Policy Memo: Recommendations from the Rizq-MNSUAM Sustainable Agriculture Policy Dialogue

EXECUTIVE SUMMARY

This memo recommends that the Government of Pakistan take targeted action to strengthen regenerative agriculture, expand access to climate-smart technology and reframe corporate farming to include small farmers in South Punjab. These steps are critical to addressing climate vulnerability, institutional disconnect, and declining productivity across the region.

The recommendations are based on insights generated through the Sustainable Agriculture Policy Dialogue co-hosted by Rizq and MNSUAM in Multan, where stakeholders across research, policy and agricultural practice discussed barriers and emerging solutions to advance sustainable agriculture in Pakistan.

SPEAKER ORGANISATIONS:

BACKGROUND & METHODOLOGY

The Sustainable Agriculture Policy Dialogue, co-hosted by Rizq and the Muhammad Nawaz Shareef University of Agriculture, Multan (MNSUAM), brought together key voices from academia, policy and on-ground practice to address the pressing agricultural challenges facing South Punjab. Framed around the vision of bridging policy and practice, the opening session set the tone for a grounded and forward-looking exchange.

Speakers emphasized the importance of collective wisdom - drawing on academic research, policy insights and the lived realities of smallholder farmers. A recurring concern was the disconnect between modern agricultural systems and the traditional regenerative practices once embedded in Pakistan's agrarian history. Keynote speakers noted that while corporate agriculture has become more prominent, it must not overshadow the revival and integration of regenerative agriculture (RA), which carries both environmental and cultural significance.

While many policy dialogues take place, there is a pressing need to ensure that the findings and recommendations from such dialogues are actively implemented into real-world practices to create meaningful change on the ground.

The Dialogue also underlined the need to build stronger linkages between corporate farming ventures and smallholder farmers, ensuring that benefits are shared equitably and not limited to large landholders. Technology was identified as a key enabler for transforming agriculture, but speakers urged that uneducated and underserved farming communities, particularly in South Punjab, remain an untapped demographic requiring focused awareness and support.

Throughout the discussions, there was a strong call to revisit and update Pakistan's national agriculture policy to reflect regional realities, with specific focus on areas like Multan, Cholistan (Bahawalpur), Rahim Yar Khan and other areas of South Punjab. The Dialogue affirmed that South Punjab, with its ecological diversity and agricultural potential, must be centered in national agricultural planning if long-term food security and climate resilience are to be achieved. research, most smallholder farmers remain disconnected from innovation, knowledge and institutional support.

KEY FINDINGS AND CORE POLICY QUESTIONS

What is happening?

South Punjab's agriculture is increasingly strained by climate change, soil degradation, outdated inputs and poor water management. Despite available research, most smallholder farmers remain disconnected from innovation, knowledge and institutional support.

What is working?

Emerging models such as Rizq's regenerative pilot in Khairpur, corporate farming pilot in Cholistan, AI-based farmer advisory platforms, multilingual call centers and inclusive corporate engagement (e.g., National Foods Ltd.), demonstrate scalable solutions when paired with enabling support.

What should be done next?

To build long-term resilience, there is a need to scale localized regenerative practices, develop region-specific and crop-specific protocols, invest in authenticated digital platforms, subsidize smart equipment and institutionalize farmer education and research outreach.

CORE THEMES IDENTIFIED IN THE POLICY DIALOGUE

1. Trends of Regenerative and Sustainable Agriculture in South Punjab

South Punjab faces growing agricultural vulnerability due to climate change, making a region-specific and climate-resilient agricultural policy an urgent need. Despite the increasing urgency, there remains a glaring gap between research, policy and on-ground farming realities. Stakeholders highlighted that while regenerative and sustainable agriculture practices offer promising solutions - particularly in restoring soil health, conserving water and maintaining biodiversity - these practices remain poorly understood by smallholder farmers due to lack of awareness, limited access to information and weak institutional support. **Soil degradation, salinity and the decline in cotton and mango productivity are linked to redundant input practices and minimal organic matter, exacerbated by the impacts of climate change.**

