

# *The Economic Benefits of Regenerative Agriculture*

## *Practices*

26 July 2022

*“Organic Fertilizers use in Rwanda engagement in a profitable, productive, to achieve sustainable and inclusive food systems. Remedies to the soil degradation”*

The outlook of crop output and fertilizers between 2007 and 2014 suggested a positive and proportional relationship between increased inorganic fertilizer use and crop output. But a close examination of crop responsiveness through production and nutrient use efficiency based on a Cobb-Douglas production function suggested that the proportionality of the relationship was lower than expected. The coefficients showing the percentage increase in output for every one-percentage increase in fertilizer use 0.35%, 0.84%, 0.14% and 0.18% for aggregate crop total, maize, rice and beans respectively with weak significance for beans and rice. The response for Irish potato was negligible while that for wheat was not significant.

**The results of the value cost ratio VCR were based on the rule of thumb that farmers would be more willing to use inorganic fertilizers if the additional value of crops produced exceed the cost of fertilizer used by a ratio of 3:1.**





**Antoinette Mbabazi, Representative RICA (Rwanda Inspectorate Competition and Consumer Protection Authority)**

The REALMS project brought together around 45 government officials, private sector, key players in the RA and Circular practices, non-government organizations, research institutions, SMEs and Farmer Cooperatives active in the RA (Regenerative Agriculture), and Circular Practices. The mapping of the participants/stakeholders will be guided by the identified key targeted platforms, active players in the RA, institutions and people targeted in the reflection meeting highlighted, institutions with renown work either in the generation of evidence or playmaker in the advocacy area of concerned targeted policy, cooperatives, SMEs, government influential agencies local or central, sister's organizations / projects working in

## **GENERAL OBJECTIVE OF THE EVENT**

The focus of this event is to contribute to the development of RA policies and engaging with key stakeholders from the government, private sector, civil society organizations, farmer's organizations, knowledge, and research organizations. The general objective is to contribute to the knowledge, evidence generated in the RA that may lead to a decreased reliance on imported fertilizers and increased food security.



**From Left to Right: RDO, Imbaraga, (both are from CSOs), Envirom (Private sector), REALMS and RICA (Rwanda Institute for Conservation Agriculture)**

The outcome of the workshop:

*“Effectiveness and Efficiency of Fertilizer use in Rwanda”* concluded the need to embrace a structure at farm level; building on the resilience of complementarity of inputs by balancing inorganic fertilizer use with organic manure, improved seed and irrigation. This is the basis of the REALMS project promoting regenerative agriculture solutions. Fertilizers key ingredient needed to help crops grow is in short supply across the world. Global prices have also skyrocketed in part because of the Russia and Ukraine Conflict.

The amount of fertilizers available globally has almost halved, while the cost of some types have nearly tripled over the past twelve months according to the United Nations.



Regenerative Agriculture Products Exhibition

## RELEVANT POLICIES & STRATEGIES

The theme of the event included consideration of the following policies:

- Soil and environment conservation / Law determines modalities for protecting, conserving, and promoting the environment
- PSTA 4 & CIP policies / the increase of productive inputs (fertilizers), water use (improvement of irrigation) and a higher level of land use (marshland development)
- Agri PPD platform / Agriculture Public-private dialogue (PPD) as a structured engagement mechanism that aims to bring together all relevant stakeholders.
- Chemical inputs / National policy frameworks that support ecosystem approaches as alternatives to synthetic pesticides / fertilizers etc

The cost of fertilizers was already high following the economic fall out of the covid 19 pandemic. The crisis of to date Russia and Ukraine worsen the situation. In that situation, farmers are having difficulties to access these inorganics fertilizers due to the high prices of agricultural inputs. The resilience of agriculture is to maximize the production and use of organic inputs efficiently and the creation of the enabled environment that gives ample space to the RA practices through the evidence creation.

## At a glance:



 IKEA Foundation





**Project Name:** Regenerative Agricultural Practices for Improved Livelihoods and Market System ( REALMS) | **Project aim:** To improve the livelihoods of smallholder farmers through creating conditions for the adoption of Regenerative Agricultural Practices. | **Countries:** Rwanda & Kenya

**Donor:** The IKEA Foundation

**Implementing Organisation:** SNV Netherlands Development Organisation

**Duration:** 4 Years | **Targeted Impact:** 10,000 smallholder farmers

**For more information:** <https://realmsproject.org/>