



Innovation Package and Scaling Readiness assessment CGIAR
full report

Innovation Package and Scaling Readiness assessment for Novel stress tolerant (abiotic and biotic), highly productive and resource efficient forages to drive livestock production and productivity for market oriented small and medium, size farm operations in Eastern Asia

Submission details

PRMS Result code: 9322

PRMS reporting phase: IPSR 2024

Status: Submitted

Submitted on Sunday, February 2nd, 2025 at 11:17 CET by Jane Poole

General information

Primary submitter: INIT-17 - Sustainable Animal Productivity for Livelihoods, Nutrition and Gender Inclusion

Contributing initiative(s): Not Provided

Result level: Initiative outcome

Result type: Innovation Package

Lead contact person: Michael Peters

Core innovation selected and CGIAR Initiative leading the development:

[5142: Innovation development - Novel stress tolerant \(abiotic and biotic\), highly productive and resource efficient forages to drive livestock production and productivity for market oriented small and medium, size farm operations.](#)

Country/geoscope for which packaging and scaling readiness assessment will be conducted:

Regional:

Eastern Asia

Description

Good quality feed year-round is limiting livestock productivity on-farm and resource use in farms of small to medium size. Feed production can amount to 50 to 70% of livestock production costs. Forages are a means to overcome the feed gap, and resilient forages responding to different abiotic and biotic stresses, including low soil fertility, drought / excess water, pest diseases, are essential, increasing livestock productivity by up to 15%. To scale such technologies, suitable entry points i.e., market-oriented livestock production particularly dairy are required. Enablers are animal genetics and health technologies which capitalize on the improved feeding as well as capacity and dissemination channels such as cooperatives and functional seed supply systems. We are using a diversity of advanced forages which have a good availability of seed and/or planting material and demand pull through livestock production in Kenya; at the same time a pipeline for improved forages is being maintained.

DAC Marker	Value	Description	Evidence
Gender equality tag	(0) Not Targeted	The result did not target any of the Impact Area objectives.	Not Provided
Climate change tag	(1) Significant	The result has made a significant contribution to any of the Impact Area objectives, even though the objective(s) is not the principal focus of the result.	Not Provided
Nutrition, health and food security tag	(0) Not Targeted	The result did not target any of the Impact Area objectives.	Not Provided
Environmental health and biodiversity tag	(0) Not Targeted	The result did not target any of the Impact Area objectives.	Not Provided
Poverty reduction, livelihoods and jobs tag	(1) Significant	The result has made a significant contribution to any of the Impact Area objectives, even though the objective(s) is not the principal focus of the result.	Not Provided

Is this result featured in a Key Result Story for the Reporting year?: No

Link to Key Result Story: Not Required

Contributors

Primary submitter	
Description	ToC indicators:
Name: INIT-17 - Sustainable Animal Productivity Is this result planned in the initiative's ToC? Yes See TOC: https://toc.loc.codeobias.com/toc/3e148c6c-c422-4720-b139-5ad94dd2c79c	Not Provided

Other contributors	
Description	ToC indicators:
Not Provided	Not Provided

Contributing non-pooled projects:

Not Provided

Contributing centers:

- ILRI - International Livestock Research Institute
- **Primary** - CIAT (Alliance) - Alliance of Bioversity and CIAT - Regional Hub (International Center for Tropical Agriculture / Centro Internacional de Agricultura Tropical)

Partners

Name	Country HQ	Institution type	Delivery type(s)
Not Provided			

Step 1: Scaling Ambition, Experts and Consultation

2024 Scaling Ambition blurb

By 2024, the Sustainable Animal Productivity and partners will work together with Netherlands Development Organisation, Send a Cow, Kenya Agricultural and Livestock Research Organization and Semillas Papalotla SA de DV to accomplish the use of Novel stress tolerant (abiotic and biotic), highly productive and resource efficient forages to drive livestock production and productivity for market oriented small and medium, size farm operations. by 5 Cooperatives, 3 Research organizations and universities National (NARS), in Eastern Asia to contribute achieving EoI1: Co-created, demand-driven innovation packages of productivity- and resilience-enhancing, low emissions technologies and institutional arrangements - adopted and EoI2: Private and public sector partners invest at least \$30M in co-creation and -delivery of novel, low emissions, demand-driven, gender and youth inclusive, and productivity- and resilience-enhancing technologies and practices for genetics, feed-forages, and health.

