

CGIAR Innovation Packages and Scaling Readiness (IPSR) INNOVATION PORTFOLIO MANAGEMENT REPORT



CGIAR INITIATIVE ON SUSTAINABLE ANIMAL PRODUCTIVITY FOR LIVELIHOODS, NUTRITION AND GENDER INCLUSION (SAPLING)

2022

1st Edition

Introduction

CGIAR Initiative on Sustainable Animal Productivity aims to contribute to transforming livestock sectors in Ethiopia, Kenya, Mali, Nepal, Uganda, Tanzania and Vietnam to make them more productive, resilient, equitable and sustainable. This will be achieved by developing new and adapting existing technologies and practices to increase sustainable livestock production; Encouraging innovative practices for safe consumption of livestock-derived foods as part of diverse diets; Focusing on gender equity and social inclusion; Promoting competitive and inclusive livestock value chains; Generating and consolidating evidence and scalable models and tools.

This report provides an overview of the portfolio of innovations of the Initiative and its partners.

KEY PORTFOLIO DATA

of innovations
reported

21

Countries
targeted

19

Average Innovation
Readiness Level

5.4

Other CGIAR
Initiatives

12

SDGs
targeted

4

Partnerships
engaged

35

9

PROVEN INNOVATION

The innovation is validated for its ability to achieve a specific impact under uncontrolled conditions

2

8

UNCONTROLLED TESTING

The innovation is being tested for its ability to achieve a specific impact under uncontrolled conditions

4

7

PROTOTYPE

The innovation is validated for its ability to achieve a specific impact under semi-controlled conditions

3

6

SEMI-CONTROLLED TESTING

The innovation is being tested for its ability to achieve a specific impact under semi-controlled conditions

4

5

MODEL/EARLY PROTOTYPE

The innovation is validated for its ability to achieve a specific impact under fully-controlled conditions

1

4

CONTROLLED TESTING

The innovation is being tested for its ability to achieve a specific impact under fully-controlled conditions

1

3

PROOF OF CONCEPT

The innovation's key concepts have been validated for their ability to achieve a specific impact

2

2

FORMULATION

The innovation's key concepts are being formulated or designed

1

1

BASIC RESEARCH

The innovation's basic principles are being researched for their ability to achieve a specific impact

2

0

IDEA

The innovation is at idea stage

1



Pipeline overview

of innovations





INNOVATION OVERVIEW

#	Innovation Title	Countries Targeted	Innovation Readiness	Handle to CGSpace
1	Cactus Pear for Sustainable Livelihoods in the Drylands	-	9	Link
2	Information and Communication Technology and genomic technology solutions for smallholder dairy farmers	Ethiopia Nepal Rwanda Tanzania Uganda	9	Link
3	Legume (<i>Mucuna pruriens</i>)-cereal products in livestock fattening rations	Zambia Zimbabwe	8	Link
4	Community-based sheep and goat breeding programs for low input systems	Ethiopia Tanzania	8	Link
5	Tools for control and eradication of peste des petits ruminants	Burkina Faso Ethiopia Kenya Mali Senegal Tanzania	8	Link
6	Women and youth entrepreneurship in sheep fattening	Ethiopia	8	Link
7	Green manure/cover crops for improved livestock feeding	Malawi Zambia Zimbabwe	7	Link
8	The Women's Empowerment in Livestock Index or WELI	Ethiopia Ghana Tanzania Vietnam Uganda	7	TBD
9	Reproductive platform to deliver genetic gain in sheep and goats	Ethiopia Mali Tanzania Sudan	7	Link
10	Public Private Partnerships and community-based engagement for livestock vaccine delivery	Mali	6	Link
11	On-farm Digitised Feed Advisor	Bangladesh India Nepal Pakistan	6	TBD
12	Dairy profitability simulator is a mobile application that creates personal farm profitability projections based on several small holder dairy production practices and parameters	Ethiopia Kenya Tanzania Uganda	6	Link
13	Social and behaviour change communications strategy for improving livestock derived food consumption	Kenya Rwanda Vietnam Uganda	6	Link
14	Developing dual-purpose chicken strains	Ethiopia	5	Link
15	CGIAR Barley Breeding Toolbox	-	4	TBD
16	Integrated decision-support system assessing investment trade-offs	Ethiopia Kenya Nepal Nicaragua Tanzania Vietnam Uganda	3	Link
17	FoodSENSE Framework	Vietnam Uganda	3	Link
18	CGIAR Research Initiative on Diversification in East and Southern Africa (Ukama Ustawi) Scaling Hub - Eastern and Southern Africa Scaling Hub	Kenya Zambia Zimbabwe	2	Link
19	Improved vaccines for the control of East Coast Fever	Kenya	1	Link
20	Gendered business models for improved cattle artificial insemination service delivery in Vietnam	Vietnam	1	Link
21	CLEANED-eXtRa	-	0	TBD



