

A Transformative Climate Action through Upscaling Climate Resilient Rice and other Agricultural Technologies supported by Evidence-Based Knowledge and Policy in India

(UPSCALE)

Annual work plan

(01 October 2024 to 30 September 2025)



NIBIO
NORWEGIAN INSTITUTE OF
BIOECONOMY RESEARCH



Norwegian Embassy
New Delhi

This project has received funding from the Ministry of Foreign Affairs, Norway/ the Norwegian Embassy, New Delhi, under Grant Agreement No. IND-3025, IND - 23/0009

WP1: Interventions for Transformative Change – Climate Resilient Rice Agriculture (CRRA) Technologies (Lead :AAU & OUAT, Co-lead: NRRI & NIBIO), M02–M48			
Tasks to be implemented, lead partners and duration	Oct 2024 –Sep 2025	WorkPlanned/ Expected outputs	Remarks
Task 1.1: Agronomic, socio-economic, and environmental baseline indicators determined <i>Lead: NIBIO</i> <i>Supporters: All partners</i> <i>Duration: M02–M09</i>	<i>October – June</i>	Comprehensive baseline indicator report	<ul style="list-style-type: none"> • <i>Relevant base line data/information from the RESILIENCE project, will be used, in addition to targeted base line survey and Focus Group Discussion</i>
Task 1.2: Precision-based climate-smart rice technology interventions including precision water management <i>Lead: NRRI</i> <i>Supporters: All Partners</i> <i>Duration M06 –M45</i>	<i>April, 25- Oct, 25x</i>	Assam: 30 lead farmers will be targeted using Direct seeded rice (DSR), SRI etc.	<ul style="list-style-type: none"> • <i>Districts: Jorhat, Nagaon</i> • <i>Total Clusters: 2</i>
	<i>Dec 2024 – y 2025</i>	NRRI: 250 Farmers will be targeted for implementing DSR, SRI and AWD etc.	<ul style="list-style-type: none"> • <i>4-5 clusters in Kendrapada, Jagatsinghpur and Cuttack will be undertaken for upscaling</i>
	<i>Dec 2024 – April, 2025</i>	OUAT: 100 Farmers will be targeted for conducting demonstration on climate smart rice technology such as stress tolerant varietal interventions under DSR/ Aerobic rice etc.	<ul style="list-style-type: none"> • <i>4-5 clusters in Puri,Dhenkanal and Nayagarh</i>
Task 1.3: Precision-based bio-based soil and nutrient management using Digital tools <i>Lead: NRRI</i> <i>Supporters: AAU, OUAT, NIBIO</i> <i>Duration: M06 –M45</i>	<i>April, 25 - Oct, 25</i>	Assam: 200 farmers will be targeted for the demo of precision soil and nutrient management/ using Leaf colour chart, N app	<ul style="list-style-type: none"> • <i>Districts: Jorhat, Lakhimpur, Nagaon</i> • <i>Total Clusters: 4</i>
	<i>Dec 2024 – Sep 2025</i>	NRRI: 200 farmers will be targeted for upscaling of precision nutrient management using Leaf colour chart, riceNxpert	<ul style="list-style-type: none"> • <i>4-5 clusters in Kendrapada, Jagatsinghpur and Cuttack will be undertaken for upscaling</i>

	<i>Dec 2024 – Sep, 2025</i>	OUAT: 150 Farmers will be targeted for demonstration on Precision soil and nutrient management using LCC/ N expert/ crop manager).	<ul style="list-style-type: none"> • 4-5 clusters in Puri, Dhenkanal and Nayagarh
Task 1.4: Upscaling climate smart seed systems through public-private partnerships <i>Lead: AAU & OUAT</i> <i>Supporter: NRRI</i> <i>Duration: M03 –M42</i>	<i>Nov, 24- Sep, 25</i>	Assam: 500 farmers will be targeted for strengthening the seed production	<ul style="list-style-type: none"> • Districts: Jorhat, Lakhimpur, Nagaon • Total Clusters: 3
	<i>Dec 2024 – Sep 2025</i>	NRRI: 25 Farmers	<ul style="list-style-type: none"> • 3 clusters in Kendrapada, Jagatsinghpur and Cuttack will be undertaken for upscaling
	<i>Dec 2024 – Sep, 2025</i>	OUAT: 200 Farmers will be involved in smart seed production system with the help of village seed bank	<ul style="list-style-type: none"> • 3 clusters in Puri, Dhenkanal and Nayagarh
Task 1.5: Integrated farm systems/crop diversification (rice-legumes/vegetables etc; agroforestry, crop-livestock/fishery based) <i>Lead: AAU & OUAT</i> <i>Supporters: All Partners</i> <i>Duration: M06 –M45</i>	<i>Nov, 24- Sep, 25</i>	Assam: 8 clusters (200 farmers) will be targeted for crop diversification and increasing the cropping system in upscaling areas	<ul style="list-style-type: none"> • Districts: Jorhat, Darrang, Nagaon • Total Clusters: 8
	<i>Dec 2024 – May 2025</i>	Odisha: NRRI: 150 Farmers will be targeted for upscaling the rice-pulse, rice-vegetable cropping system	<ul style="list-style-type: none"> • 4-5 clusters in Kendrapada, Jagatsinghpur and Cuttack will be undertaken for upscaling
	<i>Dec 2024 – Sep, 2025</i>	OUAT: 150 Farmers will be targeted for Integrated Farming system including community based mushroom production, vermicomposting, crop diversification, fish farming etc.	<ul style="list-style-type: none"> • 4-5 clusters in Puri, Dhenkanal and Nayagarh.