The anticipated user of the innovation in number of users (actors/ organizations/ other) that can be supported by evidence:

Actors

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#	Type	Women	Men	Total
1	Other: Cooperatives	Not Provided	Not Provided	5

Organizations

#	Type	Subtype	How many
1	Research organizations and universities	Research organizations and universities National (NARS)	3

Other

#	Type	Unit of measure	Quantity
Not Provided			

Aspired outcomes and impact:

- EoI1: Co-created, demand-driven innovation packages of productivity- and resilience-enhancing, low emissions technologies and institutional arrangements - adopted
- EoI2: Private and public sector partners invest at least \$30M in co-creation and -delivery of novel, low emissions, demand-driven, gender and youth inclusive, and productivity- and resilience-enhancing technologies and practices for genetics, feed-forages, and health

Which CGIAR Action Area outcomes the scaling of the core innovation is expected to contribute by 2024 in the selected geolocation:

CGIAR Action Area outcomes	
Systems Transformation	Not Provided
Resilient Agrifood Systems	<ul style="list-style-type: none"> • 3 - Research institutions, government analytical units, and scaling partners in the Global South have improved knowledge, skills, access to data, capacity to develop tools, innovations, and undertake research to support transformation of food, land and water systems contributing to livelihood, inclusion, nutrition, environmental and climate objectives. • 1 - Implementation partners (e.g. NARES, NGOs, private companies) actively support dissemination, uptake, and implementation of CGIAR innovations. • 2 - Due to CGIAR involvement, private sector actors invest in business practices or models that have the potential to improve livelihoods, climate resilience, promote sustainable and inclusive food systems, and boost consumption of healthy diets, especially among nutritionally vulnerable population groups. • 5 - National and local multi-stakeholder platforms are strengthened to become more effective and sustainable, addressing development trade-offs and generating strategies for effective food, land, and water systems transformation. • 4 - National and sub-national government agencies use CGIAR research results to design or implement strategies, policies and programs which have the potential to transform food, land and water systems contributing to livelihood, inclusion, nutrition, environmental and climate resilience objectives.
Genetic Innovation	Not Provided

Which CGIAR Impact Area Target(s) the scaling of the core innovation is expected to contribute by 2024 in the selected geolocation:

- Poverty Reduction, Livelihoods and Jobs - Lift at least 500 million people living in rural areas above the extreme poverty line of US \$1.90 per day (2011 PPP).
- Nutrition, Health and Food Security - End hunger for all and enable affordable healthy diets for the 3 billion people who do not currently have access to safe and nutritious food.
- Poverty Reduction, Livelihoods and Jobs - Reduce by at least half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.
- Environmental Health and Biodiversity - Stay within planetary and regional environmental boundaries: consumptive water use in food production of less than 2500 km³ per year (with a focus on the most stressed basins), zero net deforestation, nitrogen application of 90 Tg per year (with a redistribution towards low-input farming system) and increased use efficiency; and phosphorus application of 10 Tg per year.
- Environmental Health and Biodiversity - Maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed genebanks at the national, regional, and international levels.
- Gender Equality, Youth and Social Inclusion - Close the gender gap in rights to economic resources, access to ownership and control over land and natural resources for over 500 million women who work in food, land and water systems.
- Climate Adaptation and Mitigation - Equip 500 million small-scale producers to be more resilient to climate shocks, with climate adaptation solutions available through national innovation systems.

Which SDG Target(s) the scaling of the core innovation is expected to contribute to by 2030 in the specific country/ subnational context:

- 1.1 - By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day
- 1.2 - By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
- 2.1 - By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round
- 5.a - Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws
- 13.1 - Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Partners

Name	Country HQ	Institution type	Delivery type(s)
KALRO - Kenya Agricultural and Livestock Research Organization	Kenya (KE)	Research organizations and universities National (NARS)	Scaling
SENDACOW - Send a Cow	Kenya (KE)	NGO Regional (Farmers)	Scaling
SNV - Netherlands Development Organisation	Netherlands (Kingdom of the) (NL)	NGO International (General)	Scaling
Papalotla - Semillas Papalotla SA de CV	Mexico (MX)	Private company (other than financial)	Scaling

Innovation Packaging Experts

#	Expert	First name	Last name	Email	What expertises will this expert contribute?
1	Not Provided				

Engaging a diverse group of experts leads to better and more realistic innovation package design and assessment. Please confirm that the above list of experts is diverse in gender, age, disciplinary and cultural background, organizational affiliation and typology, etc.

Not Provided

Consensus and Consultation

Can you confirm that there is consensus/commitment among the Initiative and Work Package leadership and partners on the proposed Innovation, country and targets?

Yes, there is consensus

Can you confirm that the relevant CGIAR country convener is aware of the proposed innovation package and scaling readiness exercise?

Yes, the CGIAR country convener is aware

Can you confirm that the CGIAR Regional Leadership is aware of the proposed innovation package and scaling readiness exercise?

Yes, the CGIAR Regional Leadership is aware

Can you confirm that the CGIAR Regional Integrated Initiative leadership is aware of the proposed innovation package and scaling readiness exercise?

Yes, the CGIAR Regional Integrated Initiative leadership is aware

Would you be interested in receiving active support to ensure (gender-)responsible scaling?

