



Excellence in Agronomy 2030 Initiative

Customized Scaling Readiness Agronomy Innovation Profile

for

Integrated Agri-food System Transformation Strategy

in

Mexico,Peru,Colombia

in

Nov 2021

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SCALING READINESS GLOSSARY

Intervention	A coherent set of planned activities for achieving specific goals in a defined period in a specific space. An intervention is a general name of a project. Although most interventions are projects, there are other types of interventions such as programs, a specific combination of projects for achieving higher-level objectives, and initiatives that refer to a set of planned activities usually without clear specification of goals and period. Scaling Readiness can be used for multiple types of interventions, e.g. projects, programs, policy interventions.
Innovation Readiness Metrics	In Scaling Readiness two different Innovation Readiness metrics are used for addressing two different management questions. The first one is the Average Innovation Readiness Level. It refers to the average Readiness of all the novel components of the innovation. The Average Innovation Readiness Level aims to give an overall idea about the functioning of the innovation without considering the interdependencies among the components. The second Innovation Readiness metric is the Innovation Readiness Score. The Innovation Readiness Score is the minimum of the Innovation Readiness Levels of all the novel components. It aims to present the overall functioning of the innovation taking into account the dependencies of the components for the proper functioning of the innovation. Depending on the preference of the innovation managers, either or both of the metrics can be used.
Innovation Readiness Level	It is a metric indicating how mature or effective an innovation is to achieve its use objectives. It can be considered as a systematic answer to the question "how good an innovation functions." It can be between 0, which indicates that the innovation is just an idea in the mind of its potential designers and developers, and 9, suggesting that the innovation is a proven innovation with clear evidence of its value measured in terms of livelihood impact, profit, etc. Research and development projects increase the Innovation Readiness Levels by improving the design of the innovations, developing and validating the improved designs in uncontrolled and controlled conditions.
Innovation Component	Knowledge, technology, a concept, practice, etc. that constitutes a part of innovations. Innovations have many components. Some of them are novel and play critical roles in the functioning and use of the innovation in the contexts the intervention operates for achieving specific intervention goals. They can be stand-alone innovations for other contexts and goals but for the specific goals and contexts an intervention operates they work as a part of a larger innovation. In Scaling Readiness, these novel components of innovations are identified, characterized, and diagnosed. Research for development interventions can control or significantly influence the design, development, and delivery of innovation components.
Innovation	A novel product, service, arrangement, or their purposeful combination with economic, environmental, health, industrial, etc. benefits. Innovations are different from inventions since innovations have explicit implementations. To be considered innovation, a product, service, an arrangement, or their combinations need to have a clear use objective. Innovations can be technical or social. They can be tangible and intangible. In Scaling Readiness, innovations are characterized, diagnosed, and strategized. Research for development interventions can control or strongly influence the design, development, and delivery of innovations and catalyze or support their use at scale.
Evidence-based Measurement	Measures in Scaling Readiness are calculated using evidence. Specific claims of Readiness and Use measures are assessed through a hierarchy of sources of verification. High-quality science articles and other peer-reviewed documents are the first sources. In their absence, technical documents or other publicly scrutinized documents are used to back up specific evidence claims. In the lack of any documents, multiple experts' opinions proven to have sufficient competencies are triangulated to identify the measures.
Bottleneck Component	A component or subset of components of an innovation that perform worse and are used by fewer users than the other components of the innovation. In Scaling Readiness, the bottleneck components of an innovation are used to prioritize the activities of a research for development intervention to achieve maximum impact at scale with minimum cost and resource use. Bottleneck components are not universal and depend on a specific time, space and for specific goals.

INNOVATION PROFILE SHEET

Integrated Agri-food System Transformation Strategy

SOFT-SYSTEMS METHODOLOGY

A set of context-specific models that are used for analysing and navigating complex agri-food systems where the stakeholders have divergent views on the status of the system and the root causes of the problems are not directly observed

RECIPROCAL MULTI-STAKEHOLDER INFORMATION EXCHANGE

Consistent two-sided information exchange among different stakeholders involved in the activities of interventions

OPPORTUNISTIC CHANGE MANAGEMENT

Continuous monitoring of the conducive conditions (window of opportunities) that the desired change has a higher likelihood to happen and implementing the activities when these conducive conditions are met
Continuous monitoring of the conducive conditions (window of opportunities) that the desired change has a higher likelihood to happen and implementing the activities when these conducive conditions are met