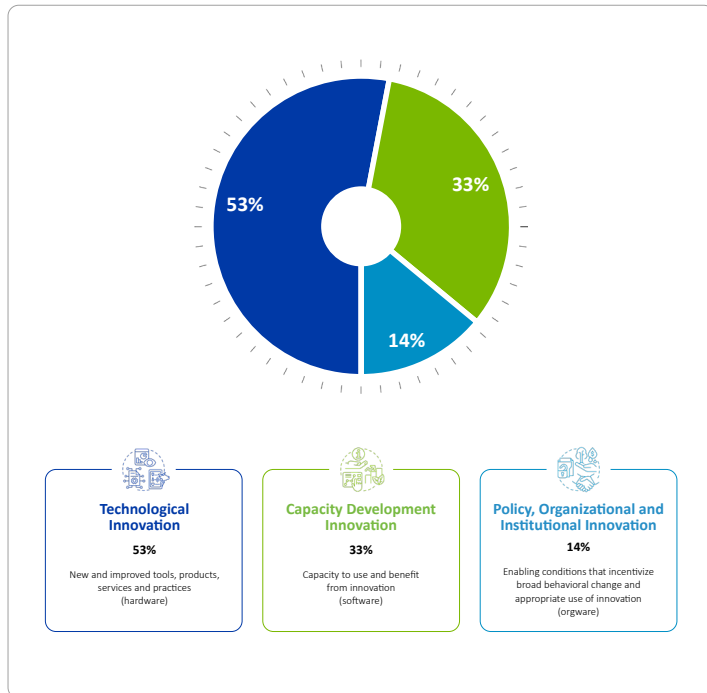
INNOVATION TYPOLOGIES

CGIAR and partners work on a broad variety of innovations to achieve outcomes and impact. These include (1) technologies (e.g. germplasm; management practices; machines; data systems), (2) capacity development innovations (e.g. training programs; guidelines, e-learning courses), and (3) policy, organizational or institutional innovations (governance frameworks, business models, finance mechanisms).

