required due to the varying financial needs at different stages of innovation. For instance, seed money may be necessary for testing an idea, conducting feasibility studies or developing a proof of concept; risk capital may be required for prototyping and experimentation; and additional risk capital, loans or financial guarantees may be needed for scaling up. To determine the appropriate cost-sharing mechanisms and incentives between public and private stakeholders, factors such as the phase of innovation, the level of underlying risk, and the distinction between public and private good production must be considered.

Table 1: Support services to innovation scaling
Source: Faure et al., 2019

Innovation scaling

Scaling is the process of replicating and/or adapting an innovation across large geographic areas and populations to achieve transformative positive impacts.

→ **Vertical scaling**
Changing the policy and/or institutional environment through higher-level influencing.

→ **Horizontal scaling**
The process of expanding impact through replication.

Scaling innovation, or bringing innovations to a broader reach and impact, is a complex process that requires the involvement of various actors. It is not a single-actor endeavor and typically necessitates a coordinated effort across an ecosystem of stakeholders.

Financing options and strategy

Financing options refer to the choices made regarding financing tools and mechanisms selected to address specific financing needs, which, together, form a financing strategy.

Financing options for innovation scaling

In this ActionBook, the proposed tailoring process covers both the "horizontal and vertical scaling" of innovations, meaning that "scaling" here refers to the dissemination of an innovation to the benefit of a greater number of actors in rural communities, value chains or territories, beyond those who participated in the early phases of innovation (ideation, design, prototyping, small-scale experimentation).

The proposed financing strategies include specific financing mechanisms that were selected according to specific criteria:

- Active in Africa;
- Focused specifically on the agricultural sector;
- Providing small intervention amounts;
- Having a stronger social impact focus than others.

To learn more about innovation scaling and financing options:

- **Academic papers**

Schut M., Leeuwis C. and Thiele G. (2020). "Science of Scaling: Understanding and guiding the scaling of innovation for societal outcomes", Agricultural Systems, 184, 102908.

Woltering L. and del Refugio Boa-Alvarado M.(2024), "Insights on scaling of innovations from Agricultural Research for Development: views from practitioners", Knowledge Management for Development Journal, 18(1), 90-110.

- **Report**
IDIA (2017), Insights on Scaling Innovation

- **Seminar series**
https://www.iita.org/scaling-agricultural-innovations-through-commercialisation-for-sustainable-food-system-transformation/

- **Community of Practice**
https://scalingcommunityofpractice.com/

- **Toolkits:**

European Commission: Directorate-General for Employment, Social Affairs and Inclusion and Barnett, S. J., Scaling-up social innovation – Seven steps for using ESF+, Publications Office of the European Union, 2022.

Jacobs, F., et al. "The scaling scan: a practical tool to determine the strengths and weaknesses of your scaling ambition." (2021)

UNDP, 2020. Strategy to scale social innovation for development

- **Knowledge platform**
https://tapipedia.org

Tailoring financing strategies for innovation scaling

Our framework for designing tailored financing strategies was developed based on two main principles.

Principle 1: shifting to a "run mode"

A first principle is that innovation scaling requires a shift from "project mode", where a single source of funding applies to several budget lines of very different natures, to a "run mode", where innovation scaling follows its own trajectory and requires one or more specific financing mechanisms.

In a "run mode", the innovation is actively implemented and utilised within an organisation, a network or a community. It often involves training organization employees, farmer groups or other stakeholders, adjusting processes, and integrating new technologies within existing socio-technical infrastructures.

In a "run mode", innovations are sustained through permanent organisations and business models. Shifting from "project mode" to "run mode" often requires more extensive mobilisation of private sector actors, e.g. agro-industries, start-up, small and medium-sized enterprises (SMEs), farmer organisations, agricultural service providers (inputs, equipment, advisory services) or distributors. It implies to identify new leaders of the scaling process, different from the initial R&I project leader. Several actors can play this role **(Box 1)**.

Furthermore, when scaling is associated with the sale of a product or service, financing needs will generally be shared by several stakeholders of the value chain.

Box 1: Zoom-in on the scaling actors

Several actors can play a leading role in the scaling pathway :

- Innovation can be farm-led and mainly consist of practices to be implemented at farm level.
- Innovation can be driven by the state, through public agencies or extension services.
- Innovation can be driven by private businesses, whether a start-up, one or several SMEs or an agro-industry.
- Innovation can be community-led, for example, when it comes to creating a label or certification.

This ActionBook assesses scaling pathways through a "financing lens", meaning it will focus on the stakeholders involved in the scaling process, with a specific emphasis on the private sector and the funding mechanisms supporting this scaling process (see Step 1 of the exploration process).

Additional resources to learn more about scaling actors

- **Academic papers**

Wigboldus, S., et al. *"Understanding capacities to scale innovations for sustainable development: a learning journey of scaling partnerships in three parts of Africa." Environment,* Development and Sustainability 25.8 (2023): 8197-8231

- **Typical actors in an innovation ecosystem:**

https://www.idiainnovation.org/ecosystem-actors

Example of the EIC scaling club

- **Mapping of agrifood innovation ecosystems:**

FAST: interactive database of actors working at the intersection of agrifood systems, climate change and finance

Tailoring financing strategies for innovation scaling

Principle 2: sparing public grants

A second principle is that, as public, concessional resources – particularly grant funding – are scarce, they should be limited to what truly requires grant funding.

As such, whenever possible, alternative funding resources should be mobilised to scale innovations.

Alternative funding resources cover a wide range of financing mechanisms. The funds may come from private value chain players, commercial finance, carbon offsetting, philanthropy.

Blended finance is a way to de-risk private (commercial) investment and leverage grant resources without creating unfair competition or displacement effects.

Box 2: Zoom-in on blended finance

Blended finance is the use of catalytic capital from public or philanthropic sources to increase private-sector investment in sustainable development.

It incorporates de-risking elements within a set of financial mechanisms and tools.

It can be implemented at several levels: funds can be blended at the financial mechanism level, with public and philanthropic players offering first-loss tranches, or through the combination of financing tools at the recipient level.

In other words, blended finance combines concessional money (funds offered on more generous terms than the market would normally allow) with commercial investment to make projects financially viable that might otherwise be too risky or unattractive for private investors alone.

Additional resources to learn more about blended finance

- **Guidelines:**

The Convergence website

Guidelines on EU blending operations

Finance for sustainable development

Blended finance

Blended finance for agriculture

- **Academic paper:**
Devadas D., Thériault A. and McGahan A. M. (2024), "Financing instruments for innovators to scale health innovations in low-and middle-income countries", in Resilient Health (pp. 663-677), Academic Press.

- **Report:**
OECD (2021), "Making blended finance work for agri-SMEs: Lessons learned from selected case studies"

Definitions of core concepts

Responsible Research and Innovation

Responsible research and innovation (RRI) is a concept that has gained increasing attention in the scientific community in recent years.
According to the European Commission (2012), RRI entails "taking into account the societal, ethical and environmental implications of research and innovation in order to ensure that their outcomes are desirable and sustainable".

RRI recognises, therefore, that innovation should not only focus on technological progress and economic growth but also consider broader societal implications and address potential risks and ethical considerations. Responsible Research and Innovation (RRI) has been proposed by the European Commission as a policy framework to make Research and Innovation (R&I) actors more responsible for the social, ethical, and legal implications of science and innovation.

Financing tool

A financing tool is the form through which funds are allocated to businesses, individuals or projects. It refers to the combination of characteristics that define the conditions of fund allocation, which mainly depend on the provider's expectations regarding economic and financial return.
Three main categories exist: equity, debt and grant. Hybrid tools can also be derived from these categories, such as reimbursable grants.

Financial mechanism

In this ActionBook, we use the term financial mechanism to refer to the type of institution allocating the funds. A mechanism can be characterised by its financing tools; management structure (who oversees it and how decisions are made); allocation rules (criteria for deciding where the money goes); and monitoring and reporting systems (to ensure transparency and accountability). A single mechanism may provide several financing tools.

De-risking

De-risking refers to a set-up that lowers the risk for an investor of not achieving the expected return on funds provided to investees in the form of credit or equity. It can take various forms, ranging from financial guarantee to capacity building. De-risking therefore aims to enhance the engagement of private funds in activities initially perceived as too risky.

Financial incentive

A financial incentive is a monetary benefit provided by a public or private actor to various stakeholders in order to encourage a specific action or behaviour.

Additional resources

Sabio R. P. and Lehoux P., 2024. "Responsible research and innovation in food systems: a critical review of the literature and future research avenues", Agriculture and Human Values: 1-14.

Owen, R., P. Macnaghten, and J. Stilgoe, 2020. "Responsible research and innovation: From science in society to science for society, with society." Emerging technologies. Routledge. 117-126.

European Commission, 2012. Responsible Research and Innovation: Europe's Ability to Respond to Societal Challenges (KI31-12-921-EN-C). Luxembourg: Publication Offices of the European Union.

European Commission, 2022. The financing of innovation. R&I Paper series. Literature review. Brussels

Content and objectives of the ActionBook

What to expect

The ActionBook is specifically designed for research and innovation (R&I) project leaders, managers or any “innovation holder” – whether a public organisation, entrepreneur or non-governmental organisation (NGO) – operating in Africa.

Its objective is to guide the development of tailored financing strategies to support the scaling of innovations emerging from research-led innovation projects and programmes in the field of agricultural development.

Several of the financing mechanisms and illustrative cases focus on innovation scaling in Africa. However, the 6-step tailoring process can also be deployed in other contexts.

The tailoring process is composed of a series of assessment phases or steps, that gradually guides the analysis of the innovation dimensions, the actors involved, the possible innovation scaling pathway and associated financing strategy.

Accurate identification of what needs to be scaled, by whom, what costs will be incurred and how they should be covered, as well as what funding tools and mechanisms are available and could be mobilized will guide the users of the ActionBook through the various parameters and constraints of their scaling strategy.

In the next section, two concrete examples of the use of the tailoring process, taken from the analysis of the 12 DeSIRA projects between 2024 and 2025, are proposed to showcase the results to be expected from this process.

IRRINN project - challenges for scaling new irrigation technologies
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The tailoring process in practice

Example 1: innovation developed by the IRRINN project (2021-2025)

"Intensification of agricultural production through the scaling up of innovative and adapted irrigation practices and technologies in Burkina Faso."

Innovation description

The IRRINN project developed an irrigation system tailored to the needs of smallholder farmers in Burkina Faso, associated with a solar-based pumping system.

Business model

The kits are already distributed through a private equipment provider that proposes payment facilities tailored to the capacities and revenue patterns of smallholder farmers. They are currently co-financed by a matching grant proposed by IRRINN.

Scaling approach

To distribute the irrigation system to a larger number of farmers, IRRINN plans to rely on several equipment providers taking in charge the import of the products and selling them on credit to farmers with a decreasing grant contribution.

Actors involved

- The equipment providers that will import and sell the pumps and irrigation systems
- Two NGOs (Practica and APESI) that act as a "market openers"
- The local financial institutions that should provide working capital facilities to equipment providers or equipment credits to farmers.

Financing strategy

1. Raise additional grant resources to support market opening facilities from Practica and APESI

Ex.: Development projects, grant-based innovation funds, climate funds

2. Raise additional grant resources to further subsidize acquisition costs

Ex.: Development projects, state budget, national development funds

3. Mobilize working capital for equipment providers so that they can propose payment facilities to end-users and/or equipment loans for smallholder farmers so that they can buy the irrigation system

Ex.: Development banks, impact funds, Commercial banks (for providers), Microfinance Institutions (for farmers)

4. Mobilize additional resources to set up a guarantee fund to de-risk credit to equipment providers and/or farmers

Ex.: Development projects, state budget, climate funds, national development funds.

More information

IRRINN

© IRRINN/CIRAD

Example 2 : innovation developed by the ReSI-NoC project (2020-2024)

"Strengthen agricultural innovation systems with a view to promote agro-sylvo-pastoral production systems that are economically profitable, ecological sustainable and socially equitable in the North Region of Cameroon."