MULTI-STAKEHOLDER SHORTLISTING OF INVESTMENT OPTIONS

A set of practices for collaborative prioritization of multiple investment options

LONG-TERM MULTI-ORGANIZATIONAL COLLABORATION (PARTNERSHIP)

Building and capitalising long term collaborations in the implementation of intervention activities and including relationship management activities in the interventions

LOCAL-LED AGRICULTURAL EXTENSION, FARMER ENGAGEMENT AND CAPACITY BUILDING

Utilizing existing information and knowledge sharing systems and co-designing and co-implementing farmer engagement and capacity building activities with local actors

INNOVATION BROKERAGE TECHNIQUES

A set of integrated practices for identifying, facilitating, nurturing effective collaborations among various stakeholders and helping to slow or stop ineffective collaborations

ENSURE FARMER TRUST

Considering the trust of the farmers in designing, implementing and updating intervention activities and taking sufficient measures to ensure their trust

DETAILED AND SYSTEMATIC DOCUMENTATION OF MULTI-STAKEHOLDER COLLABORATION

A set of practices to generate, analyse and disseminate information about the current performance of multi-stakeholder innovation processes and changes necessary to improve the performance

CROP-BASED AGRI-FOOD SYSTEM NARRATIVES

A set of narratives that explain the fundamental, chronic and complex problems of the agri-food system using more concrete and easily observable crop-related activities

INNOVATION READINESS ANALYTICS - 1

Space: Mexico,Peru,Colombia

Time: Nov 2021

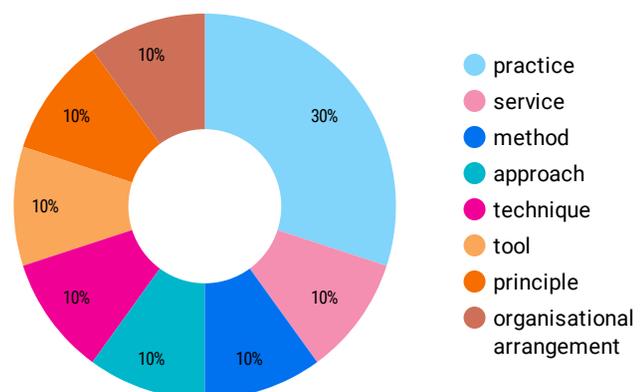
Goal: Improving the effectiveness and efficiency of agricultural knowledge management systems,Improving effectiveness and efficiency of collaborations, partnerships and other stakeholder engagements

Component Name	Type	Level	Evidence Sources
reciprocal multi-stakeholder information exchange	practice	6	Gardezabal-23,Govaerts-30,Amerasinghe-32,Sartas-33, Varghese-13
innovation brokerage techniques	technique	7	Gardezabal-23,Ramírez-Gómez-21,Thiele-25,Guevara-Hernández-29,Del Pilar Monserrat Perez Hernandez-17,Ortiz-16,Govaerts-30
ensure farmer trust	principle	6	Gardezabal-23,Casanova-Pérez-24,Ramírez-Gómez-21, Thiele-25,Govaerts-30
Soft-systems methodology	method	6	Govaerts-30,Gelabert-14,Nattasha-31
Opportunistic change management	approach	4	Govaerts-30
Multi-stakeholder shortlisting of investment options	practice	6	CIP-4,Scheerer-5,Pemsl-6,Pemsl-7,Arega-8,Hareau-9, Hareau-10,Abdoulaye-11,CIP-12
Long-term multi-organizational collaboration (partnership)	organisational arrangement	6	CIP-1,Timler-2,IFPRI-3,Scheerer-5,Pemsl-6,Pemsl- 7, Arega-8,Hareau-9,Hareau-10,Abdoulaye-11,CIP- 12, Saldaña-26,Underwood-27,Celik-28,Cícmil- 15, Govaerts-30
Local-led agricultural extension, farmer engagement and capacity building	service	6	Gebrehiwot-19,Hailemichael-20,Krishnan-18,ILRI-22
Detailed and systematic documentation of multi-stakeholder collaboration	practice	6	Govaerts-30,Amerasinghe-32,Sartas-33
Crop-based agri-food system narratives	tool	4	Govaerts-30

Average Innovation Readiness Level:



Type of the novel components:



The measures presented here assume that relevant conditions in Colombia, Mexico and Peru are homogenous in effect for Improving the effectiveness and efficiency of agricultural knowledge management systems,Improving effectiveness and efficiency of collaborations, partnerships and other stakeholder engagements. Since the use case is designed as a single intervention, the distinction based on countries is not presented in this document. If the country-specific differences are considered, the Average Innovation Readiness of the Sub Use cases could decrease by 0.1

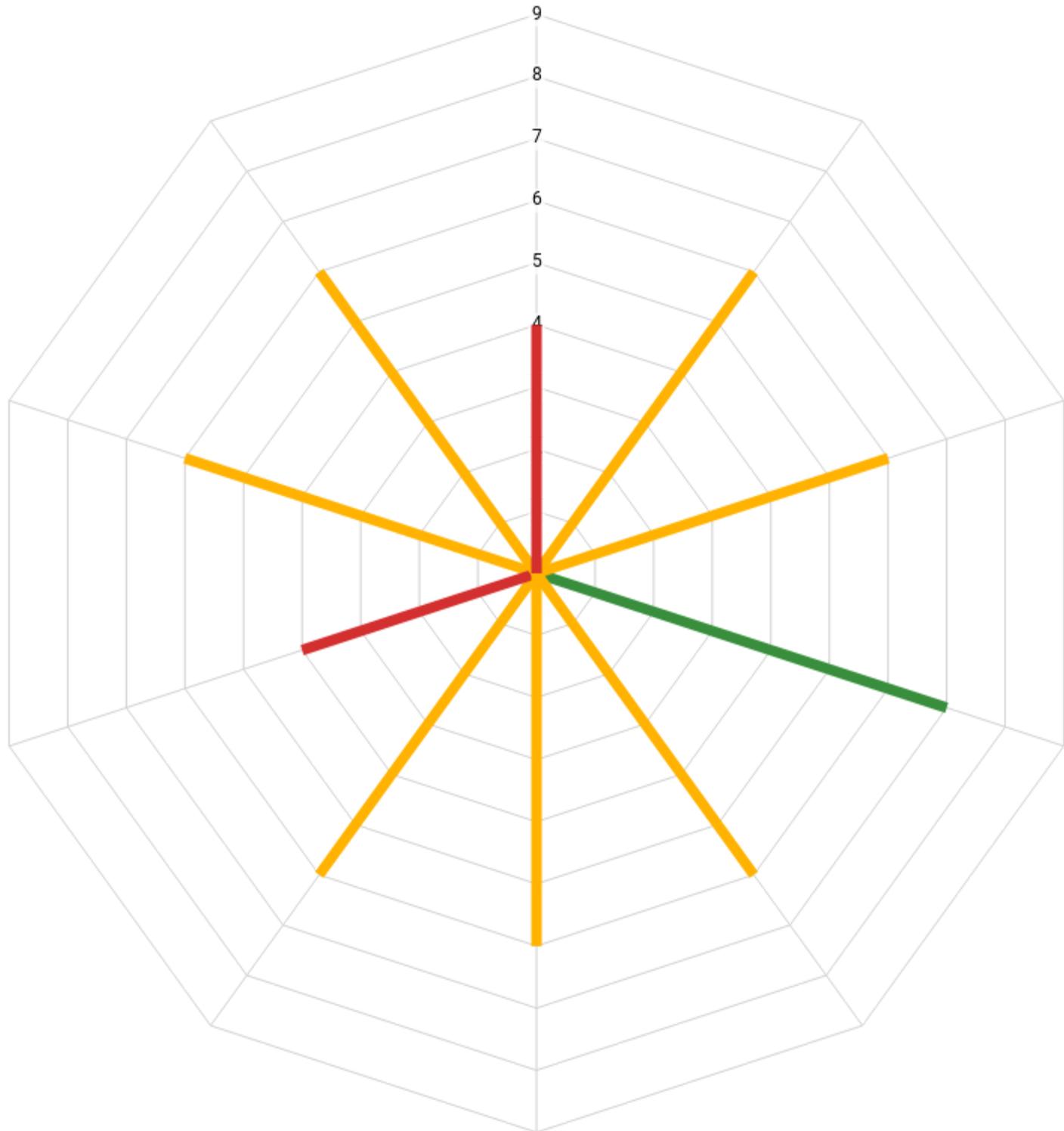
INNOVATION READINESS ANALYTICS - 2

Space: Mexico,Peru,Colombia

Time: Nov 2021

Goal: Improving the effectiveness and efficiency of agricultural knowledge management systems,Improving effectiveness and efficiency of collaborations partnerships and other stakeholder engagements