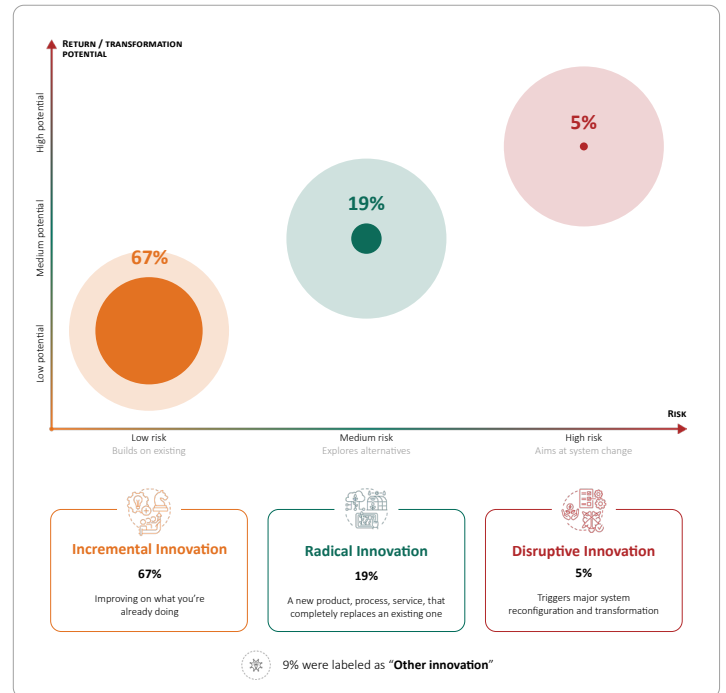
The nature of the innovations and innovation processes may be different. Incremental innovations follow a steady process of gradual improvement. Radical innovations replace existing technologies, practices and institutions. Disruptive innovations trigger major system reconfiguration or transformation.

The below graphs provide an overview of the innovation type and nature in this portfolio.

