

REGENERATIVE AGRICULTURE AND FARMER EMPOWERMENT PROGRAM

RAJANPUR, 2024

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MESSAGE FROM THE CEO



When Pakistan faced its worst floods in living memory, our mission was simple, to bring food, dignity, and hope to those who had lost everything. Through Cargill's trust and partnership, that mission grew into something much larger, a movement to rebuild lives, regenerate livelihoods, and restore the land itself.

Together, we have not only rebuilt homes and harvests, we have rebuilt confidence. What began as a response to crisis has evolved into a shared commitment to sustainability. From providing relief to families in distress, to empowering smallholder farmers with training, resources, and regenerative practices, our partnership with Cargill has redefined what recovery can mean for Pakistan.

This journey from relief to regeneration has been one of learning, humility, and hope. It has shown us that when compassion meets collaboration, entire systems can be transformed, and communities once on the brink can thrive again. We look to the future inspired by this partnership, driven by data, grounded in humanity, and united by a simple belief: that every person deserves the chance not just to survive, but to grow and flourish.

Qasim Javaid
CEO, Rizq

EXECUTIVE SUMMARY

The **2022 monsoon floods** devastated Pakistan's agricultural heartland. They affected more than **35 million people** and destroyed crops, livelihoods and savings across Sindh, Balochistan and South Punjab. Smallholder farmers were among the most exposed to food insecurity and future climate shocks, since many already relied on high-interest informal credit and low-quality inputs.

Building on its flood relief work, **Rizq partnered with Cargill in 2024**, with funding facilitated through CAF America, to move from relief to long-term recovery. The project had three objectives:

- provide direct input support to vulnerable cotton farmers
- establish a Regenerative Agriculture (RA) Model Farm to research sustainable practices
- use policy dialogues and farmer training to scale those practices

Under the Rizq Kisaan Dost Program, **110 smallholder cotton farmers in Rajanpur, cultivating 550 acres,** received certified climate-resilient seed, fertiliser and seed treatment at zero upfront cost. The inputs were provided as interest-free loans repaid after harvest. With training and Rizq Field Officer support, farmers achieved **40–60% higher yields** than baseline and an average income increase of around **USD 1,500,** helping them escape cycles of predatory debt.

In parallel, a 3-acre RA Model Farm in Lahore tested five practices: low/no tillage, reduced chemical inputs, mulching, livestock integration and agroforestry. The trials ran across the Rice/Cotton 2024 and Wheat 2024–25 cycles. The farm recorded 30% lower production costs, competitive yields, and a 35% reduction in water use through raised beds and mulching for wheat and Alternate Wetting and Drying for rice.

These findings informed two showcase trainings in Lahore and Kot Addu, which reached 200 smallholder farmers. They also informed three policy dialogues, held at LUMS, MNS University of Agriculture Multan, and the Asian Institute of Technology in Bangkok. The dialogues brought together government, academia, the private sector and researchers to discuss integrating RA into provincial and national agricultural strategies.

Together, these results show that affordable finance, quality inputs and evidence-based regenerative practice can deliver immediate gains for farmers while building the case for systemic change in Pakistan's agriculture.



PROJECT BACKGROUND



Climate change has hit Pakistan very hard, with vulnerable populations bearing the brunt of climate-related disasters and damages.
The monsoon season of 2022 saw extremely heavy rains and landslides, drowning over a third of Pakistan, hitting Sindh and Balochistan the hardest. In what the UN best described as "monsoon on steroids", over **1,700** individuals lost their lives according to National Disaster Management Authority (NDMA) figures, with more than **12,000** injured. Reportedly, over **35 million** individuals were affected by the floods across the country, with more than **1.5 million** homes destroyed and **900,000 acres** of farmland flooded.

Beyond the reported numbers, there were quieter wars that the affected individuals were fighting in the form of hunger, rising poverty and a spread of diseases. Agriculture was one of the worst hit sectors, with the crop losses pushing food prices out of reach for millions, while simultaneously causing a shortage of essential crops in the country. Disasters of this scale expose the existing systemic inequalities, which disproportionately affect the most vulnerable populations the hardest.

These disasters call for large-scale systemic changes at all levels of disaster management, as well as climate policies. Situations like these also demand action by civil society and non-governmental organizations to help rebuild resilience and rehabilitate livelihoods, homes and capacities in a sustainable manner through climate-smart, eco-friendly interventions.