INNOVATION READINESS LEVELS OF THE COMPONENTS



- Crop-based agri-food system narratives
 Detailed and systematic documentation of multi-stakeholder collaboration
- Local-led agricultural extension, farmer engagement and capacity building
- Long-term multi-organizational collaboration (partnership)
 Multi-stakeholder shortlisting of investment options
- Opportunistic change management
 Soft-systems methodology
 ensure farmer trust
- innovation brokerage techniques
 reciprocal multi-stakeholder information exchange

FINDINGS

- Integrated Agri-food System Transformation Strategy is a strategy type of innovation
- It has 12 key performance components. Among them 10 are novel and significantly influence the impact at scale contribution of Integrated Agri-food System Transformation Strategy in Mexico, Peru, Colombia for Improving the effectiveness and efficiency of agricultural knowledge management systems, Improving effectiveness and efficiency of collaborations partnerships and other stakeholder engagements.
- These 10 are different types (1 tool 3 practice 1 service 1 principle 1 technique 1 approach 1 method 1 organisational arrangement)
- Readiness of the novel components vary between 4 and 7. These imply that the Innovation Readiness Score, which is based on the lowest-scoring component used for identifying the bottleneck component is 4. Meanwhile the Average Innovation Readiness Score, which is used for comparing the innovation with its previous status as well as with other innovations, is 5.7.
- In other words, the major bottleneck(s) for Integrated Agri-food System Transformation Strategy in Mexico, Peru, Colombia for Improving the effectiveness and efficiency of agricultural knowledge management systems, Improving effectiveness and efficiency of collaborations partnerships and other stakeholder engagements is/are : crop-based agri-food system narratives, opportunistic change management.

Please note that the bottlenecks are identified using available evidence sources such as journal articles, book chapters, rigorous technical reports and in their absence other complementary research and research communication items. In some cases, an advanced novel component can be assessed as a bottleneck if there is no available evidence about its Readiness. This can be the case especially in innovation components that are designed, or developed recently. If this is the case, the use cases are recommended to invest resources in publishing and disseminating the evidence. Once the dissemination is done, the Readiness scores will be updated.

RECOMMENDATIONS for crop-based agri-food system narratives

Option 0: Prove - document and disclose available and recently generated cognitive, conceptual, applied, experimental or impact/benefit evidence of crop-based agri-food system narratives in Mexico, Peru, Colombia or sufficiently similar contexts

Main mandate and contribution of research for development organizations like CGIAR is to develop scalable solutions, or innovations, that can achieve high impact at scale. However, not all scalable solutions are suitable for the CGIAR system. Innovations can be produced by repetitive trial and error or can be discovered and developed by coincidence. The key niche and contribution of CGIAR are science-based innovations. What makes science-based innovations different from the others are systematic documentation about how they work and the availability of the information for public scrutiny. Therefore, it is important for EIA Latin America Transformation Strategy use case team to prove the Readiness of their innovations by systematically documenting the performance of the innovation and disclosing the information to the public. This will not only increase the scientific credibility and reputation of the use case but also increase its attractiveness for investments.

Option 1: Substitute - find alternative solutions that can serve the same purpose as crop-based agri-food system narratives

crop-based agri-food system narratives' develop insights about how agri-food system functions using crops as an anchor of the narrative. If there are any available sufficiently performing alternatives that can serve the same function, it is recommended to replace crop-based agri-food system narratives with the most suitable alternative

Option 2: Outsource - establish a partnership with organizations that can develop and validate crop-based agri-food system narratives more effectively, efficiently and locally

crop-based agri-food system narratives is at the level of application (unproven). For it to move to the next level, it is necessary to test the capacity of crop-based agri-food system narratives using applied research methods. If there are local or national organizations or teams with sufficient experience and capabilities to test the capacity of crop-based agri-food system narratives using applied research methods, it is recommended to outsource the work on crop-based agri-food system narratives. If there are no such local and national organizations and teams, but there are international organizations that can do the work effectively and efficiently, they can be the second outsourcing option.