While countries like Australia have demonstrated success through integrated public-private partnerships and streamlined credit-insurance models, Pakistan's smallholders continue to face credit constraints, fragmented policies and poor implementation of subsidies and support systems. However, recent initiatives offer replicable models for localized regenerative approaches. Under the Revive & Rise Sindh program, Rizq, alongside Bank Alfalah, onboarded over 200 smallholder farmers in Khairpur, providing access to quality inputs, fixed input pricing and easy credit for farmers cultivating less than five acres. Similarly in South Punjab, a collaborative project with Nestlé in Jalalpur piloted protocols for cotton and wheat in high-salinity soils within an industrial facility - demonstrating effective soil recovery strategies that can be adapted by farmers in similar conditions.

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The Better Cotton Initiative (BCI) has also shown the viability of regenerative practices for cotton, though efforts are still being made to expand these practices for smallholder farmers. Cases like Cholistan show that with proper regenerative planning, even deserts can be transformed into cultivable lands - models that could be replicated in Thal, interior Sindh and parts of Balochistan. Yet despite these examples, there is still no institutional push toward establishing model farms or systematically disseminating field-tested, practical knowledge. **From the absence of coordinated tractor policies to the lack of region-specific and crop-specific smart agriculture frameworks, the disconnect across government, agribusiness and research institutions continues to leave farmers unsupported.** A holistic approach that combines regenerative, organic and sustainable practices is not just aspirational - it is essential for restoring South Punjab's agricultural resilience.

2. The Role of Technology in Agricultural Practices

> *Without deliberate efforts to localize technology, streamline digital extension services and link innovation with affordability, Pakistan risks wkidening the gap between tech-enabled solutions and those they are meant to serve.*

The integration of technology into agriculture is gaining momentum in Pakistan, with South Punjab emerging as a critical testing ground for innovation. Numerous agri-tech companies and institutional actors, including those from the Urban Unit, have launched initiatives ranging from climate-smart agriculture and space-based regional mapping to the Kisaan Card and Green Tractor schemes, with assistance from SUPARCO. One notable example is ConcaveAgri's development of Pakistan's first AI-powered chatbot to assist farmers across six key crops, offering localized guidance in Urdu and soon in regional languages such as Pashto and Seraiki. Similarly, SAWIE has established multilingual call centers to support farmers with real-time agronomic advice.

Despite this progress, **a key concern remains: many of these solutions are either imported without local adaptation or fail to account for the ground realities of smallholder farmers.** High-tech tractors imported from Italy, equipped with GPS and autopilot systems, are unaffordable for most farmers - highlighting the need for targeted subsidies and access-based government policies. Moreover, while data is being collected at unprecedented scale, there is a lack of authenticated, organized platforms that can transform this data into actionable intelligence for the farming community. Without deliberate efforts to localize technology, streamline digital extension services and link innovation with affordability, Pakistan risks widening the gap between tech-enabled solutions and those they are meant to serve. As climate stress and population pressure increase, building a sustainable, inclusive and digitally driven agricultural system has become a dire need.

3. Corporate Farming and its Prevailing Trends in Pakistan

Corporate farming presents immense potential for transforming Pakistan's agricultural sector, yet its perception remains limited and exclusionary. Often viewed as a domain reserved for large landholders and elite investors, corporate farming is mistakenly distanced from smallholder realities. However, the 2018 National Agriculture Policy of Pakistan explicitly uses the term **"small commercial farmers"**, indicating that corporate farming is not inherently restricted to large-scale actors. When structured inclusively, corporate agriculture can enhance efficiency, boost output and offer market access to farmers traditionally excluded from formal value chains.

