

For sustainable agricultural innovations in the Sahel, an **analytical framework** for sustainability and scaling

First synthesis note from the Inter-DeSIRA regional workshop, held from 5 to 7 March 2024 in Saly (Sénégal)

DISSEM-INN IN A NUTSHELL

Funded by **AFD** and coordinated by **CIRAD**, the project “Dissemination of innovations in the Sahel region (**DISSEM-INN**)” concerns a set of **eight projects**¹ launched under the European **DeSIRA**² initiative and implemented in the Sahel region. These projects contribute to the development of sustainable, climate-resilient agri-food systems by focusing on innovation processes, each in a specific field. DISSEM-INN aims to capitalise on their practices and invites them to collectively reflect on the sustainability and the scaling of their innovations.

The Sahel faces significant challenges in terms of food security and climate resilience. Agricultural innovations are crucial to address these challenges, yet for many, ensuring they are sustained over time and deployed on a larger scale is proving difficult. An analytical framework, developed by DISSEM-INN and applied during a sub-regional workshop to 16 innovations characteristic of these eight DeSIRA projects, highlights key factors to address these issues of innovation sustainability and scaling.

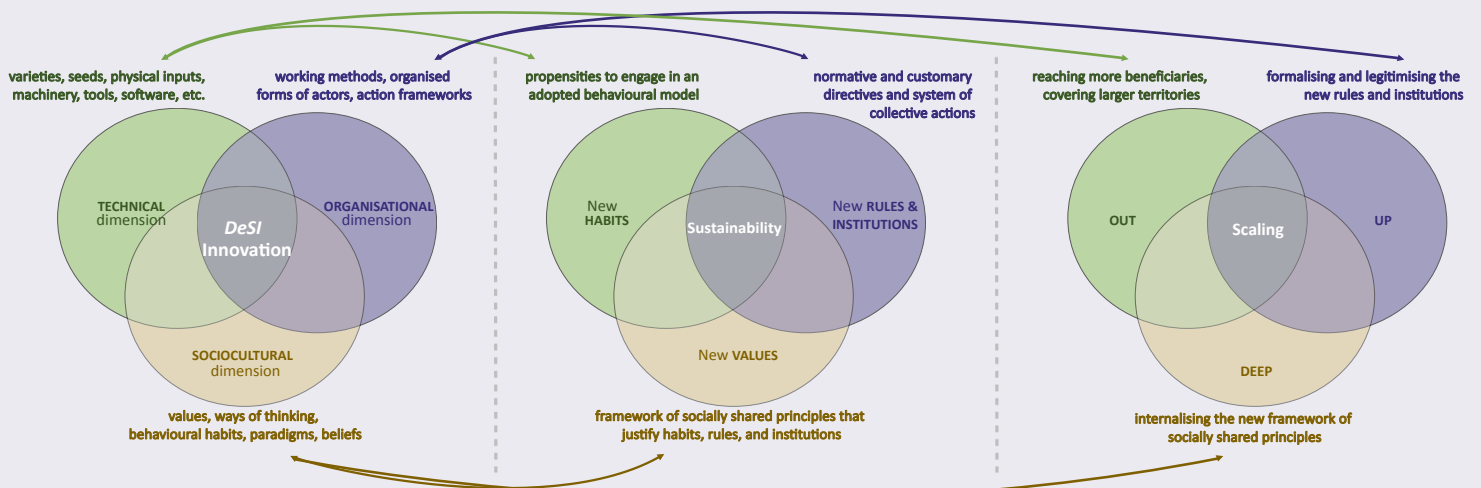


From assumptions to the analytical framework

The innovation approach specific to these eight projects – referred to as **DeSI** (Development Smart Innovation) – is characterised by three common principles: a **multi-stakeholder approach** that is **co-constructed** and **multidimensional**. The third principle, multidimensionality, indicates that the projects innovate not only on the technical level, but also on the organisational and sociocultural levels. Based on these initial findings, DISSEM-INN has developed a specific analytical framework applied to three key assumptions (*see diagram below*):

1. The **sustainability of innovations is based on their multidimensional nature** (technical, organisational and sociocultural).
2. There are **connections between these dimensions and the three modes of scaling** (out, up and deep).
3. **Any innovation process that combines these three dimensions carries seeds of scaling.**

Illustration and definition of elements of assumptions



¹ These projects are: **ABEE, ACCEPT, APSAN-Mali, BIOSTAR, CASSECS, FAIR, IRRINN and Health & Territories**. They cover a wide range of fields (crop improvement, agroecology, bioenergy, livestock, irrigation, health) in six countries of the sub-region (Benin, Burkina Faso, Chad, Mali, Niger and Senegal).