Innovation description

The ReSI-NoC project developed Rural Resource Centers, which are multi-stakeholders' organizations aiming at promoting and implementing innovative agricultural techniques based on agroforestry principles and settled on the outskirts of protected areas to support national parks' conservation.

Business model

The Rural Resource Centers are newly created cooperatives that are currently 100% subsidized by development projects and programs.

Scaling approach

Ambition for each center is to extend their area of intervention by integrating neighbouring villages.
To reach scale, the project's ambition is that the Rural Resource Centers find revenue sources to reach minimum financial sustainability without diverting from their main mission: advisory services for innovation.
Even if it is important for the centers to remain private, farmer-led structures, their sustainability will probably be attained through a greater engagement of the state into the business model.

Actors involved

Actors are the Rural Resource Centers and their members, farmers and farmer groups.

Financing strategy

1. Raise additional grant resources to strengthen, equip and duplicate the Rural Resource Centers

   Ex.: Development projects, grant-based innovation funds, carbon credits, value chain finance

2. Raise additional grant resources to support advisory services over the long run

   Ex.: State budget, development projects, grant-based innovation funds, carbon credits, value chain finance

3. Mobilize working capital and investments to cover financing needs related to revenue generating activities to be developed by the Rural Resource Centers

   Ex.: Development banks, Commercial banks, Microfinance Institutions, value chain finance

More information

Desira Project Capacity4dev Resi-NOC

https://www.cifor-icraf.org/resi-noc/fr/

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Tips to keep in mind when embarking on the tailoring process

Financing complexity matches innovation complexity

Simple product innovations like IRRINN's solar irrigation kits follow linear subsidy phase-out strategies, moving predictably from high subsidies to commercial viability. More complex institutional innovations such as ReSI-NoC's Rural Resource Centers require sophisticated multi-stream financing combining grants and revenue-generating activities.

Each innovation, even the more complex one, can be broken down into multiple actors and delivery models that will be turned into various types of business models and associated financing needs.

The "deconstruction" of innovations is useful to identify where grant resources are needed and where commercial funding can take over.

Transitioning from pilot phase to scale up phase or, in other words, from proof-of-concept to commercial viability is complex.

This must be anticipated and most often requires specific "bridging financing" to reduce scaling risks and unlock private funding. Public-to-private transitions require public-private partnerhsips (PPP) arrangements and risk-sharing mechanisms that ensure smooth transfer of responsibilities while maintaining service quality and accessibility.

More lessons learnt about financing strategies for scaling project-based innovation in agrifood systems

Juguet E., Defebvre R., Toillier A., and Guillonnet R., 2025. "*Actionable learning from a review of financing needs and strategies for scaling DeSIRA innovations*". DeSIRA Learning Brief Series, Agrinatura, Cirad 15p.

How to navigate in the ActionBook

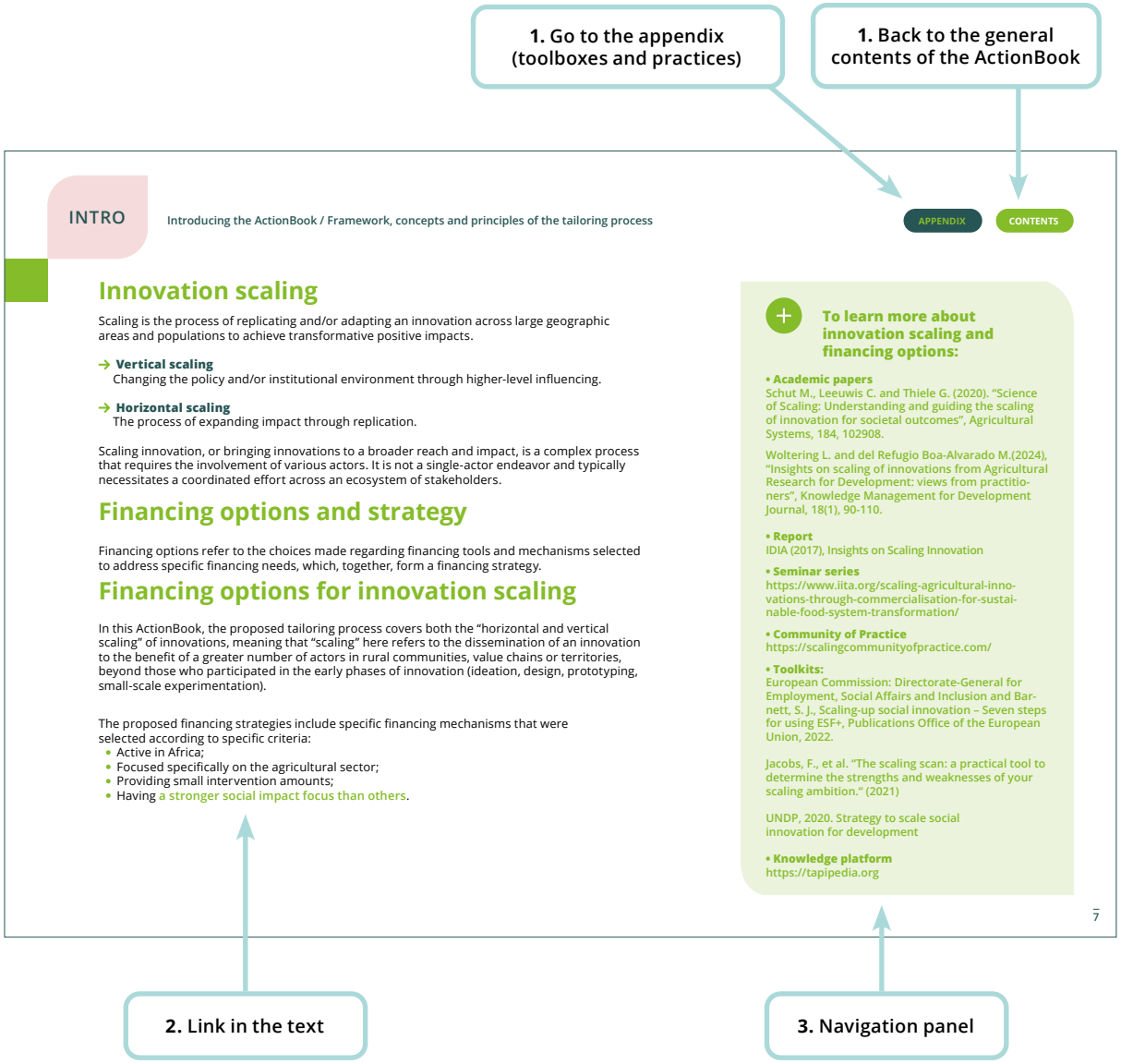
The rest of the document consists of two parts:

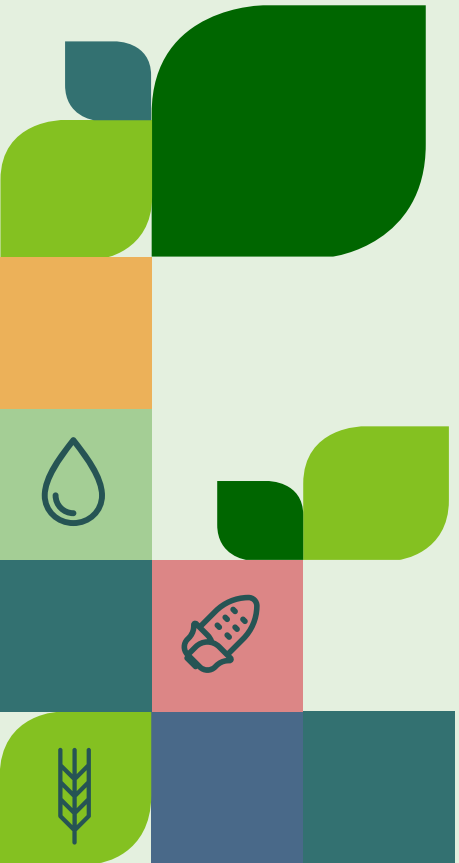
- The first part presents the **Tailoring Process**
- The second part comprises the **Appendix** that encapsulates practices and tools.

Both parts include clickable navigation links as follows:

- The two buttons, **CONTENTS** and **APPENDIX**, respectively link to the main table of contents of the ActionBook and the contents of the Appendix.
- Throughout the text, you will find words underlined in light green. These link either to an external website or to another section within the document.
- The green navigation panel provides access to four categories:
  - → Toolboxes
  - → Inspiring examples
  - → Focus
  - → Additional resources

All tables of contents are interactive. Simply click on the underlined titles to navigate directly to the relevant section.





The tailoring process to design financing strategies for scaling innovation

A six-step process to tailor your financing strategy

Tailoring financing strategy for scaling responsible innovations from research projects is a six-step process.

STEP 1

Assess readiness and plan scaling process

The first step in designing a sound financing plan is to assess whether an innovation is ready to seek funding beyond the usual framework of development projects and programmes to support its scaling process, and to clarify how the scaling will take place.

STEP 2

Define scaling actors' financing needs

The second step consists in defining the financing needs associated with the scaling of an innovation: who needs funding, and for what purpose? This will help in identifying the appropriate financing tools and mobilising suitable financing mechanisms.

STEP 3

Identify the right financing tool(s)

The third step guides the reader through various financing tools and matches them with specific financing needs.

STEP 4

Explore suitable financing mechanisms

The fourth step involves identifying suitable financing mechanisms, based on the financing tools they offer and the type of clients or beneficiaries they target (e.g. size, financial capacity, track record, etc.).

STEP 5

Identify de-risking and incentivising options

De-risking mechanisms and incentives are useful tools to support access to a wide range of financing mechanisms, particularly private funding sources. This fifth step explains when and how to mobilize them.

STEP 6

Secure the responsible aspect of an innovation while diversifying financing options

The diversification of financing options, especially when mobilising private financing sources, should not compromise the responsible aspect of an innovation. This final step explores frameworks that can be used to sustain this responsible aspect.

Step 1. Assess readiness and plan scaling process

Assessing the innovation's readiness to scale

The design of a funding strategy to scale an innovation begins with precisely identifying what you want to scale.

To help you better frame what needs to be scaled, it can be useful to ask yourself whether you can turn your innovation into product(s) and/or service(s) that should be made available to agrifood players.

For your innovation to enter the "scaling" phase, a list of pre-requisites should already be met.

The checklist **on the right** allows you to self-assess the readiness level of your innovation.

The following pages offer guidance on how to plan your scaling process and prepare for the mobilisation of alternative funding sources.

Checklist of pre-requisites to scale

- ☑ ☒ Have you tested the innovation "in the real world" to validate its effectiveness in, for example, agronomic, technical or organisational terms?
- ☑ ☒ Have you tested the innovation "in the real world" to validate its acceptance by the beneficiaries?
- ☑ ☒ Have you reached more than 50 people or conducted solid market research to test the interest of beneficiaries in the product/service you want to scale?
- ☑ ☒ Have you thought about the business model for your innovation? (This includes a precise and realistic identification of costs and revenue sources, whether commercial or of another nature.)
- ☑ ☒ Have you identified one or more organisations (e.g., SMEs, NGOs, a state body, etc.) to hold and disseminate your innovation or identified an individual with the right competencies to establish a new organisation to hold and disseminate your innovation?

Scaling dimensions to consider for financing strategy development

Any financing strategy must be based on a clear vision of how your innovation will scale. If, for example, your innovation was to reach more than 1,000 beneficiaries tomorrow, how would this happen? More precisely, you need to define:

1. Who are the actors involved? From the innovation holder to the end beneficiary.

2. What could be the business model? What revenue sources can be mobilised to cover the costs of sustaining and delivering your innovation? What does your innovation need to scale? Or, put differently: What exactly is preventing the dissemination of your innovation today? "Money" cannot be the only answer.

Precisely identifying the scaling levers will help you define your actual financing needs, determine the financing tools to target, and identify the prerequistes you need to work on now to enable future scale-up.