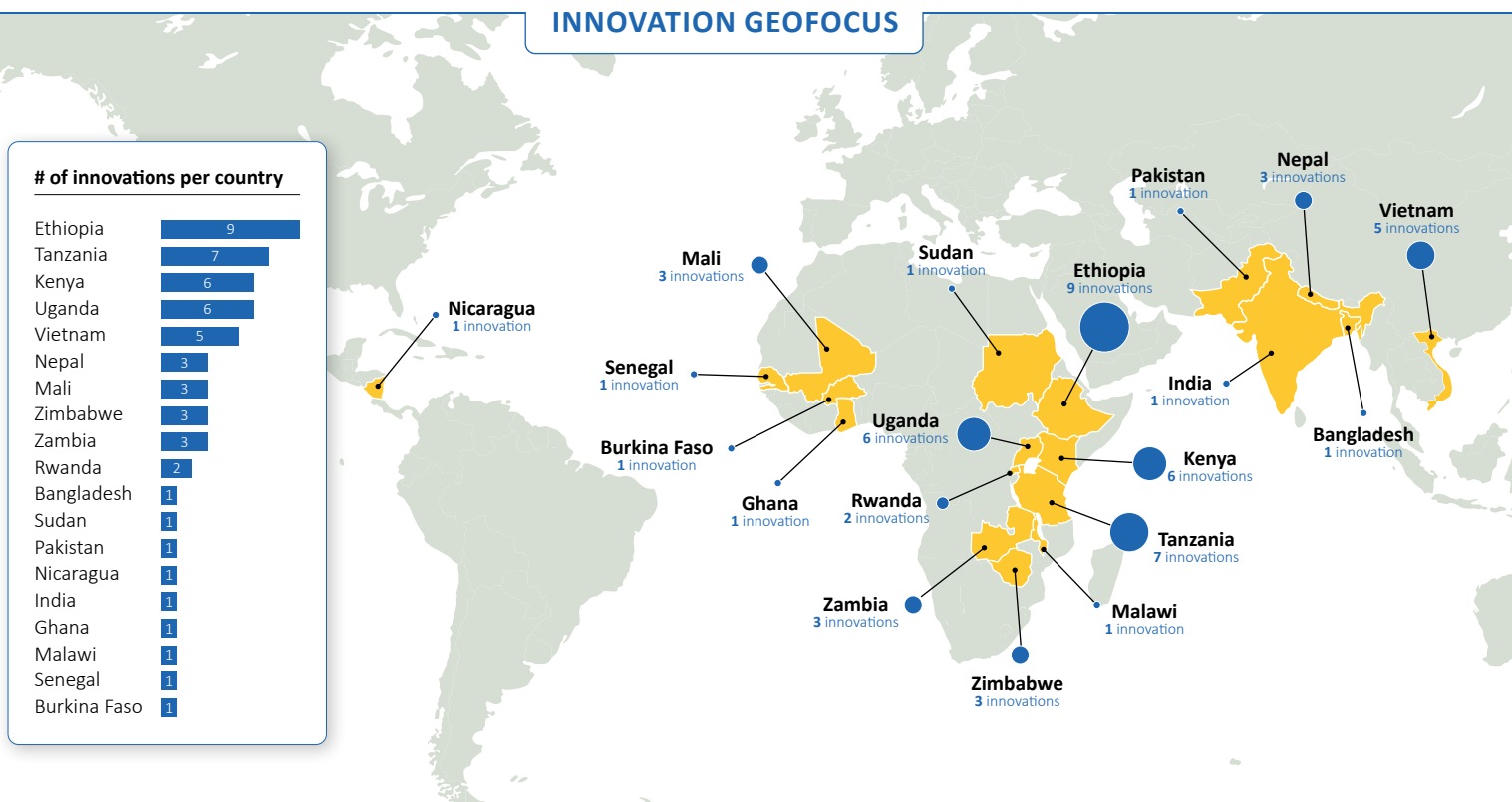
INNOVATION TYPES



INNOVATION NATURE



INNOVATION GEOFOCUS





ASPIRED OUTCOMES AND IMPACTS

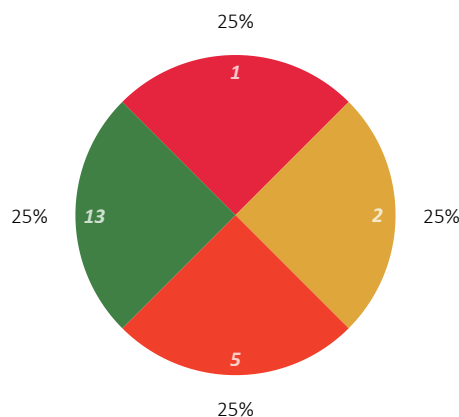
This initiative aims to contribute to transforming livestock sectors in Ethiopia, Kenya, Mali, Nepal, Uganda, Tanzania and Vietnam to make them more productive, resilient, equitable and sustainable.

The below graphs reflect how the Initiative innovation portfolio is currently mapped to the CGIAR Impact Areas and United Nations Sustainable Development Goals (SDGs).

SUSTAINABLE DEVELOPMENT GOALS (SDGs)

Percentage of innovation portfolio targeting SDGs.
More information on the Sustainable Development Goals can be found at <https://sdgs.un.org/goals>.

	SDG1	No Poverty	25%
	SDG2	Zero Hunger	25%
	SDG5	Gender Equality	25%
	SDG13	Climate Action	25%



CONTRIBUTING CGIAR INITIATIVES AND BILATERAL PROJECTS

INTERNAL CGIAR INITIATIVE COLLABORATION

CGIAR Initiatives and projects do not work in isolation, but collaborate on innovation to achieve outcomes and impact. The below overview shows these collaborations across the different CGIAR Action Areas.

Genetic Innovation Action Area Initiative

- ↳ Breeding Resources

1

Resilient Agri-Food Systems Action Area Initiative

- ↳ Mixed Farming System
- ↳ Livestock and Climate
- ↳ Excellence in Agronomy

5
3
1

System Transformation Action Area Initiative

- ↳ Nexus Gain
- ↳ National Policies and Strategies
- ↳ Digital Innovations
- ↳ Climate Resilience