Task 1.6: Enhancing Agricultural Sustainability through harnessing Solar Energy on small farms <i>Lead: AAU & OUAT</i> <i>Supporter: NRRI</i> <i>Duration: M06 –M45</i>	Nov, 24- Sep, 25	Assam: solarification in agriculture in Jorhat and Darrang, 32 farmers will be benefitted.	<ul style="list-style-type: none"> • District: Jorhat, Darrang • Total Clusters: 3
	Dec 2024 – Sep 2025	Odisha: NRRI: 50 farmers will be targeted for implementing the solar light traps	<ul style="list-style-type: none"> • 4 clusters in Kendrapada, Jagatsinghpur and Cuttack will be undertaken for upscaling
	Dec 2024 –Sep, 2025	OUAT: 50 Farmers will be targeted for implementing Solar equipments operated farm equipments.	<ul style="list-style-type: none"> • 3-4 clusters in Puri, Dhenkanal and nayagarh.
Task 1.7: A pilot study- biodegradable plastic usage in agriculture/pilot testing and assessing environmental performance <i>Lead: NRRI</i> <i>Supporters: All partners</i> <i>Duration: M04 –M39</i>	Nov, 24- Sep, 25	Assam:GHG Estimations for environmental impact study in different systems	<ul style="list-style-type: none"> • Districts: Jorhat, Tinsukia • Total Clusters: 2
	Dec 2024 – Sep 2025	Odisha: NRRI: Trials for mulching using biodegradable plastic to be done at NRRI	<ul style="list-style-type: none"> • On-station experiment will be conducted at ICAR-NRRI for mulching using biodegradable plastic and subsequently it will be upscaled to farmers field
	Dec, 24- Sep, 25	OUAT: 50 Farmers will be targeted for demonstration on Vegetable production using biodegradable polymulching and trellis net	<ul style="list-style-type: none"> • 3-4 clusters in Puri, Dhenkanal and Nayagarh.