Preparing for private funding mobilisation from the start

Experience from the DeSIRA Initiative shows that the development of alternative funding strategies is far easier when initiated during the initial phase of the project. Addressing the economic sustainability of the innovation through cost-benefit analysis, assessing farmers' interest through market studies, and identifying sustainable organisations to support dissemination are all key areas to address. Raising early funding for projects to lay the foundations for robust scaling will greatly facilitate alternative fundraising in the future.

To do so, two key levers should be considered:

1. Engaging private actors in the value chain;

2. Fostering access to local financial systems.

Note: Working on pre-requisites related to the private sector or financial access requires the mobilization of appropriate expertise at the project level.

An overview of the dimensions to be addressed is presented **on the next page**. Even if the innovation is not clearly identified at the project's initial phase, it is still possible to structure the project in a way that ensures these dimensions are properly taken into account.

Toolbox 1
Engaging the private sector in R&I projects

Tool 1.1: Engaging private value chain partners

Tool 1.2: Fostering access to local financial systems

Inspiring examples

The Yayu project

The DARE project

Additional resources

• On private-sector engagement in development projects and programmes:

OECD principles for private sector engagement

BEAM Exchange – Towards transformational impact: synergies of private sector engagement and market systems development

Public-private partnerships for agribusiness development: A review of international experiences

• On fostering access to finance for agriculture:
Agriculture Finance Support Facility: "*Lessons Learned, World Bank Group*"

Preparing for private funding mobilisation from the start

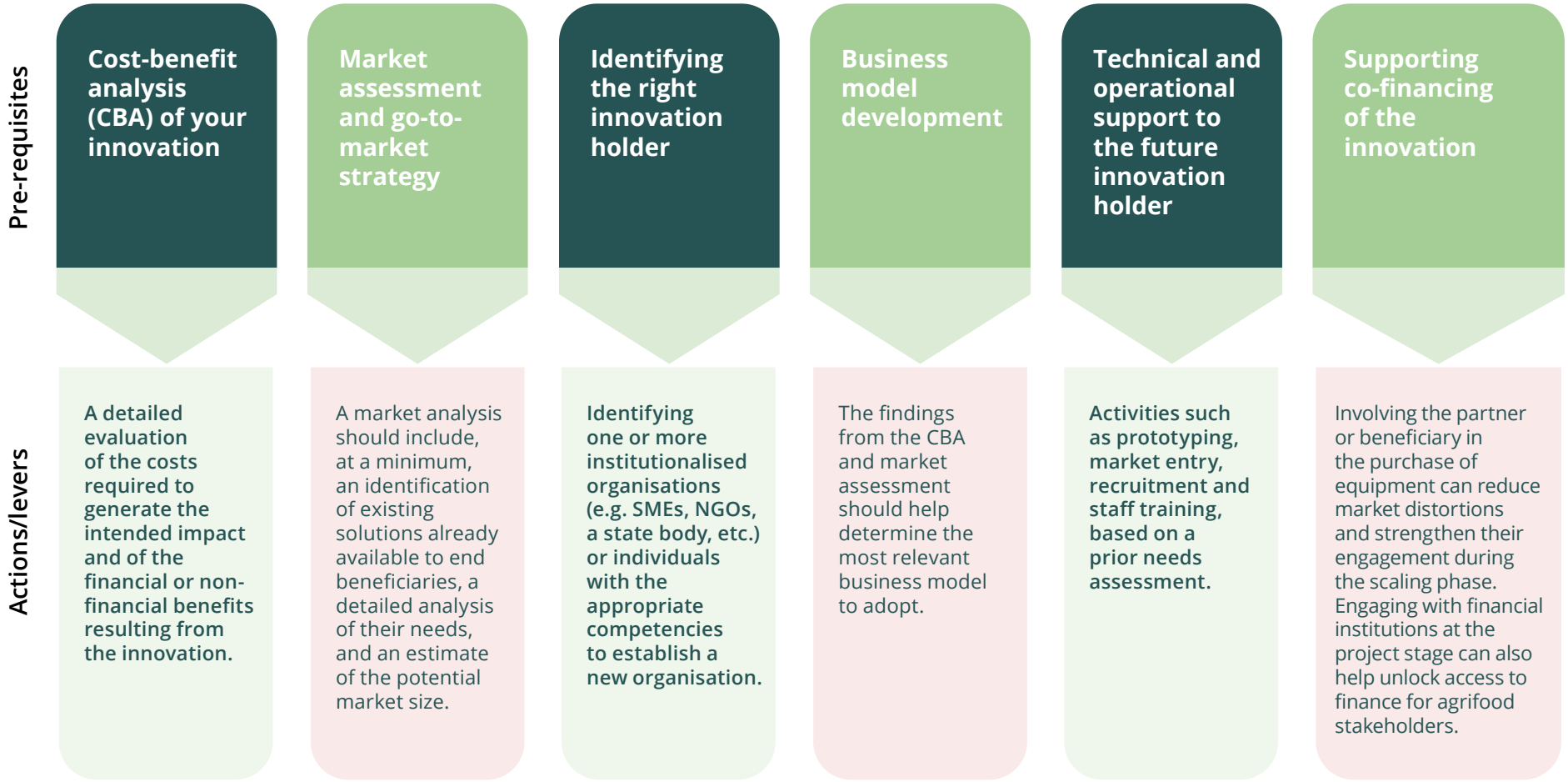


Figure 4: Dimensions to consider when preparing to mobilize private sector funds

Step 2. Define scaling actors' financing needs

Typical situations associated with scaling pathways

Once the scaling pathway and its stakeholders are identified, the financing needs of each category of stakeholders should be characterised.

Based on the assessment of various innovations and scaling pathways, five typical situations have been identified and are presented in the Toolbox 2. Though they do not claim to cover all scaling pathways, they provide a potential basis for defining financing strategies.

A scaling pathway will typically be a combination of one to three situations. For instance, the 'Situation 5' described in the right-hand box, concerns access to financing for innovation beneficiaries. It will necessarily be associated with any of scaling pathway involving the commercialization of a product or a service.

Financing needs

An overview of all existing financing needs is presented **in Table 2 on the next page**.

The identification of financing needs per stakeholder is key, as it will guide your strategy towards specific financing tools and mechanisms.

Toolbox 2
Identifying financing needs

- **Situation 1:**
Transfer your innovation to non-commercial players (state or NGO/association)

- **Situation 2:**
Create a (public or private) economically sustainable organisation to scale your innovation

- **Situation 3:**
Transfer your innovation to existing private-sector players

- **Situation 4:**
Set up a commercial distribution network relying on existing private-sector players

- **Situation 5:**
Support end beneficiaries in accessing the innovation

Financing needs

Financing need	Explanation	Example
Non-productive financing need	1.Financing needs related to experimental R&D, business model structuring and the establishment of potential partnerships, but which do not directly impact revenue growth. 2. Costs that are not associated with any revenue-generating perspective.	1. Assessment of impact and market potential, and negotiations with prospective partners. 2. Costs related to the creation of a bio/organic label, awareness-raising activities, etc.
Seed funding need	Financing needs related to the preliminary costs of a company, from the idea phase to the point where it can develop a minimum viable product (MVP). While R&D is still required at the seed stage, R&D costs should be oriented towards optimisation and should contribute to validating product/service market fit.	Market entry costs: communication, marketing and other commercial development expenses. R&D: adapting products/services to consumer preferences and/or market constraints. Any other cost incurred during the initial phase.
Long-term investment need	Financing needs related to investments that will generate income over the long term, albeit with a certain degree of uncertainty.	Investments related to soil regeneration or tree planting.
Equipment financing need	Need to finance capital expenditure ("Capex"): buildings, equipment and other long-term assets that affect production capacity, revenue growth and/or profit margins. Capex costs are most often non-recurring.	Building a new factory or opening a new point of sales.
Working capital need	Need to finance operational expenditures ("Opex"): salaries, transport, electricity, rent, etc. Opex refers to recurring costs incurred to run the day-to day business.	Raw material purchases, employees' salaries, logistics.
Liquidity need	Temporary needs linked to the volume of cash available to meet short-term obligations.	Financing need to cover customs duties linked to product importation.

Table 2: Overview of financing needs to scale agrifood innovations

Step 3. Identify the right financing tool(s)

Grants, equity and loans (debt)

Choosing the right financing tool to match the various financing needs associated with your scaling pathway is key, as it will determine how funds will be made available to the various innovation actors.

Three main tools co-exist: grants, equity and loans.

1. Grant resources are distributed with no expectation of direct financial return. They do not have to be repaid and can be considered as "free money".

2. Equity involves selling part of a company to an external player, the investor. The investor generally has expectations in terms of financial return over a given period of time. However, the innovation holder does not contractually engage to a predefined remuneration on the funds, as all shareholders equally share the risks of the company and will also equally share the resulting profits.

3. Debt, or loans, are amounts borrowed from a person or financial institution and must be repaid, usually with interest.

At first glance, grant resources may appear as "no-brainers". However, grants are difficult to mobilise, especially for private companies. They can come with stringent conditions regarding their use and, most of all, are limited in availability and/or size.

As previously stated, grant resources should be concentrated where they are truly needed (see introductory principles).

Financial service providers can combine characteristics of grants, equity and loans to create hybrid tools that address specific needs.

These hybrid tools can stem from blended finance approaches. Notable examples benefitting innovation in agri-food systems include patient capital (equity that stays in a company for a long duration, for example, 10 years or more), reimbursable grants, convertible debt, payments for ecosystem services, etc. (**See toolbox on the right for the definition of each tool)**.

Toolbox 3
Matching financing needs with appropriate financing tools

Grants and associated tools

Equity and associated tools

Debt and associated tools

Self-funding

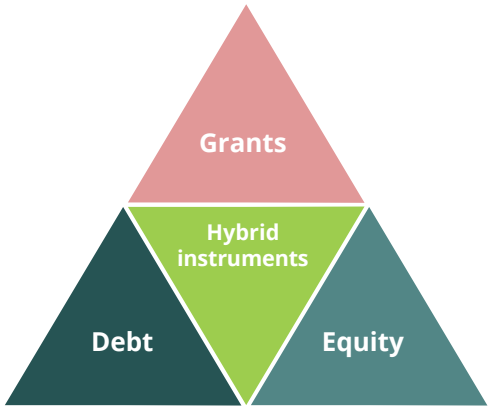


Figure 4: The three main financing tools for agrifood innovation scaling

Matching financial needs and financing tools

Typical financial needs that can be matched with non-grant funding are so-called "productive expenses", meaning that these expenses will be converted into future financial value creation, or, in other words, future revenue for the stakeholders. Typical financing needs for which non-grant funding should be considered are as follows:

- Acquisition costs of a product/service for the end beneficiary.
- Working capital and investment costs of production units (if they can rely on an established business model and pre-tested market).
- Potential costs related to the setup and operation of functional distribution networks (such as input shops, for example).

NB: Public companies can have productive activities and therefore take loans or even open their capital. Conversely, private companies can generate sustainable revenues from state contributions (e.g., private-led extension services funded through the Ministry of Agriculture's budget).

Considering the risks and criticality of the agricultural sector, the fact that we are financing innovation, and the fact that some innovations can be considered as "public goods", there is a strong case for mobilising additional grant funding after the research phase, especially at the beginning of the scaling process, and potentially over the long term.

Typical financial needs that should be matched through grant funding are as follows:

- Building the capacities of the "scaling" partners: although various models have tried to make farmers pay for extension services, experience shows that these services need to be at least partially subsidised.
- "Market opening" costs.
- Further R&D.
- Coordinating a network of players.

NB: In many cases, scaling an innovation will require both grant and non-grant funding.

→ In a nutshell

Grant funding

- Pre-market entry costs ("prerequistes")
- Non-productive activities

Non-grant funding

- Productive needs within sustainable business models

Step 4. Explore suitable financing mechanisms

Mapping the financing mechanisms

A high-level mapping of financing mechanisms is presented below.