1
1
1
1

Regional Integrated Initiative

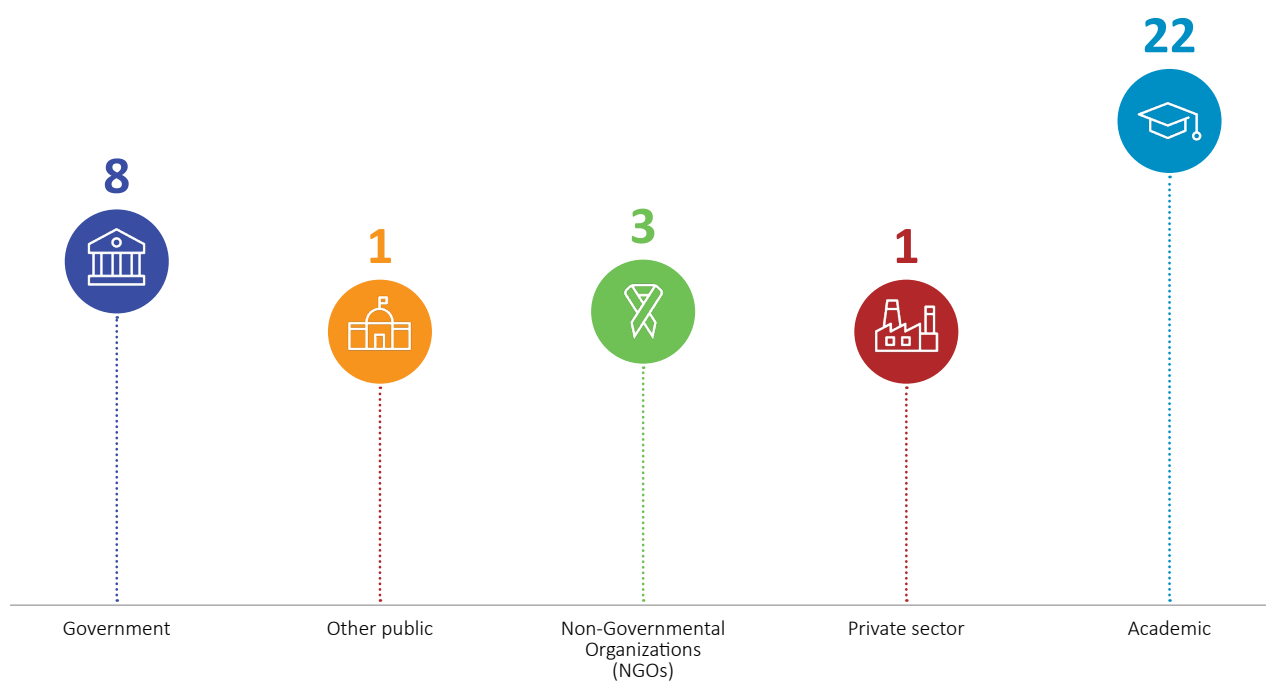
- ↳ Diversification in East and Southern Africa
- ↳ Fragility to Resilience in Central and West Asia and North Africa
- ↳ Transforming Agrifood Systems in South Asia
- ↳ West and Central African Food Systems Transformation

3
1
1
1



EXTERNAL PARTNERSHIPS

Partnerships are central to the CGIAR mission and for innovation development and scaling, partnerships with academia, governments, development organizations and private sector are key. The below provides an aggregate overview of the current partnerships in the portfolio of innovations.





INNOVATION READINESS

Innovations can be at different levels of maturity and go through processes of ideation, design, testing and validation. This infographic shows the readiness levels of the innovations included in this portfolio.





ACKNOWLEDGEMENTS

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CITATION

Baltenweck, I., Rekik, M., Ouma, E., Galie, A., Kassie, G.T., Notenbaert, A., Mwai, O.A., Haile, A., Dione, M., Wamatu, J., Thierfelder, C.L., Padmakumar, V., Rao, J., Esatu, W., Sanchez-Garcia, M., Hammond, J., Konlambigue, M., Lacasta, A. and Marshall, K. 2023. CGIAR Research Initiative on Sustainable Animal Productivity: IPSR Innovation Portfolio Management Report. First edition, March 2023. Montpellier: CGIAR System Organization.
<https://hdl.handle.net/10568/130462>