PROJECT OVERVIEW

Following the relief work conducted in Sindh, Balochistan, and South Punajb following the devastation caused by the floods of 2022, Rizq teams realised the need to intervene to solve root issues in the long run though targeted initiatives in sustainable agricultural practices, ensuring long-term food security for the entire country.

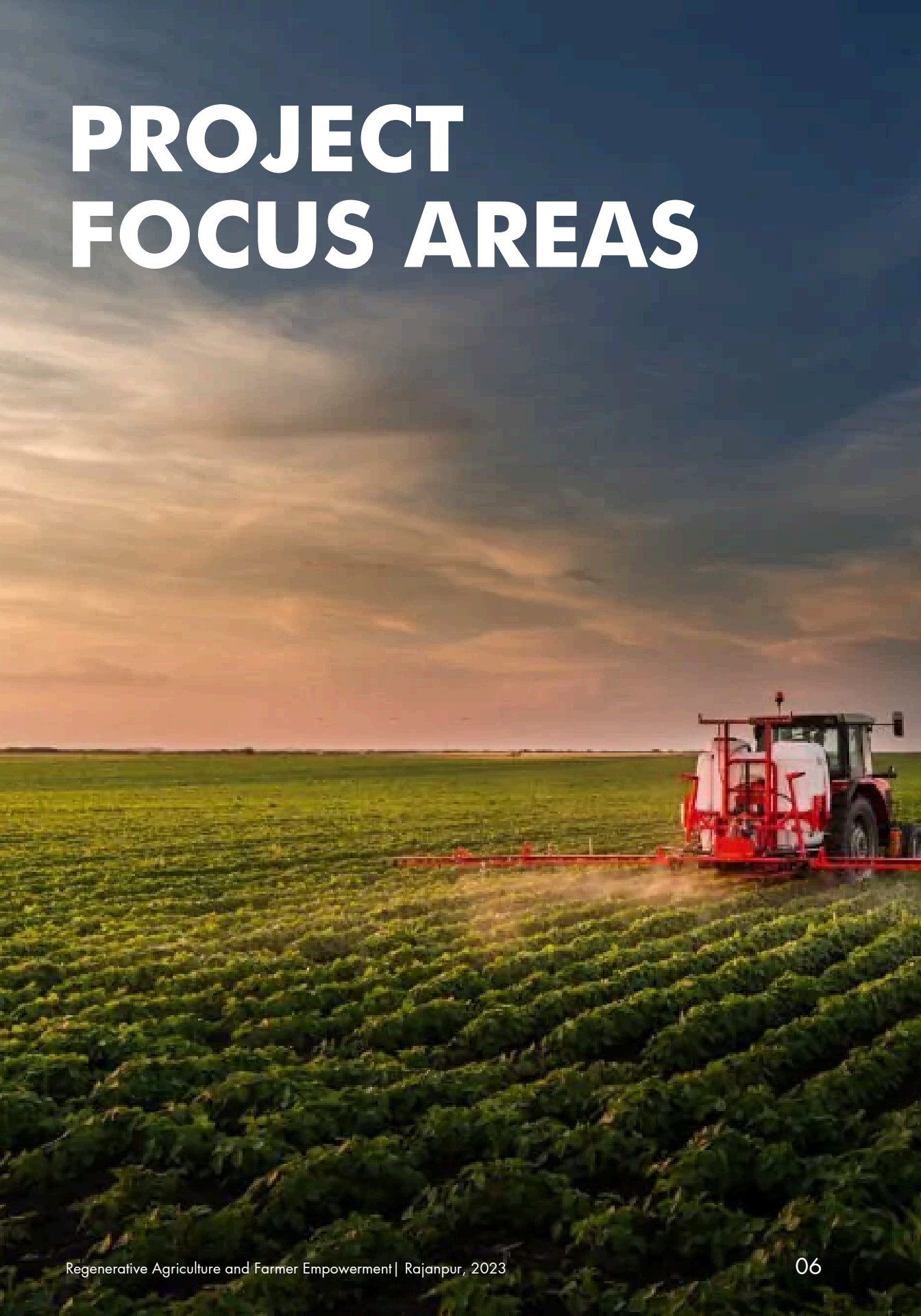
In 2024, Rizq Trust, in partnership with Cargill and with funding facilitated through CAF America, launched a project aimed at empowering smallholder farmers and advancing climate-resilient, regenerative agriculture in Pakistan.

Objectives

1. Providing direct agricultural input support to vulnerable cotton farmers.
2. Establishing a Regenerative Model Farm to research sustainable farming practices.
3. Host policy dialogues with key stakeholders and hold farmer trainings.