It provides a general overview of the diversity of mechanisms that can be mobilised outside of development project funds.

A more detailed mapping can be found in the toolbox **(see next page)**.

This section aims to equip the reader with the tools to navigate these mechanisms and identify the most suitable ones.

Category	Funding mechanism	Examples
Grant-based financing mechanisms	Grant-based innovation funds, incubators/accelerators, research-oriented awards and prices, foundations, state budget, R&D tax credits, national or local development funds, carbon/biodiversity finance	FID, DIV-USAID, DFCD, Global Innovation Fund, BOPinc, 2scale, Africa Food Prize, WAYA, BIOFIN, Ikea Foundation, AGRA, McKnight Foundation, FNDA, Rwanda Green Fund, L3F, BioFa, ...
Equity-based financing mechanisms	Impact investing funds, impact venture capital funds, local private equity funds, equity-based crowdfunding, love money, corporate venture capital	AATIF, Huruma Fund, Acumen, SIDI, Aceli, Mercy Corps Ventures, Elea Foundation, Sinergi (Niger), Miarakap (Madagascar), Fako Capital (Central Africa), GrowForMe (Ghana), Agrivest Africa, ...
Credit-based financing mechanisms	National public development banks/funds, commercial banks, microfinance institutions, value chain finance, impact investing funds/impact banks	TADB (Tanzania), BNDA (Mali), BoA, Ecobank, UBTEC (Burkina), Baobab (Senegal), Heineken, Barry Callebaut, SIDI, Shared Interest, SME Impact Fund, Balloon Ventures, Kampani, Triodos, ...

Table 3: High-level mapping of financing mechanisms

Navigating through the variety of financing mechanisms

The main entry point to navigating through the various financing mechanisms is the type of financing tools they offer. To identify the right financing mechanism, one should consider the following:

1. The innovation holder: is it a for-profit or a non-profit company? Where is it based? What is its typical annual turnover?
2. The financing need.
3. The financing range.

Thanks to the tool "Matching financing mechanisms with innovation stakeholders", you should be able to pre-identify the right type of mechanism for each of the pre-identified financing needs. It consists of a non-exhaustive pre-selection of financing mechanisms based on ticket size, investment sector and geographical focus (e.g. excluding those investing only in technology-driven start-ups and countries outside of Africa). This pre-selection is intended to serve as an entry point for research-oriented projects and innovation holders.

While navigating through the various mechanisms, the first step is to check the eligibility criteria (who can access the funds), the conditions associated with the funding (the financing tool) and the eligible financing needs. These conditions and criteria should be considered in relation to the scaling model and the associated financing needs, as defined in steps 1 to 3.

→ **In a nutshell**

Pre-requisites for equity funding

The organisation requesting finance is a private, capitalistic company. A business plan is in place and at least 1-2 top managers are in position.

Pre-requisites for debt funding

The economic activity exists and has a track record. The organisation requesting finance can provide a guarantee (assets, contracts or alternative guarantees).

NB: In some countries, leasing can address the collateral issue. Some microfinance institutions (MFIs) can lend based on alternative guarantees, such as a group guarantee.

Toolbox 4
Matching financing mechanisms with innovation stakeholders

Focus on selected mechanisms

Fonds d'innovation pour le développement

2SCALE

Mercy Corps Ventures

Carbon credits

National public development banks and funds

Local financial institutions

Additional resources

- **On incubators:**

Ennova's mapping

- **On impact investing:**

Database of impact investing in Africa, FERDI (2024)

Impact investing in Africa: a 2024 analytical map, FERDI (2024)

Climate capital: financing adaptation pathways for smallholder farmers, ISF, AgFunder (2024)

Étude sur les mécanismes de financement de la transition agroécologique dans la CEDEAO, ARAA (2023)

The figure below provides a general overview to quickly guide project managers and innovation holders towards the most appropriate type(s) of financing mechanism(s).

Stage of the innovation		Research / Ideation	Market entry strategy	Scale up / Dissemination			
Grant funding	**What**	Applied research	Market entry costs	Non-economic activities / public services	Further R&D	Capacity building	Acquisition cost - end beneficiaries (incentives)
	Who	*State budget, Cooperation, Awards and prices*	*Cooperation, Innovation funds, Incubators, Awards and prices*	*State budget*	*State budget, Cooperation, Fundations, Corporate ESR, Carbon/biodiversity finance, Philantropy, National dvpt funds*		
Equity funding	**What**		Market entry costs	Long term investments / Equipement	Lauch of new products / Services - Growth financing		Further R&D
	Who		*Venture capital, Business angels, Love money*	*Impact investors, Corporate (venture) capital, national*			
Debt funding	**What**			Working capital / Equipment cost of production units	Working capital / Equipment cost of distribution units		Acquisition cost - end beneficiaries
	Who			*Impact investors, Development & commercial banks*	*Impact investors, Development & commercial banks*		*MFis, Banks, Impact investors, Value chain finance*

Figure 5: overview of best-fit financing mechanisms per innovation stage

Step 5. Identify de-risking and incentive options

Why identify de-risking and incentive options?

Financing agriculture in Africa is perceived as a high-risk activity, primarily because most players are smallholder farmers who do not have many physical guarantees to offer, such as physical goods, land properties, etc. Financing innovation is also considered risky, as financial service providers prefer to assess risk based on proven past experience. Additionally, transitioning to new agricultural techniques and systems is perceived as a risk by farmers. This is why de-risking mechanisms can be very useful in unlocking access to private and commercial funds in the agricultural sector and in directing funds towards responsible innovation. Financial incentives are also highly effective in encouraging farmers and other stakeholders to transition to more sustainable agricultural practices.

- For financial institutions, financial incentives can help offset the high operational costs associated with agricultural credit, particularly agricultural microcredit. They make the business case for serving smallholder farmers viable without resorting to high interest rates that could be overwhelming for farmers.
- For value chain stakeholders, financial incentives can alleviate the financial burden related to the investments required for transition. More specifically, they can compensate for the extra cost of "green" equipment.

De-risking and incentives should be supported by concessional resources, especially grant funding. They fit into the concept of "blended finance".

How to mobilize de-risking and incentive mechanisms?

→ Option 1
Development projects and programmes can play a role in mobilising private capital into responsible innovation in the agricultural sector by setting up mechanisms that ease access to finance for value chain players without displacing traditional financial service providers. **The next page** provides some guidance and a tool for setting up suitable de-risking and incentivising options.

→ Option 2
Development projects and programmes can identify pre-existing de-risking/incentive echanisms, such as national or regional guarantee funds or national incentive schemes **(see examples on the right)**. However, these are not always easy to mobilise for small-scale projects or for agriculture. This is why project-based de-risking options are still widely used in Africa and they can be managed by such partners.

+ Additional resources: de-risking and incentive mechanisms to explore

- **Regional guarantee funds:**

AGF
FAGACE
FSA

- **National guarantee funds:**

FONAFI (Burkina Faso)
FPM (DRC)
BDF (Rwanda)
FONGIP (Senegal)

- **National matching grant mechanism:**

FISAN (Niger)

- **Interest rate subsidy scheme:**

FONSTAB (Senegal)
The SUNREF mechanism (AFD)

Navigating through the various de-risking options

The most common de-risking and incentivising options at the beneficiary level are presented **in the table below.**

Option	Definition
Revolving fund	Endowment fund which aims to offer credit to beneficiaries/ project partners on a revolving basis
Guarantee fund	Endowment fund which aims to cover potential losses on a credit
Matching grant	Partial subsidy on an equipment that comes in association with a credit
Interest rate subsidy	Subsidy that is used to cover part of the interest rate of a loan

Leveraging grant funding, development projects can set up temporary or long-term de-risking or incentivising options. To identify the most suitable option, you need to precisely identify the market failure(s) that prevent scaling actors from accessing private funding.

This should be done in partnership with financial service providers, who are best placed to offer their opinion on which option would make them more comfortable financing a particular innovation actor.

Toolbox 5 **(link on the right)** will help you better understand the role and implications of each option.

Capacity building and information sharing can also be considered as de-risking options that can be implemented at project level **(see detail on the right).**

NB: Outside the scope of development projects, de-risking is also proposed by development partners to equity-based mechanisms, in the form of «first loss tranches» ***(see definition on the right)****. This is very common in impact investing.*

→ **In a nutshell**

Capacity building and information sharing

Capacity building and information sharing can also be considered as de-risking options when they are well aligned with a financing offer:

- Capacity building and training for end beneficiaries
- Access to meteorological or market information
- Capacity building for financial institutions
- Information sharing between financial service providers
- Etc.

Indeed, capacity building and information sharing can help financial players feel more comfortable financing innovation and can encourage farmers to adopt innovative behaviours.

First-loss tranche

A first-loss tranche investor will absorb the first losses until that tranche is depleted; any additional losses will then be borne by the other investors.

Toolbox 5 Understanding and mobilising de-risking mechanisms

Revolving fund

Guarantee fund

Matching grant

Interest rate subsidy

Additional resources

Lessons learned from IFAD's inclusive rural and agricultural finance experiments

Lessons learned: loan guarantee funds, IFAD (2014)

Agricultural credit: assessing the use of interest rate subsidies, À savoir 29, AFD (2015)

How can matching grants in agriculture facilitate access to finance? World Bank (2019)

Step 6. Securing responsible innovation while diversifying financing options

Looking for alternative funding sources, especially when raising private funding, can present some risks in relation to the responsible aspect of the innovation.

Private scaling actors could take over the innovation with little regard for its accessibility to the most vulnerable, for example, or investment funds could push an innovation holder towards greater profitability at the expense of environmental, social and ethical standards.

Safeguards can be introduced at various stages of the innovation journey to secure the responsible aspect of an innovation while engaging the private sector and diversifying financing options:

1. Select responsible companies.
2. Identify the right social and environmental target indicators and engage scaling actors towards these targets.
3. Foster responsible innovation through a favourable environment .

Most of the identified financing mechanisms also have their own social and environmental criteria. Some have even developed impact frameworks **(see examples on the right-hand box)**. These should be considered when comparing the various financing mechanisms.

Toolbox 6
Three steps towards private sector responsability

Additional resources

The responsible agricultural investment tool for agribusinesses and case studies

The Agri CP tool

IFC performance standards on environmental and social sustainability

Cerise+SPTF's rating tool for microfinance institutions

→ **In a nutshell**

Innovation funds and incubators
New-generation innovation funds generally have a specific focus on documenting evidence-based impact. Innovation funds, such as the FID, propose an impact measurement process based on randomised trials, which is embedded into the support provided to the innovation holder.

Impact investors
Each impact fund develops its own impact framework, which more or less covers responsible innovation. From this framework, eligibility criteria are established, along with extra-financial commitments.

NB: eligibility criteria are generally not stringent; however, minimum standards are required, along with a clear commitment to impact.

Local financial institutions
Commercial banks typically do not measure their impact. However, they are required to adhere to minimum social and environmental (S&E) standards when financed by international lenders such as IFC, KfW or Proparco. Microfinance institutions, on the other hand, tend to build stronger cases for impact. They often have a clear social mission, which translated into concrete business decisions, such as inclusive eligibility criteria. Many institutions have conducted "social ratings" (specific S&E assessments based on standardised methodologies) and are actively engaged in managing their environmental and social performance.

Appendix

Appendix

Toolboxes

Inspiring examples

Focus on selected financing mechanisms

Appendix

Appendix

Toolboxes

Inspiring examples

Focus on selected financing mechanisms

Toolbox 1

Engaging the private sector into R&I projects

Tool 1.1: Engaging private value chain partners

Rationale: engaging private value chain partners from the early stages is an opportunity to shape your innovation to meet market needs and develop it in a cost-efficient way. Even if private-sector players are often not ready to invest financially in the early stages, they are very often key actors at the scaling stage. Involving private-sector players in innovation processes allows each stakeholder to bring complementary contributions and helps facilitate the identification of funding opportunities for scaling up.

Step 1: What value can the private sector add?

