

Reduce-Reuse-Recycle Rice Initiative for Climate Smart Agriculture Phase Two (R4iCSA-II) Project

COMMISSIONED BY	IMPLEMENTOR
IKEA Foundation	Kilimo Trust
PROJECT COUNTRIES	DURATION
Kenya and Uganda	5 years (1-Oct-2022 to 30-Sept-2027)

Areas within the Sustainable Development Goals that this project contributes to are as follows;

SUSTAINABLE DEVELOPMENT GOALS



Goal of the Project



Improved incomes and food security for 10,000 rice farming households and other value chain actors in Kenya and Uganda.

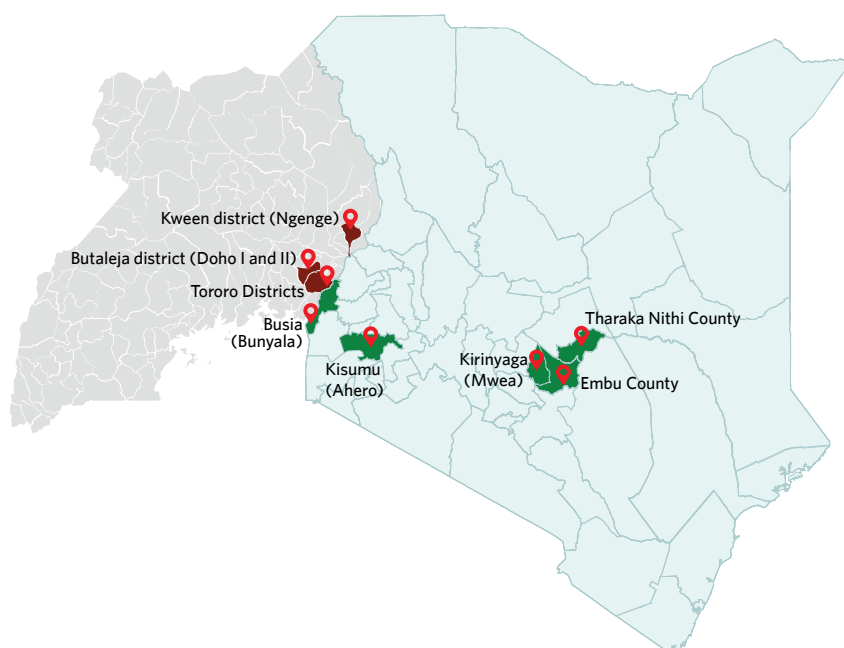
Specific objectives of the project are:

1. To generate and verify evidence for promotion of innovative technologies and management practices for regenerative and sustainable rice farming systems that lead to better livelihoods and environment
2. Build robust evidence of economic benefits of innovations that utilize rice by-products tested in phase one of project implementation.
3. To generate evidence that will inform stakeholder engagement in the pursuit of creating an enabling environment to promote regenerative agriculture in the rice sub sector

R4iCSA-II Expected Outcomes

- Increased adoption of sustainable rice production practices
- Increased awareness on wetlands conservation and protection using evidence generated from the studies
- Increased adoption of rice-legumes rotations (green grams, soya beans, chickpeas) and short duration pigeon peas) among rice farmers.
- Increased access to inputs and output markets for rice products and by-products and legumes
- Increased adoption and utilization of products and by-products from rice and other complementary farm enterprises
- Evidence based knowledge products on circular and regenerative practices documented and shared to influence policy shift
- Institutional Capacity of KT strengthened

Areas of operation



The achievements of the phase I of the project



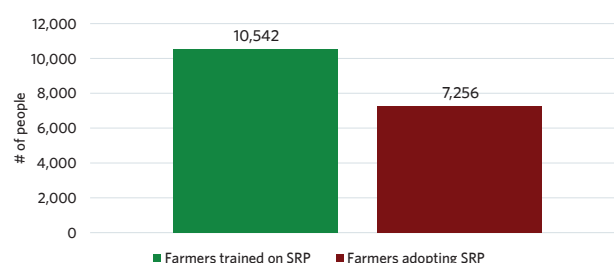
Number of farmers Trained on SRP, GAP:

10,542 farmers trained on SRP (Male 6,666, Female 3,876, and Youth 1,684)

7,256 adopting SRP (Male 4,264, Female 2,992 and Youth 1,160)

69% Adoption rate

Rate of adoption of SRP based on the numbers trained



The achievements of the phase I of the project



2,807.1 Ha put on SRP practice.