Yes

Step 2 and 3: Innovation Packaging and Scaling Readiness assessment

Was an Innovation Packaging and Scaling Readiness online or in-person expert workshop organized?

Yes, an expert workshop was organized

Facilitators:

- Lead - Edwin Kangethe ()

Provide the link to the workshop list of participants:

Not Provided

What was assessed during the expert workshop?

Only Current innovation readiness and innovation use were self-assessed by the workshop experts

Current use of the core innovation

The current use of the core innovation by actors, organizations, hectares or other innovation users/ beneficiaries. The numbers should reflect the current innovation use that can be supported by evidence:

Actors

#	Type	Evidence	Women	Men	Total

1		Not Provided	Not Provided	Not Provided	Not Provided
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Organizations

#	Type	Subtype	Evidence	How many
1	Public-Private Partnership	Not Applicable	https://hdl.handle.net/10568/169469	5

Quantitative measures

#	Type	Evidence	Unit of measure	Quantity
1	Other	Not Provided	Not Provided	Not Provided

Evidence-based Scaling Readiness assessment

Type	Short title	Innovation readiness	Evidence	Innovation use	Evidence
Core innovation	Novel stress tolerant, highly productive and resource efficient forages	8 - Uncontrolled Testing	https://alliancebioiversityciat.org/stories/study-finds-40-more-milk-and-tens-millions-dollars-revenue-possible-african-farmers	3 - Partners	https://alliancebioiversityciat.org/stories/study-finds-40-more-milk-and-tens-millions-dollars-revenue-possible-african-farmers
Complementary innovation 1	Farmer Training & Extension for NOVEL Forages	7 - Prototype	https://hdl.handle.net/10568/163492	6 - Unconnected next-user	https://hdl.handle.net/10568/163492
Complementary innovation 2	Cost-Benefit Analysis Tool for NOVEL Forages	0 - Idea	Not Provided	0 - No use	Not Provided
Complementary innovation 3	Farmer Investment Program for Climate-Resilient Agriculture	3 - Proof of Concept	https://alliancebioiversityciat.org/stories/study-finds-40-more-milk-and-tens-millions-dollars-revenue-possible-african-farmers	4 - Connected next-user	https://hdl.handle.net/10568/162799
Complementary innovation 4	Seed Testing for Enhanced Forage Production	4 - Controlled Testing	https://hdl.handle.net/10568/116651	0 - No use	Not Provided

Complementary innovation 5	Livestock Farmer Social Media Package	4 - Controlled Testing	https://hdl.handle.net/10568/131943	8 - End-user / Beneficiaries	https://hdl.handle.net/10568/131943
Complementary innovation 6	Enhancing Livestock Productivity with Novel Forages	2 - Formulation	https://alliancebioiversityciat.org/stories/study-finds-40-more-milk-and-tens-millions-dollars-revenue-possible-african-farmers	4 - Connected next-user	https://alliancebioiversityciat.org/stories/florence-makokha-and-her-journey-success
Complementary innovation 7	Empowering Farmers with NOVEL Forage Analysis	0 - Idea	Not Provided	0 - No use	Not Provided
Complementary innovation 8	Innovation Farming Network.	0 - Idea	Not Provided	0 - No use	Not Provided
Complementary innovation 9	Last Mile Seed Distribution Solution.	6 - Semi-Controlled Testing	https://hdl.handle.net/10568/168240	4 - Connected next-user	https://hdl.handle.net/10568/168240
Complementary innovation 10	Gender equality and social inclusion affirmative action	4 - Controlled Testing	https://hdl.handle.net/10568/170198	1 - Project lead organization	https://hdl.handle.net/10568/168240
Complementary innovation 11	Plant Material Governance Solution.	2 - Formulation	https://hdl.handle.net/10568/168240	0 - No use	Not Provided

Step 4: Additional information

Partner	Current calendar year	Next calendar year	To be determined
Expected CGIAR Initiative investment in improving the scaling readiness of the Innovation Package in:			
Sustainable Animal Productivity - Sustainable Animal Productivity for Livelihoods, Nutrition and Gender Inclusion	Not Provided	Not Provided	No
Expected CGIAR Bilateral investments in Innovation Package in:			
Not Provided			
Expected partner co-investment (from own resources) in Innovation Package in:			
Not Provided			

Would you like this IPSR innovation use result to be published as a stand-alone CGIAR IPSR Innovation Packaging and Scaling Readiness report (PDF)?:

Not Provided

Innovation acknowledgement:

Not Provided

Provide pictures that show the Innovation in action/use (if available):

Not Provided

Provide any reference materials that show the Innovation Package in action/ use:

Not Provided

Links to results

- [5142: Innovation development - Novel stress tolerant \(abiotic and biotic\), highly productive and resource efficient forages to drive livestock production and productivity for market oriented small and medium, size farm operations.](#)