The first step is to clearly understand the relationship that private-sector players may have with the problem your innovation seeks to address. Start by mapping the various types of actors related to your innovation. Then assess their potential role in the scaling process. Key questions include: to what extent do these companies contribute to the problem? Could they be part of the solution?

Step 2: Which private-sector actors should be engaged?

It is essential to consider the size and capacity of the private-sector players you wish to engage. Pragmatic decisions should be made about which partners to target (e.g. small local farmers' organisations or large agribusinesses?), depending on the complexity of the production process and the objectives you aim to achieve (see, for example, the **DARE project).**

Working with pre-existing SMEs already active in the sector is often highly effective. In such cases, an open selection process can be carried out using pre-established criteria, such as existing go-to-market strategy, adequate distribution channels to reach targeted beneficiaries, financial capacity, willingness to co-invest, compliance with minimum environmental and social standards.

Step 3: How to formalise private-sector engagement?

Engagement with private-sector players can be formalised through a memorandum of understanding or a more detailed partnership agreement. These could include:

- clear division of roles and responsibilities;
- financial arrangements or contributions (e.g. repayment modalities for the public partner or revenue-sharing arrangements in the initial years;
- pricing clauses;
- environmental and social requirements;
- performance targets.

Step 4: When should the private sector get engaged?

In most cases, your private-sector engagement strategy will be more relevant once the R&D process is well underway.

Tool 1.2: Fostering access to local financial systems

Rationale: from the outset, the question of who will pay for the proposed innovation should be considered. If end beneficiaries are expected to partially or fully cover the cost of the service or product, their capacity to access funds should be anticipated.

Specific project activities to support access to finance

To ensure end beneficiaries can access the necessary funding to adopt an innovation, the following project activities could be undertaken:

Support the local financial offering

- Identify financial service providers most likely to finance partner SMEs (i.e. those well established in rural areas and with experience working with similar businesses).
- Involve financial service providers early on to identify relevant support points (e.g. pain points or barriers that need to be addressed to develop and manage agri-focused financial products).
- Engage financial service providers to pre-identify bankable innovation holders and beneficiaries, and to promote your innovation among their existing clients.
- Organise training and awareness-raising sessions for staff of a pre-selected group of financial institutions on the innovation and its value.

Support potential clients of financial institutions (e.g. agribusiness SMEs) in accessing credit

- Facilitate multistakeholder exchange workshops at the local level to raise awareness and build trust (the geographical scope of these workshops should align with the innovation's purpose and scale).
- Provide support for developing realistic business plans, including a clear view of revenue cycles and cash flow.

Set up a de-risking mechanism

→ See Toolbox 5

Toolbox 2

Identifying financing needs

→ Tool 2.1 - Situation 1

Transfer your innovation to non-commercial players (state or NGO/association)

In which situations is it relevant?

The dissemination of your innovation only requires capacity building, awareness raising or training at the end-beneficiary level

→ Example: the adoption of agricultural practices such as the introduction of zero or minimum tillage.

Your innovation is not linked to the distribution of a product or service, but instead relates to:

→ The establishment of new organisational models.

→ The introduction of new processes and tools to transform innovation or research systems.

Example

Your innovation relates to good agricultural practices, and the main constraint to scaling up is the need for awareness raising and training of farmers. In this case, the funding needs primarily concern the organisation of new training sessions. Farmers are unlikely to have the financial capacity to pay for these trainings and there is no major private aggregator in the value chain with a direct interest in seeing farmers adopt these practices.

As a result, non-commercial actors will be responsible for scaling up the innovation, most likely relying on public funding – either from state budgets or development partners. It may also be possible to raise funds from foundations, which often contribute through intermediary basket funds such as the Agroecology Fund. In specific cases, Carbon credits could also be explored as a complementary funding option.

→ Tool 2.1 - Situation 1

Transfer your innovation to non-commercial players (state or NGO/association)

Typical financing needs and suitable financing mechanisms

Working capital needs	• Salaries • Travel costs • Expertise • Training-related costs • Communication expenses	• Grant-based financing mechanisms • Research-oriented awards and prices • Foundations • State budget • National or local development funds • Carbon finance
Equipment needs	• Vehicles • Eventually buildings	

→ Tool 2.2 - Situation 2

Create a (public or private) economically sustainable organisation to scale your innovation

In which situation is it relevant?

- → The innovation can be linked to a business model that generates revenue – for example, by selling a product or service to farmers, other value chain actors, the state or development partners.
- → It would be more efficient for a single actor to hold the innovation, rather than involving multiple players (e.g. due to high investment costs, complexity of processes or economies of scale).
- → There is no pre-existing public or private entity capable of operating the activities required for scaling up of the innovation or you do not wish to transfer the innovation to the private sector.

Example

The BIORISK project has developed and tested healthy planting material for the cassava value chain across 10 countries in Africa. It now aims to establish regional production centres in the form of commercial companies, potentially owned by the hosting states. BIORISK considers that creating these companies from scratch is the best way to place the production of planting material on a more commercial footing, ensuring both sustainability and the responsible nature of the commercialised planting material.

In this case, commercial sources of funding may become available in the medium term; however, grant-based support will be needed initially to set up the companies and address key pre-requisites.

→ Tool 2.2 - Situation 2

Create a (public or private) economically sustainable organisation to scale your innovation

Typical financing needs and suitable financing mechanisms

→ Tool 2.3 - Situation 3

Transfer your innovation to existing private-sector player(s)

In which situation is it relevant?

- → You can associate your innovation with a business model that generates revenue; for example, you might consider selling a product or service to farmers, other value chain players, the state or development partners.
- → There are private-sector players in the market who could be interested in taking over this innovation.
- → This situation is preferable when the innovation aligns with the private actor's business model (e.g., producing similar products or serving the same market). This private actor should be chosen based on its ability to expand the availability of the product or service to the end beneficiaries in the long term.
- → *NB: The question of patenting your innovation should be discussed with the private-sector player(s).*

Examples

- → The BIOSTAR project equips beneficiary SMEs with innovative bioenergy equipment. From the outset, the BIOSTAR project worked closely not only with the SMEs benefitting from the equipment but also with engineering offices and equipment manufacturers to ensure they would be capable of replicating the innovation by the end of the project, even though the innovations will all be open source. NB: As this type of equipment is most often prefinanced by the client, the financing need during the scale-up phase is primarily at the beneficiary SME level.
- → See also: the **DARE project**.

→ Tool 2.3 - Situation 3

Transfer your innovation to existing private-sector player(s)

Typical financing needs and suitable financing mechanisms

→ Tool 2.4 - Situation 4

Set up a commercial distribution network relying on existing private-sector players

In which case is it relevant?

- → You can associate your innovation with a business model that generates revenue, and you are considering selling a product or service to farmers or other value chain players.
- → To reach the farms, you need to mobilise intermediaries.
- → Private-sector players exist and are already engaged in similar activities.

Examples

- → A project aiming to scale up the use of organic inputs on farms can rely on a network of private input dealers. Once the input dealers have been trained on the benefits of the new product, they will require working capital loans to purchase the input. These loans would be repaid through input sales.
- → To a lesser extent, funds will also be needed to adapt the shop to the new product or acquire point-of-sale advertising, for example.

→ Tool 2.4 - Situation 4

Set up a commercial distribution network relying on existing private-sector players

Typical financing needs and suitable financing mechanisms

Long-term investment needs	• Training on the product and its advantages • Promotional material • If needed: shop/business improvements	• Grant-based innovation funds • National or local development funds
Working capital needs	• Purchase of innovative product/raw materials • Salaries	• Commercial banks (big players) • Microfinance Institutions (small players) • National public development banks/fund (big players)

→ Tool 2.5 - Situation 5

Support end beneficiaries in accessing the innovation

In which case is it relevant?

- You can associate your innovation with a business model that generates revenue, and you can envisage selling a product or service to farmers or other value chain players.
- It is financially attractive for farmers to purchase your product or service and they achieve a return on investment in less than five years.

Examples

- IRRINN developed an innovative irrigation solution tailored to the needs of smallholder farmers. It selected a national input and equipment provider in Burkina Faso to commercialise the kits. In addition to commercialising the innovation, the private-sector partner also offers advances to smallholder farmers, with repayment schedules aligned with their revenue calendar.
  At the scale-up phase, this system is likely to generate funding needs at the equipment provider's level, which could be covered by local commercial banks.
- The BIOSTAR project equips beneficiary SMEs with innovative bioenergy equipment. To prepare for the scale-up of the innovation, BIOSTAR is seeking solutions to support beneficiary SMEs in accessing national or international sources of funding (e.g. equipment loans).

→ Tool 2.5 - Situation 5

Support end beneficiaries in accessing the innovation – big players

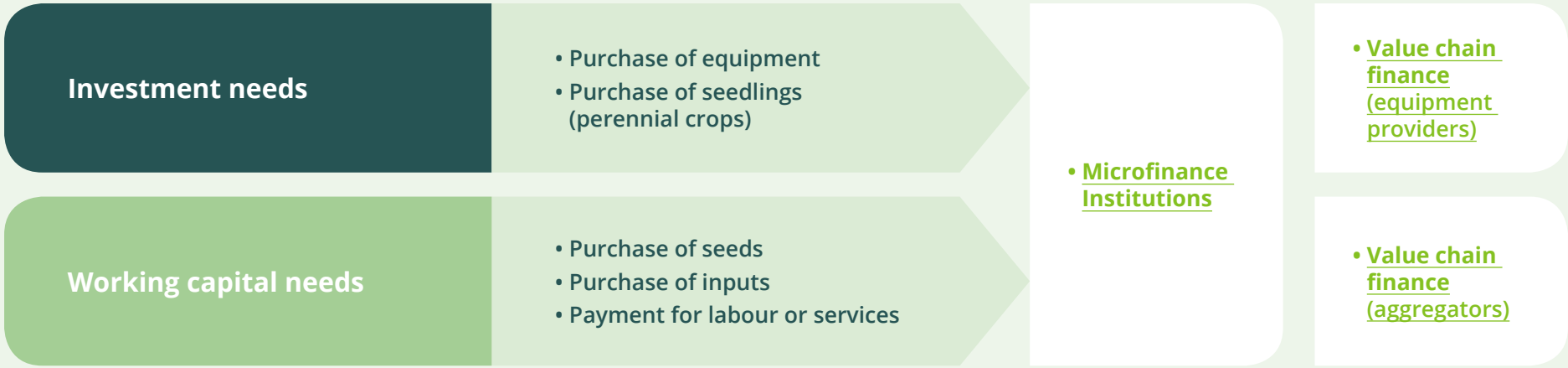
Typical financing needs and suitable financing mechanisms

Investment needs	• Purchase of equipment • Purchase of seedlings (perennial crops)	• Commercial banks • National public development banks/funds	• National or local development funds • Impact investing funds
Working capital needs	• Purchase of seeds • Purchase of inputs • Payment for labour or services		

→ Tool 2.5 - Situation 5

Support end beneficiaries in accessing the innovation – small players

Typical financing needs and suitable financing mechanisms



Toolbox 3

Matching financing needs with appropriate financing tools

Tool 3.1: Grants and associated tools

Financing tool	Definition	Type of financing need addressed
Grant	A subsidy (which can also be an award), usually provided in cash. The beneficiary is not expected to repay it.	All types of financing needs can be covered by grants. However, as this resource is scarce, the use of grants should be focused on: 1. Research activities 2. Non-productive financing needs 3. Seed funding needs 4. De-risking or incentive mechanisms for the most vulnerable end-beneficiaries
Reimbursable grant	A contribution provided to a recipient institution for investment purposes, with the expectation of long-term reflows under conditions specified in the financing agreement. The provider assumes the risk of total or partial failure of the investment and may also decide if and when to claim repayment.	• Seed funding needs • Long term investment needs • Working capital needs
Result-based financing	An umbrella term referring to any programme or intervention that provides rewards to individuals or institutions after agreed-upon results are achieved and verified.	• Seed funding needs • Long-term investment needs *NB: Appropriate to closely monitor/ensure delivery by private sector partners and/or to ensure good use of grant funding by pre-established private sector players.*
Payments for ecosystem services	Payments for ecosystem services, also known as payments for environmental services (or benefits), are incentives offered to farmers or landowners in exchange for managing their land to provide various ecological services.	

