

For sustainable agricultural innovations in the Sahel, pathways for **scaling** DeSIRA projects

Third synthesis note from the Inter-DeSIRA
regional workshop, held from 05 to 07 March 2024 in Saly (Senegal)

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.

Understood as the dissemination of results beyond the spaces and groups targeted by a project to reach other populations in other spaces, scaling is a crucial issue for sustainable development in the Sahel. However, it is not an expected outcome of these DeSIRA projects due to their “pilot” nature, but rather a *possibility* they are often asked to address. DISSEM-INN uses an analytical framework to clarify scaling according to three modes of dissemination:

- ➔ **Scaling out**: the innovation reaches a larger number of beneficiaries and territories;
- ⬆ **Scaling up**: the innovation influences policies and regulations;
- ⬇ **Scaling deep**: the innovation alters social relationships, values and practices.

➤ For a study of scaling: assumptions tested

DISSEM-INN has demonstrated that the eight DeSIRA projects concerned, all part of a common approach called DeSI (Development Smart Innovation), develop innovations with three dimensions (technical, organisational and sociocultural). Based on this finding, DISSEM-INN has made two assumptions on scaling (see *diagram* below):

1. There is a **connection between the three dimensions of innovation** (technical, organisational and sociocultural) **and the three modes of dissemination** (out, up and deep).
2. Any innovation **that combines these three dimensions carries the seeds for the three types of scaling**, and thus has a potential impact beyond the reach of the project.

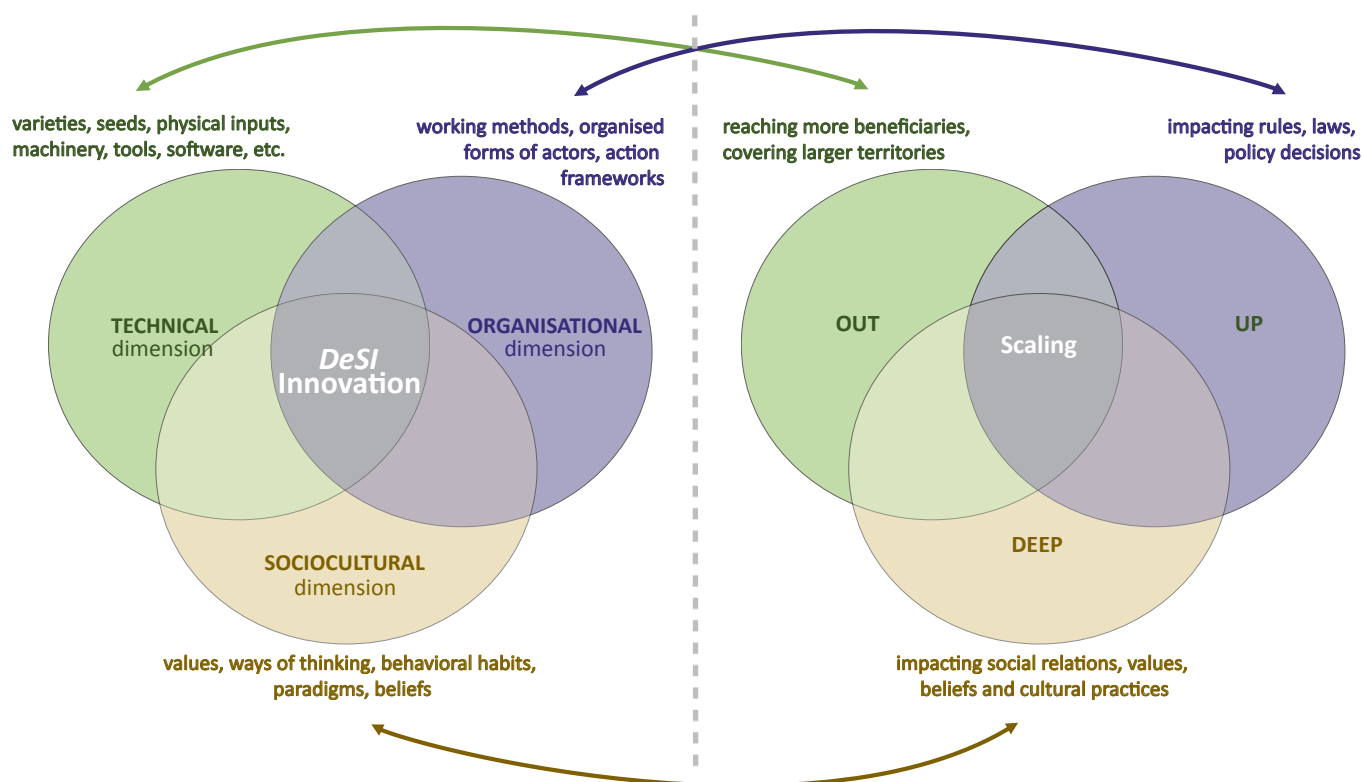
These assumptions were tested during a regional workshop organised by DISSEM-INN, **applied to 16 DeSI innovations** characteristic of the eight DeSIRA projects on which it conducts its cross-cutting capitalisation activities.

The workshop results largely confirmed these two assumptions: **across a total of 102 identified seeds, 71% contribute to the modes of dissemination corresponding to their dimension**, or 93% when considering cases where some contribute simultaneously to several modes of dissemination.