² Led by the European Commission, the DeSIRA initiative (Development Smart Innovation through Research in Agriculture) funds more than 60 projects worldwide that promote innovation in agriculture and the transformation of food systems to make them more climate resilient.

To develop this conceptual framework, DISSEM-INN started from two basic premises. The first is that **innovation is anticipation**, in other words every innovation involves a vision of the future that guides present actions. The second is that **innovation is change**, meaning that every innovation transforms an initial situation.

This analytical framework thus proposes a way to study how agricultural innovations can not only last (sustainability), but also spread to different levels (scaling). It is built on a representation that views change as the interaction between individual behaviours and social structures. This change, introduced by innovation, generates new practices within a target population A', which evolve into new habits, rules and institutions, themselves drivers of

new values, which in turn reinforce this change.

- Sustainability results from the replacement of old habits, rules, institutions and values with new ones.
- Scaling to a larger population A occurs results from the uptake of these new practices, rules, institutions and values, which have become common within population A', driven by the three modes of scaling (*see table below*).

Through the formulation of these three assumptions, this analytical framework links the success of an innovation to the combination of three key dimensions, since they contribute to all of the mechanisms at work in sustainability, and thereby also generate seeds for scaling.

Multidimensionality is central to sustainability and scaling

The framework highlights how the three dimensions of innovation contribute to the different interconnected processes of sustainability seen in the implementation of innovations by the studied projects:

Habituation: *How the practices linked to the innovation give rise to habits.* Associated with the **technical dimension** of the innovations studied, this is seen in the repetition of practices, the quality and adaptability of the innovations, the long-term involvement of actors, and the creation of gathering places.

The emergence of rules/directives and institutions: *How habits become more or less formalised directives and how these become embedded in modes of collective organisation.* Associated with the **organisational dimension** of the innovations studied, these processes are seen in the varying degrees of formalisation of operational procedures (protocols, methods, etc.) by the projects, which can include frameworks of action (charters, contracts, etc.), contributing to the creation of networks, multi-stakeholder exchange platforms and structured organisations.

The emergence of new values: *How new practices, rules and institutions become socially accepted.* Associated with the **sociocultural dimension** of the innovations studied, the processes involved in the uptake of practices, rules and institutions drive new values that are gradually internalised. These new

values drive changes in the relationships between actors as well as shifts in perceptions associated with practice changes.

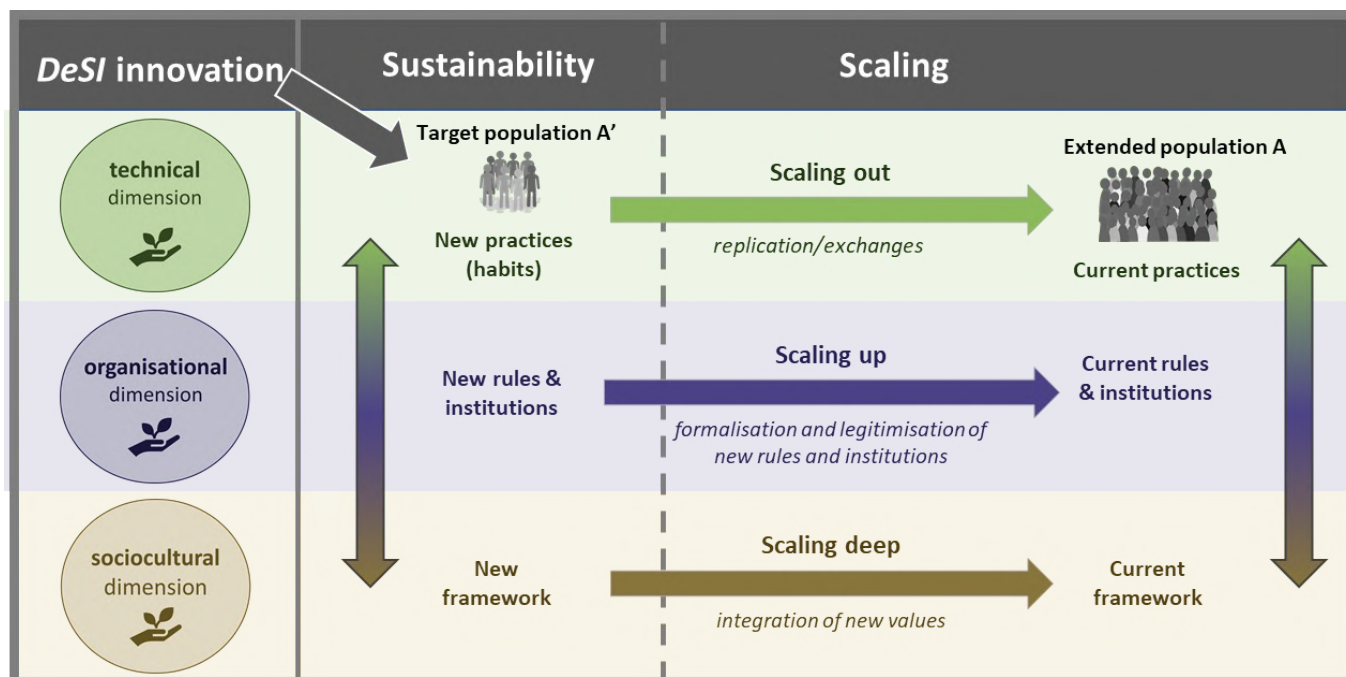
In turn, the values reinforce the processes involved in habituation, the emergence of rules and the creation of institutions, which then carry the seeds for larger-scale change, in the three modes of scaling described in the framework.