Tool 3.2: Equity and associated tools

Financing tool	Definition	Type of financing need addressed
Equity	Capital investment in privately owned companies, representing a financial contribution made by a (public or private) partner. The partner does not request repayment. The money remains in the company until the partner chooses to sell their shares. In exchange for the financial support, the founders of the company share ownership and grant the partner decision-making power within the company.	Appropriate to accelerate the growth of a company: investing in long-term assets and expanding the operational team to increase revenues and profits. • Long-term investment needs • Seed funding needs
Redeemable equity	A specific type of equity that allows founders to buy back ownership from investors under pre-defined terms.	
Convertible bonds	Debt instruments that yield interest payments but can be converted into equity at a predetermined rate.	Often used for equity-seeking firms that are not yet considered mature enough by investors. • Long-term investment needs • Seed funding needs
Revenue sharing	A business model that allows companies to share profits or losses with various partners. It is a profit-sharing system that ensures all parties involved are compensated for their contribution to the business.	Encourages various players to join forces and invest time and money in a shared project

Equity and redeemable equity are not appropriate for cooperatives or NGOs. However, they can access bonds.

Tool 3.3: Debt and associated tools

Financing tool	Definition	Type of financing need addressed
Mezzanine debt	Mezzanine financing combines debt and equity financing, allowing the lender to convert the loan into equity if it is not paid on time or in full. The loan's remuneration and repayment schedule can be tailored to the needs of the company.	• Long-term investment needs • Seed funding needs
Senior debt:	Senior debt is borrowed money that a company must repay first in the event it goes out of business. Senior loans are repaid on a regular basis, although a moratorium can be negotiated.	Investments in productive assets that contribute to revenue growth.
- Investment loans	Loans of a relatively large amount, generally with a long-term maturity.	• Long-term investment needs • Equipment financing needs
- Working capital loans	A relatively short-term loan (less than 2 years for commercial banks, less than 1 year for microfinance institutions), contracted to support the company in its day-to-day activities.	• Working capital needs
- Trade finance and overdrafts	Short-term loans, sometimes based on contracts (e.g. factoring)	• Liquidity needs
Project financing	Project finance is a method of funding projects that often involves both public- and private-sector funding sources.	• Long-term investment needs • Equipment financing needs Mainly infrastructure and capital-intensive projects that require large volumes of investment.

Tool 3.4: Self-funding

Financing tool	Definition	Type of financing need addressed
Investing pre-existing capital	Companies may fund innovation through past or future profits from existing products.	All types of financing needs. *NB: Appropriate when the innovation is transferred to a pre-existing, solid company, such as an agro-industrial.*
Reinvesting profit	Companies may scale up gradually thanks to accumulated profits from the innovation, which can be sustainable but may limit the speed of innovation.	All types of financing needs
Bootstrapping	Start-ups fund their own growth by minimising costs and maximising efficiency. This approach is often used in the early stages and by entrepreneurs seeking independence from external investors.	All types of financing needs

Toolbox 4

Matching financing mechanisms with innovation stakeholders

Tool 4.1: Grant-based financing mechanisms

Mechanism	Definition	Example	Typical beneficiary
Grant-based Innovation funds	Non-repayable funding (grants) to support the development, testing and scaling of new ideas, technologies or business models.	• Fonds d'Innovation pour le Développement • DFCD • Global Innovation Fund • African Visionnary Fund • Agroecology Fund • SASI	Some of them are business-oriented and target private companies, being selective on the "innovation" and "impact" aspects.
Incubators/accelerators	Programmes designed to support early-stage businesses or projects by providing resources such as mentorship, funding, training and/or networking opportunities.	• Bopinc • Bridge for Billions • Grindstone • Katapult Africa • 2scale	Most incubators are business-oriented and target start-ups with high growth potential. However, specialised organisations can be valuable and help agri-SMEs reach a critical phase of development.
Research-oriented awards and prices	Grants awarded to individuals, teams or institutions for conducting high-quality research that contributes to knowledge advancement, innovation or practical solutions to specific challenges.	• The AFRICA Awards • African Women in Agriculture Research and Development • GoGettaz • Africa Food Prize • WAYA	Target a wide range of beneficiaries, from NGOs to start-ups and SMEs.
Foundations	Non-profit organisations that manage assets (such as an endowment) and provide grants, donations or other types of support to organisations aligned with their mission.	• Ikea Foundation • McKnight Foundation • Rockfeller Foundation • Gates Foundation	Agroforestery/conservation initiatives, social enterprises, youth entrepreneurship initiatives.

Tool 4.1: Grant-based financing mechanisms

Mechanism	Definition	Example	Typical beneficiary
State budget	Based on the government's annual budget, funds may be allocated to address specific issues or develop particular sectors.	The Government of Togo partners with the company Bboxx to subsidise solar-powered water pumps.	Smallholder farmers, small companies, farmer organisations, local NGOs, resource centres, etc.
R&D tax credits	Incentives provided by governments to encourage businesses to invest in R&D activities.		
National or local development funds	Public envelopes used to drive growth and development within a country or specific regions.	• FNDA (Bénin) • Décentralisation des Fonds Climat (Sénégal) • Rwanda Green Fund	Smallholder farmers, communities, farmer organisations, local NGOs, etc.
Carbon credits	Carbon credits are measurable and verifiable emission reductions or sequestration generated by certified climate action projects, financed by countries or organisations aiming to compensate for their own emissions.		*NB: Appropriate for large-scale, climate-oriented projects.*
Carbon/biodiversity finance	Funding provided by polluting organisations (e.g. multinationals) to projects that reduce, capture or offset carbon emissions, aiming to combat climate change.	• Livelihoods Funds • BioCarbon Fund	Organisations fostering the reduction of CO2 emissions through project financing.

Tool 4.2: Equity-based financing mechanisms

Mechanism	Definition	Examples of existing mechanisms	Typical financing need and beneficiary
Impact investing funds	Pools of capital managed by institutions that invest in businesses, organisations or projects with the explicit goal of generating positive, measurable social or environmental impact, alongside a financial return. These funds prioritise impact over financial return.	• AATIF • ABC Fund • Huruma Fund • AgriFI • Acumen • Aceli • SIDI • Shared Interest • FADEV • Financing Innovation Tool (ADA) • Kampani – several players are grouped under the CSAF	Target private companies. The minimum ticket (e.g., EUR 1M) often excludes small companies and start-ups. Select examples with low minimum tickets for intervention.
Impact venture capital funds	Investment funds that provide capital (mainly equity) to early-stage companies with the goal of generating positive social or environmental impact, alongside a significant financial return.	• Mercy Corps Ventures • Wic Capital (Senegal and Côte d'Ivoire) • elea Foundation	Specifically target start-ups, often digital-oriented. Very few are active on the African continent.
Local private equity funds	Pools of capital managed by African-based institutions, focusing on companies that are at a more advanced stage of development than start-ups.	• Sinergi (Niger) • Miarakap (Madagascar), • Fako Capital (Central Africa)	Target private companies. These funds are not present in many countries and sometimes do not finance agriculture.

Tool 4.2: Equity-based financing mechanisms

Pre-requisites: The organisation requesting finance is a private, capitalistic company. A business plan is in place and at least 1-2 top managers are on board.

Mechanism	Definition	Examples of existing mechanisms	Typical financing need and beneficiary
Equity-based crowdfunding	Platforms that enable businesses to raise funds from a large number of people (the crowd), who, in return, become part-owners of the business.	• GrowForMe (Ghana) • Agrivest Africa • Fiatope • SmartFarmer • Kwidex • Afrikwity	Not available in all countries. Small ticket sizes. Target medium-sized farms and SMEs/start-ups.
Love money	Capital or financial support provided to a business or start-up by friends, family or close acquaintances, typically during the early stages of the business.	Family, friends, diaspora.	One of the key components of the funding gap that African founders face compared to those in capital-intensive markets.
Corporate venture capital	Large companies investing in start-ups to foster innovation and business growth, while potentially generating financial returns.	• Danone communities, local agro-industrial actors, or EDF investing into Bboxx Avril, In Vivo, etc.	Corporate venture capital will seek to invest in companies that create synergies with their core activities, while not targeting the same market.

Tool 4.3: Credit-based financing mechanisms

Mechanism	Definition	Examples of existing mechanisms	Typical financing need and beneficiary
National public development banks/ funds	Financial institutions (FIs) owned or controlled by the government that provide financing for developmental projects aimed at addressing development challenges set by the government.	• TADB (Tanzania) • BNDA (Mali) • BAGRI (Niger) • ADB (Ghana) • BOA (Nigeria) • Rwanda Green Fund, etc.	Medium to large-sized projects with long-term investment needs. Large farmer organisations with working capital needs.
Commercial banks	FIs that provide a wide range of services to individuals, businesses and governments, with the primary goal of generating profit.	• Bank of Africa • Ecobank, etc.	SMEs and large companies with short-term or mid-term financing needs above EUR 30,000.
Microfinance institutions	FIs that provide small-scale, local financial services to individuals or businesses, primarily in low-income or underserved communities.	• UBTEC (Burkina Faso) • Baobab (Senegal), etc.	Smallholder farmers or farmer groups, SMEs, with short-term financial needs below EUR 50,000.

Tool 4.3: Credit-based financing mechanisms

Mechanism	Definition	Examples of existing mechanisms	Typical financing need and beneficiary
Value chain finance	The coordinated provision of financial services to businesses or individuals at various points along a supply or value chain. Participants are often bound by a memorandum of understanding to ensure that all players have access to the capital they need to operate efficiently.	Agrodealers and offtakers offering inputs on credit and other types of advances to their smallholder farmer suppliers. Example: Heineken in Ethiopia	Smallholder farmers with short-term input financing needs.
Impact investing funds/ banks	The key difference between traditional lending and impact investing lies in the dual objective of generating both social/ environmental impact and financial returns, often based on a broader set of criteria beyond profit maximisation.	• SIDI • Shared Interest • SME Impact Fund (managed by Match Maker Fund Management) • Balloon Ventures • Kampani • Triodos	SMEs or cooperatives. Often contract-backed loans, particularly targeting export value chains.

Toolbox 5

Understanding and mobilising de-risking mechanisms

Tool 5.1: Revolving fund

Grant usage and principles

- The grant is used to endow a fund, the purpose of which is to offer credit to beneficiaries or project partners.
- This fund would be entrusted to a financial institution to ensure sound management, either through an off-balance sheet fund management mechanism, or via a donation or loan to the institution, to be incorporated into its accounts.
- Either the financial institution would be designated as the owner of the fund, or a organisation would need to be entrusted as the fund manager, with the capacity to ensure the fund's deployment and management over the long term.

Main market failures addressed

- Lack of availability of long-term resources (particularly for microfinance institutions).
- Possibility of negotiating a reduction in interest rates, although these would still need to cover the operating costs incurred by the institution in managing the fund (for example, for a rural microfinance institution in the West African Economic and Monetary Union region, operating costs represent around 12-15% of the loan amount over one year).
- Raises awareness within the financial institution regarding the features of the innovation and encourages engagement with the topic (although additional awareness raising and training for the institution's staff may still be required).

Tool 5.1: Revolving fund

Strengths and weaknesses of the mechanism in relation to the context and objectives of a research-based development project

- A long-term scheme that can continue beyond the end of the project.
- Addresses two key barriers to accessing credit at the level of microfinance institutions, which would be the “natural” financial partners of several stakeholders involved in scaling innovation.