PROJECT FOCUS AREAS





Smallholder Farmer Empowerment

Deeply impoverished smallholder cotton farmers in Rajanpur provided with high-quality inputs, including climate-resilient seeds, fertilisers, and seed treatments through interest-free loans. Inputs were provided at zero upfront cost through a series of distributions throughout the cotton cropping cycle, supplemented by capacity-building trainings and extensive Rizq Field Officer support, all aimed at building the capacity of vulnerable farmers, and empowering them to be become resilient in the face of disasters.

Long-term Food Security and Economic Growth

Vulnerable smallholder farmers provided with climate-resilient, certified seeds and high-quality inputs, to build their capacities in the face of future disasaters, ensuring long-term stability in terms of income and food security for their families.

The high-quality seeds and inputs ensured a 40-60% higher yields, leading to net income increase for the farmers, and increased economic activity for the agricultural sector at large.

Diversity, Equity, and Inclusion

The project focused on diversity and inclusivity by including a maximum number of youth and female farmers as a key subset of Rizq's beneficiary farmers; provided with high-quality inputs and key trainings.

The onboarded farmers were freed from exploitative, high-interest agricultural loans and empowered with the means to achieve economic self-sufficiency across multiple cropping cycles

KEY INTERVENTIONS



Regenerative Agriculture and Farmer Empowerment| Rajanpur, 2023

1. Regenerative Agriculture

A 3-acre Regenerative Agriculture (RA) Model Farm was established in Lahore to serve as an initiative and demonstration site for sustainable farming practices that improve soil fertility, water use and chemical inputs.



1.1 Creation of a 3-Acre RA Model Farm (Lahore)

Rizq replicated its established version of the Nagor RA Model Farm in Lahore, supporting crop cultivation and implementation of five key RA protocols across two cropping cycles (Rice/Cotton 2024–25). The model farm supported the gradual implementation of low/no tillage, low/no chemical input utilization, mulching and agroforestry integration.



1.2 Farmer Capacity-Building Training Sessions

Rizq's in-house Agricultural Research Team replicated and fine-tuned the developed framework for model farm implementation. Comparative analyses were conducted on the economic, environmental and social impact of RA practices over each cropping cycle. Research outcomes formed the basis of Rizq's RA-focused workshops and training sessions.

2. RA Model Farm Workshops, Trainings & Advocacy

Along with creating model regenerative farms, Rizq and Cargill also actively worked to accelerate the adoption of regenerative and climate-smart agricultural practices by bridging knowledge gaps, facilitating discussions, and empowering changemakers — particularly agrocultural stakeholders, students, impoverished stakeholders and policy-makers.

2.1 Policy Dialogues – Advancing Regenerative Agriculture

As part of Rizq's ongoing effort to promote sustainable agricultural transformation, a series of policy dialogues and knowledge-sharing sessions have been organized under the Rizq × Cargill partnership, across three locations:

· Asian Institute of Technology, Bangkok, Thailand
· Muhammad Nawaz Shareef University of Agriculture, Multan, Pakistan
· Lahore University of Management Sciences (LUMS), Pakistan







These sessions brought together key stakeholders — government representatives, agricultural universities, private sector partners and research organizations — to discuss the future of regenerative agriculture in Pakistan. The platform encouraged open exchange between policymakers and practitioners, focusing on how RA can be integrated into provincial and national agricultural strategies. Through these engagements, in partnership with Cargill, Rizq positioned itself as a knowledge bridge between grassroots innovation and institutional policy.

2.2 Farmer Trainings & RA Workshops

Two farmer trainings were conducted over the course of the grant period, including:

· 2 capacity-building showcase trainings conducted — one at the RA Model Farm in Lahore and another within a smallholder farming community in Kot Addu
· 100+ smallholder farmers targeted through each workshop, attendees included both Rizq's own beneficiary farmers as well as other farmers in the community wishing to attend







Conducted at the beginning of the crop cycle, the trainings provided farmers with an effective introduction to RA practices, especially in terms of yield enhancement, reduced production costs and sustainable impact. These trainings helped build farmer confidence in the program at the outset, and translated to real results on the ground — reducing excessive pesticide and fertiliser usage, more precise input application, and greater know-how about optimising germination rates through correct seed-to-seed distancing and optimal seed treatment.

Workshops and trainings serve to accelerate adoption of RA practices and address existing roadblocks, enhancing the impact and urgency of climate action. The farmers onboarded were among the most impoverished, with limited access to farmer training and advocacy — this exercise provided them with an effective introduction to RA practices.