WP2: Knowledge Management, Capacity Building, Gender, and Youth Integration, (Lead: MSSRF), M01 –M48			
Tasks to be implemented, lead partners and duration	Oct 2024 –Sep 2025	Work Planned/ Expected outputs	Remarks
Task 2.1: Virtual village knowledge centre - digital network established, farmer connectivity and knowledge exchange promoted <i>Lead: MSSRF</i> <i>Supporters: All partners</i> <i>Duration: M02 –M18</i>	<i>October –September</i>	<ul style="list-style-type: none"> • 8Virtual VKCs (4 in Assam and 4 in Odisha) established in collaboration with existing FPOs/ SHG federations • 150 lead farmers (30% women and youth) trained on CRRA technologies demonstrated by partner organizations and train a cadre of plant doctors from KVKs. 	<ul style="list-style-type: none"> • <i>The virtual VKC hub serves as contact points to transfer technology information, knowledge, and skills to approx. 4500 men and women farmers (35-40% women farmers).</i> • <i>Created 8 digital clusters, 4 in Assam and 4 in Odisha</i> • <i>Build the capacity on digital skills to 150 lead farmers</i> • <i>Captured the data base of each farmer</i>
Task 2.2: Institutional capacity building and customized training <i>Lead: MSSRF</i> <i>Supporters: All Partners</i> <i>Duration M03 –M48</i>	<i>October –September</i>	<ul style="list-style-type: none"> • 20 KVK (Farmer knowledge centre) experts as plant doctors to provide plant health information to 25000 farmers in both the states in the first year 	<ul style="list-style-type: none"> • <i>Plant doctors training of module 1 and 2 conducted for 20 KVKs scientists (10 in Assam and 10 in Odisha)</i> • <i>Conducted 20 plant clinic sessions and provided plant health advisories to 6250 farmers (Women:1560)</i>
Task 2.3:Mainstreaming Gender and Youth in upscaling CRRA technologies <i>Lead: MSSRF</i> <i>Supporters:All Partners</i> <i>Duration: M03 –M24</i>	<i>October – May</i>	<ul style="list-style-type: none"> • Report on Stakeholder Analysis and Gendered Need Assessment 	<ul style="list-style-type: none"> • <i>Conducted 4 gendered need assessment (2 in Assam and 2 in Odisha)</i> • <i>Conducted 2 stakeholders' analysis (2 in Assam and 2 in Odisha)</i> • <i>Promoting gender- and youth responsive approach to ensure the participation of women and actively in the process. promoting gender and youth-specific content and technologies</i>
Task 2.4: Knowledge Exchange and Management <i>Lead : MSSRF</i> <i>Supporters : All Partners</i> <i>Duration : M01 –M48</i>	<i>October –September</i>	<ul style="list-style-type: none"> • 2 Capacity building & facilitation programs to partners in first year • 20 IEC materials, contents, one web site and 2 briefs 	<ul style="list-style-type: none"> • <i>2 programs per site for four sites per year for 50 members in partnership with SAUs and KVKs</i> • <i>4500 farmers (30% of women and youth) received skill and knowledge through the digital platform on CRRA technologies</i> • <i>20 Location specific and demand-based content prepared in local languages</i>

WP3: Stakeholder Integration, Upscaling Frameworks, Dissemination, & Exploitation Strategies(Lead: AAU and OUAT), M01– M48			
Tasks to be implemented, lead partners and duration	Oct 2024 – Sep 2025	Work Planned/ Expected outputs	Remarks
Task 3.1:Stakeholder Engagement <i>Lead: AAU and OUAT</i> <i>Supporters: All partners</i> <i>Duration: M02 –M48</i>	<i>October –September</i>	<ul style="list-style-type: none"> Two SAC workshops jointly organized (one in Assam and one in Odisha) 	<ul style="list-style-type: none"> SAC will be reorganized and notified with inclusion of members from Govt. and private institutions required for project work.
Task 3.4: Implementation of the Dissemination Plan <i>Lead : NIBIO</i> <i>Supporters : All Partners</i> <i>Duration : M01 –M48</i>	<i>October – September</i>	<ul style="list-style-type: none"> Two stakeholders workshops/ training with FPO & Mission Shakthi Federations per year @ 50 participants 	<ul style="list-style-type: none"> Stakeholder's workshop will disseminate the proven technologies of project to grassroot level.

Note:Task 3.2: *Policy dialogue forums organized and inputs to state climate action plans and NDCs co-developed* and Task 3.3 (*Upscaling frameworks/manuals for 6 CSA interventions co-developed*) will start in the second year.

WP4: Management & Coordination Platform (Lead: NIBIO): M01–M48			
Tasks to be implemented, lead partners and duration	Oct 2024 – Sep 2025	Work Planned/ Expected outputs	Remarks
Task 4.1: Monitor Project progress <i>Lead: NIBIO</i> <i>Supporters: All partners</i> <i>Duration: M01–M48</i>	<i>October –September</i>	<ul style="list-style-type: none"> • Project work plan prepared and approved by project management committee • Project progress reports and annual report 	<ul style="list-style-type: none"> • <i>Quarterly follow ups and implementation</i>
Task 4.2: Manage risks and resolve potential problems <i>Lead: NIBIO</i> <i>Supporters: All partners</i> <i>Duration: M01–M48</i>	<i>October –September</i>	<ul style="list-style-type: none"> • A Risk Management Plan prepared, and risks resolved 	<ul style="list-style-type: none"> • <i>Follow up the plan</i>
Task 4.3 Project consortium meetings <i>Lead: NIBIO</i> <i>Supporters: All partners</i> <i>Duration: M01–M48</i>	<i>October –September</i>	<ul style="list-style-type: none"> • Inception workshop to be organized in early 2025 in addition to regular online meetings • Project website initiated 	<ul style="list-style-type: none"> • <i>Project consortium meetings will be conducted in each quarter</i>