Option 3: Insource - further design, develop crop-based agri-food system narratives using the human resources of the use case team.

if the substitution and outsourcing options have a low likelihood to develop insights about how agri-food system functions using crops as an anchor of the narrative, it is recommended to (further) develop it using the internal human resources of EIA Latin America Transformation Strategy use case.

Please note that working with existing partners is not necessarily an advantage. Although, working with local organizations that EIA Latin America Transformation Strategy team has long term collaborations can improve the ownership of fully developed Integrated Agri-food System Transformation Strategy in the future, it might hinder the (further) development of crop-based agri-food system narratives significantly. Therefore, it is recommended to have an honest conversation with existing long term partners about the development needs and validate if their experience and capabilities match these needs. If they do not match, it is recommended to offer the long term partners to co-manage the collaboration with other development partners that will be leading the outsourced work.

RECOMMENDATIONS for opportunistic change management

Option 0: Prove - document and disclose available and recently generated cognitive, conceptual, applied, experimental or impact/benefit evidence of opportunistic change management in Mexico, Peru, Colombia or sufficiently similar contexts

Main mandate and contribution of research for development organizations like CGIAR is to develop scalable solutions, or innovations, that can achieve high impact at scale. However, not all scalable solutions are suitable for the CGIAR system. Innovations can be produced by repetitive trial and error or can be discovered and developed by coincidence. The key niche and contribution of CGIAR are science-based innovations. What makes science-based innovations different from the others is the systematic documentation of how they work and the availability of the information for public scrutiny. Therefore, it is important for EIA Latin America Transformation Strategy use case team to prove the Readiness of their innovations by systematically documenting the performance of the innovation and disclosing the information to the public. This will not only increase the scientific credibility and reputation of the use case but also increase attractiveness for investments.

Option 1: Substitution - finding alternative solutions that can serve the same purpose as opportunistic change management

opportunistic change management increase the success likelihood of interventions. If there are any available sufficiently performing alternatives that can increase the success likelihood of interventions, it is recommended to replace opportunistic change management with the most suitable alternative

Option 2: Outsource - establish a partnership with organizations that can develop and validate opportunistic change management more effectively, efficiently and locally

opportunistic change management is at the level of application (unproven). For it to move to the next level, it is necessary to test the capacity of opportunistic change management using applied research methods. If there are local or national organizations or teams with sufficient experience and capabilities to test the capacity of opportunistic change management using applied research methods it is recommended to outsource the work on opportunistic change management. If there are no such local and national organizations and teams, but there are international organizations that can do the work effectively and efficiently, they can be the second outsourcing option.

Option 3: Insource - further designing, developing opportunistic change management using the human resources of the use case team.

if the substitution and outsourcing options have a low likelihood to increase the success likelihood of interventions, it is recommended to (further) develop it using the internal human resources of EIA Latin America Transformation Strategy use case.

Please note that working with existing partners is not necessarily an advantage. Although, working with local organizations that EIA Latin America Transformation Strategy team has long term collaborations can improve the ownership of fully developed Integrated Agri-food System Transformation Strategy in the future, it might hinder the (further) development of opportunistic change management significantly. Therefore, it is recommended to have an honest conversation with existing long term partners about the development needs and validate if their experience and capabilities match these needs. If they do not match, it is recommended to offer the long term partners to co-manage the collaboration with other development partners that will be leading the outsourced work.

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ANNEX-1: INNOVATION READINESS LEVELS (v.2.2)

READINESS LEVEL	READINESS LEVEL CATEGORY	READINESS LEVEL DESCRIPTION
9	Innovation (proven)	Validated application using evidence on the value or benefit
8	Innovation (unproven)	Testing the capacity of the application to generate value by solving a problem in a specific uncontrolled context
7	Application (proven)	Validated applied model using experimental evidence
6	Application (unproven)	Experimental research on application model's ability to solve a problem in the controlled conditions
5	Application Model (proven)	Validated basic model using applied evidence
4	Application Model (unproven)	Desktop research on the basic model's ability to solve a problem using existing applied evidence
3	Basic Model (proven)	Conceptual/theoretical validated set of interrelated hypotheses
2	Basic Model (unproven)	Desktop research on the hypotheses using existing conceptual/theoretical evidence
1	Hypothesis (proven)	Cognitively validated idea about a novelty's ability to solve a problem
0	Hypothesis (unproven)	Cognitive validation of idea's potential to solve the problem. / Thinking about a novelty's ability to solve a problem