- Necessity to partner with a very limited number of financial institutions, which may lack flexibility.
- The amount available needs to be quite substantial in order to represent an attractive opportunity for financial institutions – particularly if it must be divided between several institutions.
- The mechanism may be complex to set up.
- In the long term, a beneficiary of the fund must be identified at the end of the project.
- Does not strongly encourage financial institutions to take on more risk unless the fund is managed off-balance sheet.
- Successful examples of off-balance sheet funds managed by local financial institutions appear to be rare in Africa.
- Low leverage effect.

Tool 5.2: Guarantee fund

Grant usage and principles

- The grant will be used to establish a fund to guarantee loans granted by financial institutions to beneficiaries or innovation stakeholders.
- This fund can either be entrusted directly to a financial institution or to a guarantee fund, if one exists in the country.
- Either the financial institution would be designated as the owner of the fund, or an organisation would need to be identified to manage the fund, with the capacity to ensure its appropriate use over the long term.

Main market failures addressed

- High risk perception by financial institutions towards innovation, with which they are often unfamiliar.
- Can replace part of the physical guarantees typically required by financial institutions from beneficiary companies, as the guarantee fund covers part of the loan amount.
- Raises awareness within the financial institution regarding the features of the innovation and encourages engagement with the topic (although additional awareness raising and training for the institution's staff may still be required).

Tool 5.2: Guarantee fund

Strengths and weaknesses of the mechanism in relation to the context and objectives of a research-based development project

- A long-term scheme that can continue beyond the end of the project.
- Enables work on perceived risk and constraints related to physical guarantees – two major barriers to accessing credit in commercial banks, and to a lesser extent, in microfinance institutions.
- Offers immediate leverage.
- Possibility of negotiating loan interest rates where the fund is made available to the financial institution free of charge, though this impact is generally marginal.
- The subsidy is used in a complementary way, without crowding out existing players in the financial system.

- Necessity to partner with a very limited number of financial institutions, which may lack flexibility.
- If entrusted directly to the financial institution without a formal management framework, the mechanism risks being poorly managed and, therefore, may lack sustainability.
- Establishing an ad hoc framework to ensure better management by the financial institution is highly complex.
- The amount available needs to be sufficiently substantial to be attractive to established guarantee funds.
- For the scheme to be sustainable, a long-term beneficiary of the fund must be identified by the end of the project.
- Does not influence the loan duration (term).

Tool 5.3: Matching grant

Grant usage and principles

- The subsidy is used to finance part of the needs of beneficiaries or project partners, with the remainder being partly self-financed and partly financed through credit. Example: subsidy 40%, self-financing 10%, credit 50%.
- This fund can be managed directly by the project (for example through a farmer organisation or a field NGO), which must, however, establish a clear procedure for allocating the subsidy in conjunction with the credit, in partnership with the financial institution. The fund can be deposited in an account with the partner financial institution (to facilitate management and provide additional motivation for the latter).
- At the end of the project, if the entire fund has not been spent and the mechanism is functioning well, the remaining balance may be handed over to the farmer organisation or NGO, which would then be responsible for disbursing it.

Main market failures addressed

- The reduction in the loan amount made possible by the partial subsidy allows several market failures to be addressed:
  - Shorter loan maturities required for repayment (due to the lower loan amount), making financing more accessible for microfinance institutions that are unaccustomed to medium-term loans and/or have limited medium- or long-term resources.
  - Reduced need for physical guarantees (as the credit amount is lower).
  - Lower cost of credit (since the loan amount is reduced).
- Raises awareness within the financial institution regarding the features of the innovation and encourages engagement with the topic (although additional awareness raising and training for the institution's staff may still be required).

Tool 5.3: Matching grant

Strengths and weaknesses of the mechanism in relation to the context and objectives of a research-based development project

- A flexible mechanism, allowing collaboration with several financial institutions without excessive complexity.
- A system that is quick and easy to set up – an important advantage given the limited time remaining in the project and the amount of funding available.
- Enables indirect action on several market failures.
- Can be implemented with both banks and microfinance institutions.
- The grant provides direct benefits to the beneficiaries or project partners while also giving them access to local financial systems, fostering the creation of long-term commercial relationships.

- The fund operates as an endowment fund, meaning it will eventually be depleted.
- There is a need to communicate clearly with final beneficiaries about the requirement to repay the loan, to avoid confusion between the grand and the credit component.
- Does not address the high-risk perception held by financial institutions.

Tool 5.4: Interest rate subsidy

Principle and use of the subsidy

- The grant is used to finance all or part of the interest on loans provided by a financial institution to beneficiaries or project partners.
- In practical terms, for each loan granted to beneficiaries or project partners by one (or more) financial institution(s), the project pays the financial institution an amount equivalent to a percentage (set, case by case) of the loan cost, which the final beneficiary is therefore not required to pay.
- Typically, the amount allocated by the project for this activity is placed in an account with the financial institution (for ease of management and to provide additional motivation for the institution).
- At the end of the project, if the entire fund has not been used and the mechanism is functioning effectively, the remaining balance could be transferred to a farmer organisation or NGO, which would then be responsible for ensuring its proper use by the financial institution.

Main market failures addressed

- Reduces the cost of credit for beneficiaries or project partners, particularly when a microfinance institution offers an investment loan with a term of more than two years.
- Raises awareness within the financial institution regarding the features of the innovation and encourages engagement with the topic (although additional awareness raising and training for the institution's staff may still be required).

Tool 5.4: Interest rate subsidy

Strengths and weaknesses of the mechanism in relation to the context and objectives of a research-based development project

- A flexible mechanism that allows collaboration with several financial institutions without excessive complexity.
- A system that is quick and easy to set up.
- Can be implemented with both banks and microfinance institutions.
- The grant provides direct benefits to the targeted beneficiaries while also giving them access to local financial systems, encouraging the creation of long-term commercial relationships.
- The leverage effect is generally greater than in the case of partial capital grants, as the amount subsidised per loan is relatively limited.

- The fund is an endowment fund, meaning it will eventually be depleted.
- The concessionary interest rate is unlikely to be maintained by the financial institution once the subsidy ends.
- The mechanism is less transparent for beneficiaries and poses a risk of creating misunderstandings about the true cost of credit.
- Does not address the high-risk perception held by financial institutions.

Toolbox 6

Three steps towards private sector responsability

Tool 6.1: Three steps towards private sector responsability

1 Select responsible companies

- Integrate minimum eligibility criteria into your tenders such as social and environmental (S&E) - policy.
- Conduct your own responsibility assessment on a private-sector player (see, for example, **The Responsible Agricultural Investment Tool for Agribusiness).**
- Consider the importance of the company CEO's personality and the composition of its governance: do they seem sensitive to the social mission? Are they taking a long-term perspective?

2 Identify and engage the players towards S&E targets

- Be pragmatic and consider that private-sector players (especially SMEs) often lack the resources to collect data on complex indicators.
- Clearly integrate performance targets into partnership agreements and discuss data collection protocols with the partner.
- Demonstrate the value of data collection by presenting associated funding opportunities (see next slide).
- Wherever possible, ensure data collection by private players is integrated into their business processes (e.g. data collection at farm level alongside agricultural product collection).
- Make access to subsidised/project resources conditional on reaching S&E targets **(result-based financing).**

3 Foster R&I through a favourable environment

- Regulation framework: enhance national standards and norms on innovative products; require the publication of impact studies related to private-led innovations; develop a legal framework for impact companies, etc.
- Public/private partnerships can provide a long-term framework to scale up responsible innovation (e.g. shared ownership of a company or long-term sales contracts).
- Intellectual property and patents: it is possible to work with the private sector while promoting open-source innovation.

Inspiring examples

Engaging private sector from early stage

Inspiring example 1

The Yayu project

The Yayu Coffee project in Ethiopia aims to offer coffee farming communities additional income through crop diversification, while adopting agroforestry principles in their activities.
The initiative is supported by the government.

The following best practices have been identified:

→ The project successfully involved the entire ecosystem from the outset: government, end beneficiaries (through self-learning knowledge-sharing techniques) and private coffee value chain players.

- It targeted one of Ethiopia's main value chains to reach a large number of beneficiaries. By aligning with government strategy, the project benefits from state support (e.g. seed supply to farmers).
- It identified key leverage areas to expand farmers' incomes and resilience to climate change.
- It adopted a method of innovation dissemination that is not dependent on ongoing project funding (aside from the initial investment): coffee demonstration plots allow farmers to learn agroforestry practices independently, while showcasing their relevance for resilience and income generation.

→ The project developed a marketing/go-to-market strategy for the coffee produced, to enhance its market appeal (e.g. by complying with the EU Regulation on Deforestation-free Products (EUDR) label).

Coffee seedlings from the Yayu project. / © DR

Inspiring example 2

The DARE project

The DARE project in Ethiopia develops local solutions to address child food poverty by focusing on the missing food groups. Two products were selected for their potential to address this issue at scale: papaya and eggs, which are primarily turned into powder for conservation purposes.

The following best practices have been identified:

- Developing a clear path to commercialisation, based on the characteristics of the innovation and market demand (e.g. government school programmes, registration on the UN's product list and a B2B positioning as an ingredient for other agri-businesses). Having several sales channels – especially in a mono-product development strategy – reduces concentration risk for the partnering SME, ensures business continuity over time and enables larger production volumes, which lead to economies of scale.
- Selecting experienced partners and leveraging their industrial capacity: analyse the company's historical financial performance and production volumes (over 3-5 years); jointly set up profit and loss projections over the next 3 to 5 years by developing Excel sheets outlining the different revenue sources, and define financing needs based on the profit and loss forecasts.
- Establishing a partnership agreement between the company and the state of Ethiopia, in which the company commits (among other things) to repay the cost of equipment through the delivery of egg powder to the state.

Strategic development planning

- Free sampling
- Nutritional corner will be established
- Ramadan Activation in mosques sample in Mosques
- Participate in Chrismas and New year trade fair across country

Unit	Piece	Weight (gm)	Cost of Raw material
January	266,240	2,795,520	2,263,040,00
February	266,240	2,795,520	2,263,040,00
March	266,240	2,795,520	2,263,040,00

Costs forecasts

Focus

Focus on selected financing mechanisms

A focus is proposed here on mechanisms that caught our attention during discussions with innovation project leaders. These include innovative mechanisms with untapped potential to support the scaling of innovation in the agricultural sector in low-or middle-income countries **(focus 1 to 4),** as well as mechanisms that are in high demand but remain poorly understood by innovation leaders **(focus 5 and 6)**.

These are:

Focus 1: Fonds d'Innovation pour le Développement

Focus 2: 2SCALE

Focus 3: Mercy Corps Ventures

Focus 4: Carbon credits

Focus 5: National public development banks and funds

Focus 6: Local financial institutions

Focus 1: Fonds d'Innovation pour le Développement

Brief description

The *Fonds d'Innovation pour le Développement* (FID) is a new initiative created by AFD to support innovations that contribute to reducing global poverty and inequality. Through flexible grant funding, the fund enables innovators and researchers to test new ideas, build rigorous evidence for effective programmes, and scale the highest-impact and most cost-effective solutions. FID supports selected innovations through five phases associated with funding stages and project maturity.

Application process

Spontaneous application. Three-phase process: information phase, application preparation phase, application phase.

Evaluation criteria

Innovation, evidence of impact, cost-effectiveness, scale and financial sustainability, implementation, project team.

Examples of project support

Biostimulant to boost farmers income and soil quality in Benin. / © DR

Trialing climate-resistant forage grass to support smallholder farmers in Ethiopia. / © DR

New pathways for female farmers to access agricultural technology in Kenya. / © DR

Grant-based financing mechanim

Target beneficiaries

Priority is given to proposals in the areas of education, health, climate and gender equality. All types of organisations are eligible to apply, including research institutions, governments, NGOs, private companies, universities, etc.

Financing tools

Grant only

Financing range

EUR 50,000 – 500,000

Focus 2: 2SCALE

Brief description

An incubation programme created by a consortium of organisations (IDFC, ICRA and BoP Innovation Center) that manages a portfolio of public-private partnerships for inclusive businesses in the agri-food sector. 2SCALE focuses on establishing agribusiness clusters built around business champions. These champions are either entrepreneurial producer organisations or local SMEs that trade or process farmers' produce.