1,210 farmers adopting rice legume integration R-L-I



292.98MT of soybean valued at **USD 167,629.78** produced



711MT of biochar worth **USD284,400** carbonized from rice husks.



37,607.2 MT of organic fertilizer derived from rice straws using vermicomposter and BM innovation



410 youths actively involved in rice agribusiness investment (Kenya and Uganda)



19 businesses/value chain linkages initiated (**13** in Kenya and **6** in Uganda)



37 collaborators and value chain actors engaged through capacity building.



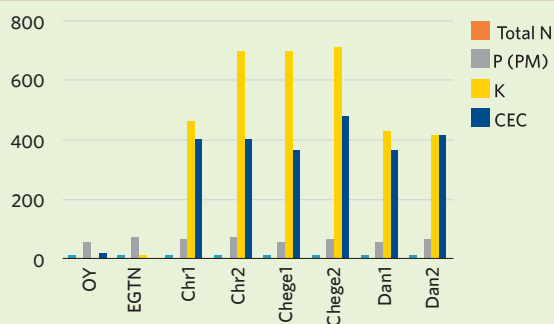
11,000 farmers onboarded and profiled into Digital and extension platform



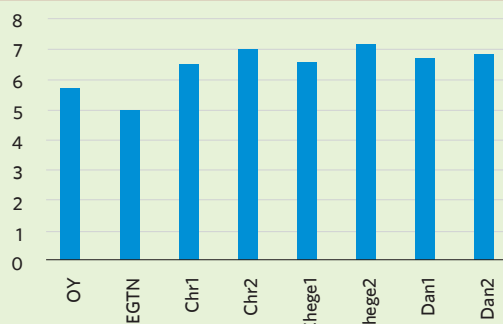
21 innovations developed: **1.** Husk stove prototype, **2.** Super burner, **3.** Bio-effective microbes, **4.** Vermicompost, **5.** Vermi-juice foliar & pesticides, **6.** Urea Deep Placement Concept, **7.** Biochar gasification process, **8.** Biochar fortification, **9.** Black Soldier Fly for frass, **10.** Black Soldier Fly larvae for concentrates, **11.** Pre-composting accelerator and fodder additives, **12.** Wage workers concept, **13.** Silica extraction from husks, **14.** Mushroom production, **15.** Rice Legume Integration R-L-I, **16.** Paddy rice intermittent water supply, **17.** Palletized husks utility stove, **18.** Biochar substrate for tree nurseries, **19.** Rice parboiling using rice husks, **20.** Fortified instant porridge/snacks and, **21.** Laser leveling of rice fields.



Improved seasonal soil macronutrient levels as a result of the impact of Legumes on soil. Demonstrated as below



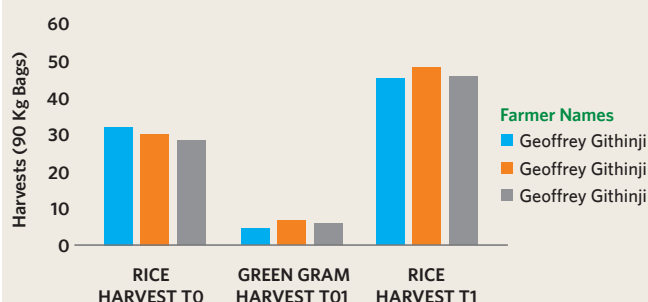
Macronutrient changes in greengram demo, West Kano 2021



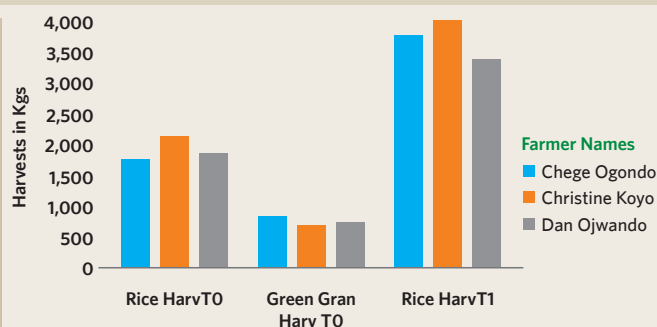
PH Levels



Drastic increase in rice yields as a result of rice-green gram integration in Mwea and West Kano. This is illustrated as follows;



Effect of Green-grams off-season crop Kano



Effect of Green-grams off-season crop on rice Harvests Plot C1 - West



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