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.

Illustration of correspondence between dimensions and modes of scaling



For an understanding of scaling: a description of its vectors

The qualitative analysis conducted by DISSEM-INN on these seeds identified the main vectors driving each of the modes of scaling considered (see *table* below).

Scaling out is primarily associated with the **attractiveness of the innovation**, in other words its capacity to appeal to beneficiaries based on its usefulness, affordability and replicability. To be recognised, these qualities require actions to **demonstrate the performance** of the innovation during sharing sessions or exchange visits, ideally **by pooling these efforts** with other similar or larger initiatives.

Scaling up occurs through the **creation of local institutions** at different levels: supporting the structuring of *local beneficiaries, assembling links in a value chain*, and creating multi-stakeholder arenas at the territorial level. These entities require

advocacy efforts to ensure their **political backing** and to **legitimise the rules** they set within their governance framework or institutional environment.

Scaling deep mainly results from the combination of the other modes of dissemination. In the case of territorial resources, awareness raising among local actors occurs through the combined effect of a demonstration of the benefits of using these resources (scaling out) and the definition of collective rules to ensure their shared management (scaling up), which alter perceptions and relationships between actors in a given area towards greater cooperation (scaling deep). Efforts to empower these actors can also enhance their role and position within the social space, but this **capacity-building** requires **long-term support** for actors.

Illustration of scaling vectors with innovation examples

Dissemination	Dynamics	Vectors revealed by seeds	Illustration with innovation examples
OUT →	Exchange dynamics	✓ Intrinsic attractiveness of innovation	✓ Characteristics of Maralfalfa (n°4 - ACCEPT)
		✓ Demonstration of performance of innovation ✓ Pooling efforts on sharing	✓ Central and satellite fields and (n°10 - FAIR) ✓ Sub-regional data sharing (n°3 - ABEE)
UP ↑	Creation of local institutions	✓ At beneficiary level ✓ At value chain level ✓ Multi-stakeholder arenas	✓ Support services (n°7 - BIOSTAR) ✓ Sector (n° 5 - APSAN) ✓ Village composting (n°11 - FAIR)
	Legitimisation efforts	✓ Political support for institutions created ✓ Inscription of co-defined rules	✓ Platform run by the municipality (n°13 - IRRINN) ✓ Certification of cuttings (n°4 - ACCEPT)
DEEP ↘	Combination of modes of dissemination	✓ Awareness raising among local actors: → : showing by doing ↑ : collectively defined management rules ↘ : changes in relationships between actors	✓ Fodder production on fallow land (n°15 - S&T) : → : testing of forage cowpea ↑ : resource governance mechanisms ↘ : shift from confrontation to cooperation
	Skill development	✓ Empowerment of local actors	✓ Farmer seed cooperatives (n°5 - APSAN)

 Points of attention and potential paths for action to foster scaling

Beyond a description of the mechanisms that foster scaling, the analysis also revealed two points of attention, which could serve as lessons for the design of future agricultural development interventions in the Sahel that deliver innovations of the same type.

First, the **organisational dimension** plays a particularly crucial role in scaling, as it is **the most likely to contribute simultaneously to several modes of dissemination**. This versatility is expressed through the creation of institutions, which provide spaces conducive to demonstrating innovation performance (scaling out) while also supporting advocacy by ensuring decision-makers are stakeholders in these demonstrations (scaling up).

Second, **training** also proves to be versatile, as it encompasses both a technical and a sociocultural dimension. It can thus **contribute simultaneously to scaling out**, by providing practical advice, **and to scaling deep**, by conveying the values delivered by the innovation. Training can also contribute to scaling up when it targets established forms of actors, thereby supporting all modes of dissemination concurrently by ensuring their skill development and, as a result, enabling their gradual empowerment.

In short, the validation of the two assumptions demonstrates that by developing innovations that encompass technical, organisational and sociocultural dimensions, the DeSIRA projects carry the seeds for scaling in all three modes: out, up, and deep.

In view of this observation, **planning scaling from the project design phase** emerges as a crucial course of action. To do so, innovations would benefit from being developed through a **holistic approach that integrates technical, organisational and sociocultural dimensions** to enable them to drive change.

Moreover, **vectors could be identified in advance in the modes of dissemination corresponding to these dimensions**, paying special attention to the organisational dimension and training, which have emerged as being central due to their versatility.

Scaling would thus need to be planned from the project design phase and considered over the long term to empower local actors, **with dedicated human resources and skills**.

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

NOTE N° 1

Presents the analytical framework



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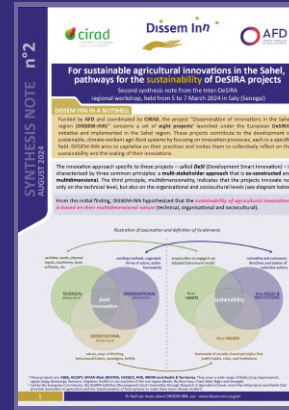


FR VERSION



NOTE N° 2

Focuses on sustainability



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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.



Authors

Robin BOURGEOIS, DISSEM-INN Project Leader

robin.bourgeois@cirad.fr

Chloé LESENFANS, Consultant for the DISSEM-INN project

ext-chloe.lesenfans@cirad.fr



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