Application process

The 2SCALE programme is implemented by NGOs in the various countries of intervention, such as SNV. Proactive contact should be made with these NGOs.

Evaluation criteria

Targeted applicants are either entrepreneurial producer organisations or local SMEs that market or process farmers' products.

Examples

Develop the supply of chicken meat throughy the production and marketing of Poultry farming is an important source of nutrition and income generation (especially for Women). / © DR

Producing the next generation of healthy organic and nitritious crops in Burkina. BioProtect is a Burkinabe company that wants to lead in the transition to more organic production. / © DR

2SCALE

Incubators/accelerators proposing funding

Target beneficiaries

SMEs, agricultural producer organisations and their partners.

Financing tools

Support services (e.g. assistance in accessing financing solutions, training in farming practices, access to improved inputs or enhanced negotiating skills).

Financing range

N/A

Focus 3: Mercy Corps Ventures

Brief description

Mercy Corps Ventures is the impact investing arm of the NGO Mercy Corps. It invests in companies operating in frontier markets, from seed to scale.

Application process

Standard equity fundraising process: companies must prepare a pitch deck that includes key information on the organisation, business model, financial records, a five-year business plan and the amount of funding sought (in equity and/or debt). If the pitch deck captures the fund's interest, it may lead to negotiation on the company's valuation, deal structure and terms.

Evaluation criteria

Business models that are impactful and profitable, or on a clear path to profitability.

Example : Vega Coffee

Mercy Corps has been working in the coffee value chain in Colombia for the better part of a decade, building a network of 80,000 smallholder farmers across post-conflict zones in Cauca and Tolima. Based on this experience, we immediately recognised the potential of partnering with Vega to help drive change in agriculture and last-mile distribution and logistics – supporting greater supply chain efficiency and empowering farmers with increased agency over their livelihoods. / © DR

Incubators/accelerators proposing funding

Target beneficiaries

Technology-driven start-ups at the early stages of development, offering resilience-building solutions in adaptive agriculture and food systems, frontier fintech and climate smart systems.

Financing tools

Equity.

Financing range

N/A

Focus 4: Carbon credits

Key concepts

Carbon credit

- A carbon credit represents one tonne of greenhouse gases (CO2) that has been either avoided or removed from the atmosphere by a project.
- It can be sold to governments and companies that produce greenhouse gas emissions, allowing them to offset their environmental impact in accordance with the "polluter pays" principle.*

The carbon credit standards

- To sell credits on the carbon markets, a project must demonstrate the credibility and actual impact of its CO2 emission reductions. Several organisations have developed certifications (or standards) which are issued following rigorous verification processes.

The project developer

- A project developer is an organisation specialised in designing carbon projects, securing initial funding (as carbon credit revenues are generated progressively and only after the project is launched), obtaining credit certification and selling the credits. Project developers earn a share of the revenue generated from credit sales.
- Project developers are essential, as the certification process is highly detailed and requires in-depth knowledge of all relevant certification criteria. They can also support the mobilisation of initial funding to launch the project.

The carbon credit price

- The price of carbon credits depends on several factors, including the scope of the project, operational costs and the current state of the carbon credit market (i.e. supply versus demand). These variables make credit prices highly project-specific.
- The Gold Standard **sets minimum prices** for carbon credits. For afforestation/reforestation projects, the minimum is approximately USD 14.50 per credit.
- Under the Gold Standard, around 85% of the sale price goes to the project developer and its partners. The remaining portion covers VAT, administrative fees, foreign exchange costs, etc. **(source).**

Additional resources

- **Main credit standards:**

Verified Carbon Standard

Gold Standard

- **Project developers active in Africa:**

Climate Impact Partners

Forliance

*Rio Declaration, United Nations 1992, Principle 16: *"National authorities should endeavor to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment."*

Focus 4: Carbon credits

An opportunity to fund innovations at scale?

Carbon credits offer a valuable opportunity to channel private funding for the benefit of smallholder farmers. Companies are strongly incentivised to engage with this mechanism, as it provides a tangible way to communicate their environmental impact through carbon offsetting.

Benefits of carbon credit projects for smallholder farmers:

- Some carbon standards, such as the Gold Standard, require projects to generate additional positive impacts beyond CO2 removal or avoidance.
- Many Gold Standard forestry-related projects include community development components – for example, providing financial incentives for farmers to adopt sustainable farming techniques and protect forested areas.
- As a result, a portion of the revenue generated from carbon credits can be redistributed to farmers in the form of capacity-building and training activities, and/or payments for ecosystem services.

However, carbon credit schemes have been subject to scrutiny, particularly on ethical grounds. Two key constraints with direct implications for funding are outlined below.

- Economic viability: carbon credit projects require the involvement of a project developer and other intermediaries, all of whom must be compensated. This makes such projects unsuitable for all types of positive-impact initiatives. The system functions as a business – only projects with profit potential are feasible.
- Revenue uncertainty: since its inception, the carbon credit system has faced criticism over the lack of scientific evidence supporting the claimed CO2 impact of many projects. In 2023, The Guardian and Die Zeit published an investigation alleging that 90% of VERRA credits – the most widely used certification – had no real impact in terms of CO2 avoidance or removal. Following this revelation, carbon credit prices dropped significantly, highlighting both the fragility of trust in the market and the high volatility of credit prices.

Additional resources

- **Project examples:**

WithOneSeed Community Forest Programme in Timor Leste

Community Managed Reforestation in Ethiopia

- **Questioning carbon credits' credibility:**

Guardian's 2023 investigation

Histoire des crédits carbone : vie et mort d'une fausse bonne idée ? Alain Karsenty (CIRAD), *The Conversation*

- **Practical resources on carbon credits:**

The CIFOR-ICRAF

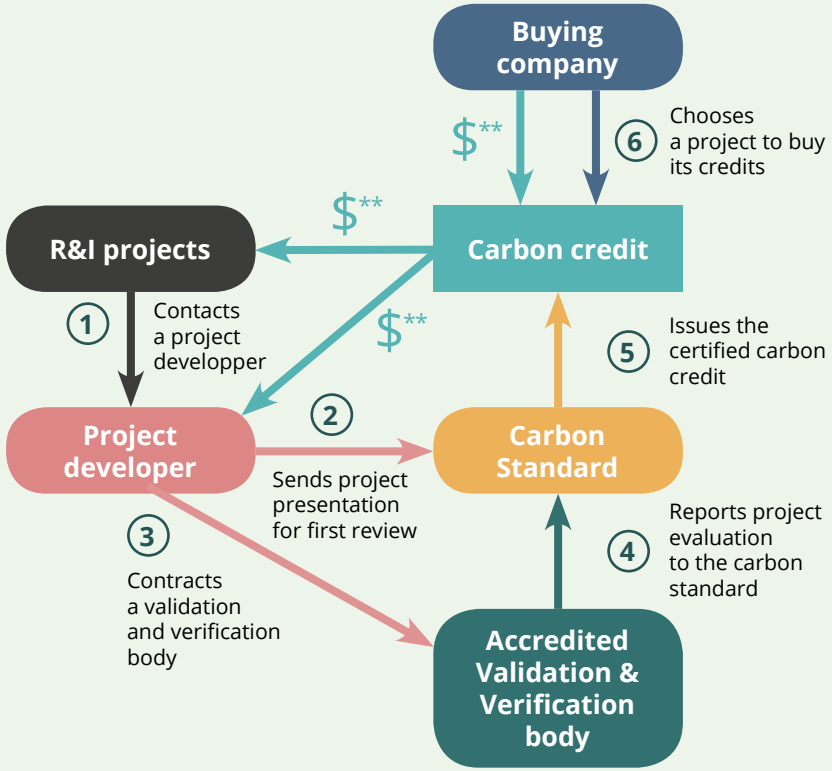
Focus 4: Carbon credits

Practical advice from practitioners

The process of generating and selling carbon credits is fairly complex. The following steps are recommended when exploring this opportunity:

- Identify whether and how your project could meet the expectations of carbon credit buyers, and assess whether it can generate sufficient revenue to be sustainable.
- Understand the national context(s) in your countries of intervention* and obtain pre-approval from the relevant government authorities.
- Conduct a market assessment to validate your assumptions and fine-tune your approach. This should be carried out by a specialised carbon expert or organisation.
- Contract a project developer based on the results of your market assessment.

On the voluntary market, the price of a carbon credit varies significantly (just as the price of a T-shirt does, for example). In 2025, projects that are particularly well valued are those involving tree planting.



* Some countries are seeking to centralise the management of carbon credits, particularly through REDD+ initiatives (reducing emissions from deforestation and forest degradation in developing countries).

* * Only the positive revenues for the project are shown in the figure; however, each step also incurs administrative fees.

Focus 5: National public development banks and funds

Brief description

- National public development banks are entities established by governments at the national (or regional) level. They can raise funds from development finance institutions as well as from regular financial markets.
- As publicly owned entities, their mandate is typically aligned with national agricultural development plans.
- These banks are well-positioned to offer attractive financial tools and mechanisms, such as interest rate subsidies, guarantees, long-term longs, and more.
- Although they primarily offer credit, they occasionally provide equity.
- They generally offer loans to farmer organisations for commercialisation, long-term loans to support investments, and guarantees to commercial banks, among other financial services.
- National public development banks are also well-suited to support responsible innovation in agriculture.

Focus 6: Local financial institutions

Locally based private financial institutions offer credit to private operators to finance revenue-generating activities.

Microfinance

- Microfinance aims to provide people excluded from the banking system (typically informal businesses) with access to financial services. Most microfinance institutions (MFIs) are impact-oriented.
- Amounts lent typically range from EUR 100 to EUR 100,000.
- MFIs lend to informal businesses.
- Collateral and KYC required exist but tend to be more flexible than in commercial banks.
- Risk assessment is based on reconstituted cash flows and an estimation of repayment capacity.
- Many MFIs accept alternative collateral, such as group collateral.
- Interest rates are higher than in commercial banks to compensate for increased operational costs.

Commercial banks

- Commercial banks represent “traditional banking”, offering standard lending services to both businesses and individuals.
- Amounts lent to companies typically exceed EUR 15,000, although some banks offer smaller loans. Note: commercial banks do not officially have minimum loan amounts, but in practice, this is often the case.
- Collateral and KYC requirements are based on industry standards, which may not align with the constraints faced by smallholders.
- Individual loans are primarily salary-based loans.
- Borrowers often need to be registered and provide account statements.
- Interest rates are competitive.
- Long-term debt is less common but more available than in microfinance institutions.

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DeSIRA-LIFT (2021-2025) encompasses three service areas aligned with the three DeSIRA pillars: Service Area 1 supports country-based DeSIRA projects to prove and enhance their impacts on climate-oriented innovation systems, contributing to more sustainable food system transitions. Service Area 2 supports the Comprehensive Africa Agriculture Development Programme (CAADP) ex-pillar IV organisations in their roles related to agricultural innovation systems. Service Area 3 provides support to policy makers on themes related to agricultural research for development and innovation policies and programming. This ActionBook has been prepared as part of the DeSIRA-LIFT Community of Action and Reflection, established by Service Area 1, under the leadership of Aurélie Toillier (Agrinatura/CIRAD) and Margarida Lima de Faria (Agrinatura/ISA, University of Lisbon), and managed by Renaud Guillonnet (Agrinatura). The purpose of the Community of Action and Reflection was to share and learn from challenges and practices in managing impacts in R&I projects.

This ActionBook forms part of a collection of knowledge products, building on the combined activities of the DeSIRA-LIFT Service Area 1 and Service Area 2 teams, which have been providing support to the 70 DeSIRA projects within DeSIRA pillar 1 and the CAADP XP4 organisations across various contexts. These knowledge products were developed in close interaction with, and with input from, the DeSIRA project teams. In addition to the authors and contributors, we extend our thanks to the many individuals from DeSIRA who openly shared their lessons learned and reflections.

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