Scaling out: this consists in making the material aspects and practices of the innovation available to a *larger number of people and over larger areas*; it is therefore associated with the **technical dimension**.

Scaling up: this consists in legitimising at the institutional level the new forms of organisation and governance (rules, laws) introduced by the innovation; it is therefore associated with the **organisational dimension**.

Scaling deep: this concerns changes in attitudes, perceptions and values related to the innovation and how they are internalised and embedded in society; it is therefore connected to the **sociocultural dimension**.

Thus, based on a multidimensional approach to innovation, this framework establishes a continuum between the mechanisms at work in sustainability and scaling (*see table above*).



➤ An anticipatory and reflective framework for project design and implementation

On the assumption that innovation is anticipation, this analytical framework shows that **sustainability and scaling need to be planned right from the project design phase**. This planning can be integrated into the logical framework and the associated theory of change, through the development of a **specific component** and anticipation of **the resources needed for its implementation**. While the issue of sustainability is essential during project design, scaling should be planned in relation to the sizing of the project in question and its capacities.

The analytical framework can also enable projects that did not use it during their design phase to rethink their innovations and the overall vision of their progress from a new perspective. Indeed, this framework **serves as a tool enabling projects to assess** the activities already carried out and **achievements** in terms of the multidimensional *DeSI* approach, sustainability and scaling. This assessment can be compared with ongoing activities in order to relate them to those already

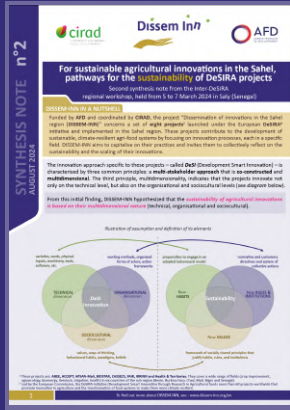
completed and thereby better plan future activities. By connecting the dimensions of innovation to the attributes of sustainability and the modes of scaling, **this framework can support the structuring of actions for these two processes**. It enables its users to gradually agree throughout the innovation process on the vectors to develop, the order and the timeline, and, as they move forward, to define the trajectory they wish to give to their innovation.

Finally, this analytical framework can be used to **promote actions completed by the projects**, especially to their sponsors, by integrating them into their “vocabulary”. Indeed, projects are often questioned about the sustainability of their actions and potentially about their scaling, but are not necessarily equipped to respond. Using this framework, projects can **clearly articulate how the implementation of their innovations prefigures their sustainability and carries seeds for scaling**. They can also structure their communication about innovations, in other words, promote their results.

In the series “For sustainable agricultural innovations in the Sahel”, also to be discovered...

NOTE N° 2

Focuses on sustainability



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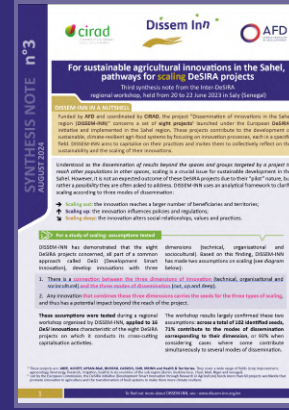


FR VERSION



NOTE N° 3

Focuses on scaling



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POLICY BRIEF

Translates these notes into pathways of action



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Source

Inter-DeSIRA Workshop Report, *Des clés pour penser la durabilité et l'expansion des innovations agricoles au Sahel*, projet DISSEM-INN 2024

To be accessed through this QR code.



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