3. Rizq Kisaan Dost Program

Rizq strongly believes that financial difficulties must never become a barrier to farming. Smallholder farmers form the backbone of our food system, yet remain extremely neglected and limited given their financial constraints. Under the Rizq × Cargill project, Rizq continued its mission to empower impoverished small farmers by providing essential agricultural inputs at zero up-front cost, enabling them to grow better with ease. After harvest, farmers return the value of inputs in monetary terms at a zero interest rate.

3.1 Empowering Small Farmers in Rajanpur

Under the Kisaan Dost Program, Rizq, in partnership with Cargill and with support from CAF America, empowered vulnerable cotton farmers in Rajanpur, South Punjab, who had long struggled with climate shocks, rising input costs and exploitative lending systems.

Through this initiative, 110 smallholder farmers cultivating 550 acres of land were provided with certified, climate-resilient seeds, high-quality fertilisers and hands-on agricultural training, all at zero upfront cost through interest-free input support. This approach freed farmers from predatory debt cycles and enabled them to invest their time and energy in improving crop quality and productivity.





As a result, farmers achieved 40–60% higher yields on average from baseline compared to previous years and experienced an average income increase of USD 1,500, directly enhancing their families' food security and financial stability.

Key Impact

3 acre	model regenerative farm established in Lahore
03	policy dialogues conducted
200	small-holder farmers trained
110	farmers provided with inputs



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STORY OF CHANGE



“Before this program, I used to take high-interest loans to buy low-quality seeds. The yields were poor, and debt kept growing every season. Rizq’s support changed that completely, we received the best seeds, fertiliser, and training without any upfront cost. My cotton yield increased by almost half, and for the first time, I earned enough to save. This project grew my confidence and gave my family stability.”

Ahmad Hussain
Cotton Farmer, Rajanpur

PROJECT OUTCOMES

Beyond numerical impact, the project also helped create long-term community impact as well as acceptance of regenerative practices amongst different agricultural stakeholders — not only opening new opportunities for Rizq's agricultural interventions, but also setting the stage for a long-term sustainable agricultural transformation in Pakistan.



Increased Yield; Lower Costs

The Regenerative Agricultural farm showcased high potential for creation of sustainable livelihoods tailored to different regional needs, able to be replicated across Punjab's different ecological zones. The techniques utilised in the model farms showed 30% lowered costs of production and competitive yields, while also causing a 35% decrease in water usage due to raised beds and mulching (wheat) and Alternate Wetting and Drying (AWD, rice).



Evidence-Backed Practices

The policy dialogues built up on the tangible outcomes from RA farms, by providing a comprehensive, evidence-driven overview of the feasibility and scalability of RA practices in Pakistan, policy recommendations and impact analyses, and market-leading regional case studies conducted by Rizq's Knowledge Hub.

In-depth awareness, policy discussion and overall momentum were created regarding the importance of key climate-based outcomes of implementing RA practices, including reduced CO2 emissions, increased water productivity, and regeneration of soil health.

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Long-term Resilience for Communities

110 impoverished smallholder farmers provided with climate-resilient, certified seeds and high-quality inputs for 2024 cotton cropping cycle, allowing them to generate 40-60% higher yields due to input quality, improved germination rates, improved input application, and capacity-building onboarding training. Net income increase of at least $1500 for each small farmer receiving inputs, helping not just break their debt cycles, but also promoting a culture of savings.



CONCLUSION

The Rizq x Cargill project addressed a root cause of rural vulnerability. Smallholder farmers lack quality inputs, fair finance and up-to-date agricultural knowledge, which leaves them the least able to withstand climate shocks. The project showed that tackling all three together produces results quickly.

For 110 farming families in Rajanpur, interest-free input support and training led to higher yields and higher incomes. As one farmer put it, it was “for the first time” enough to save. Because inputs are repaid after harvest, the model is designed to keep supporting farmers across seasons rather than ending with a single distribution. The Lahore model farm produced early local evidence that regenerative practices can cut costs and water use without sacrificing yields. The trainings and policy dialogues have begun carrying that evidence to farmers and decision-makers.

NEXT-PHASE PRIORITIES

01 track repayment, yields and incomes over further cropping cycles

02 extend model farm research across Punjab’s different ecological zones

03 turn policy dialogue into concrete provincial commitments on regenerative agriculture

Rizq is grateful to Cargill and CAF America for their partnership in helping some of Pakistan’s most neglected farming communities move from recovery toward lasting resilience.

Watch Full Project Highlights

rizq x CDP Center for Disaster Philanthropy