Initiatives such as the Green Pakistan Initiative in Cholistan and Verdora Ventures' tomato and chilli farming model in rural Sindh illustrate the viability of scaled yet inclusive corporate agriculture in Pakistan. In Cholistan, Rizq launched a corporate farming initiative in February 2024, beginning with 2,000 acres of barren desert land. Through strategic investment, efficient land planning and use of high-performance machinery, the project has since expanded to 5,000 acres. A key finding from this initiative was that in Cholistan's arid terrain, access to water was a more critical constraint than soil quality. With the use of modern, high-efficiency equipment, land preparation required nearly five times less effort than traditional methods - making desert cultivation not only feasible but replicable. Similarly, Verdora Ventures, operating under National Foods Ltd., began cultivating tomatoes on a minimum scale of 50 acres in interior Sindh to reduce the company's dependency on imported produce for ketchup manufacturing. The success of this initiative not only shifted their tomato supply chain entirely to local sources but also enabled further diversification into chilli production for other product lines. **These cases demonstrate that when supported by responsive policy and private-sector engagement, corporate farming can serve as a scalable model that empowers smallholder clusters, strengthens local supply chains and transforms agriculture into a commercially viable sector.** However, this transformation will remain limited unless agriculture is systematically reframed as a business: one that demands investment, research, and long-term planning. Without this shift, corporate farming will continue to fall short of its potential to uplift rural economies and secure Pakistan's agricultural future.

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RECOMMENDATIONS

To address the intersecting challenges of climate change, productivity decline, and institutional disconnect in South Punjab's agriculture, the following actions are recommended:

1. **Encourage a blended model of regenerative, organic and sustainable agriculture** through government-supported pilot projects. Practices like cover cropping, agroforestry and crop diversification should be incentivized to restore soil health and build climate resilience.
2. Establish structured mechanisms to **translate agricultural research into farmer-accessible knowledge**. Government extension services must be reoriented to bridge the gap between scientific advancements and on-ground realities, especially for smallholder farmers.
3. **Invest in soil amendment, composting techniques and tilling methods** tailored to the climatic and geographic conditions of regions such as Multan, Bahawalpur and Rahim Yar Khan.
4. **Create authenticated, centralized data platforms** to make agricultural data actionable. Support farmer-facing technologies like AI chatbots and call centers in local languages, ensuring digital tools are affordable, relevant and widely accessible.
5. **Provide targeted subsidies** on modern agricultural machinery, such as GPS-enabled tractors and precision tools, to improve accessibility for small and medium farmers.
6. **Build inclusive corporate farming models** that engage small commercial farmers. Encourage public-private partnerships that prioritize equity, access and long-term sustainability.
7. Launch government-backed education drives to **improve farmers' understanding of climate change, soil health and market dynamics**. Without practical awareness and trust in new approaches, adoption of sustainable practices will remain limited.

CONCLUSION

South Punjab sits at the intersection of vulnerability and opportunity. While climate change, population expulsion intensify and systemic gaps widen, the region also holds the knowledge, institutional will and innovation capacity needed for meaningful transformation. What remains is alignment: a coordinated push that brings policy, research, private sector innovation and farmers into conversation with each other. Without this, even the best ideas risk becoming inaccessible or irrelevant. Acting now is not only a matter of agricultural urgency, but of economic justice and climate adaptation. The road ahead requires resilience, but the foundations, as outlined during this dialogue, are already in place. What happens next will define the region's resilience for decades to come.

We would like to acknowledge Cargill for their valuable partnership and their critical role in enabling dialogues that bridge policy, practice and innovation.

EVENT GALLERY

Dr. Irfan Baig, head of Agricultural Economics department at MNSUAM speaks at the event.

Dr. Atta-ur-Rehman, Rizq's project lead for agricultural programs sharing key insights.

COO Verdora Ventures, Syed Muhammad Mahd, speaks at the event.

Professor Dr. Shafqat Saeed shares his speaking as a panelist.

The panelists share a lighthearted moment during the event.

Souvenirs being distributed amongst panelists.

Prof. Dr. Hammad Nadeem Tahir raising crucial points during the event.

Dr. Majid Ikram, Program Lead Agriculture and Livestock Department at Rizq, sharing field insights.