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# Earth to Food: Reclaiming Our Agricultural Future

A presentation on the past, present, and future of our relationship with soil and agriculture



PQNK: Cultivating Sustainable Tomorrow Through Regenerative Agriculture

# ORIGINS & HARMONY - Earth's Original Design

## Earth's Original Design:

- Earth was created as a living system for diverse life forms
- Vegetation was designed as the primary food source for all beings
- Every inch of soil contained minerals necessary for plant growth
- A perfect balance existed for millions of years

Our story begins with Earth itself. This planet wasn't randomly formed—it was perfectly designed as a living system to support diverse forms of life.

Vegetation evolved as the primary food source for all beings, creating the foundation of every food chain. What made this possible was that every inch of Earth's crust contained the exact minerals plants would need for growth. This wasn't coincidence, but a fundamental aspect of our planet's formation. For millions of years, this balanced system flourished without human intervention, demonstrating nature's inherent capacity for sustainability.



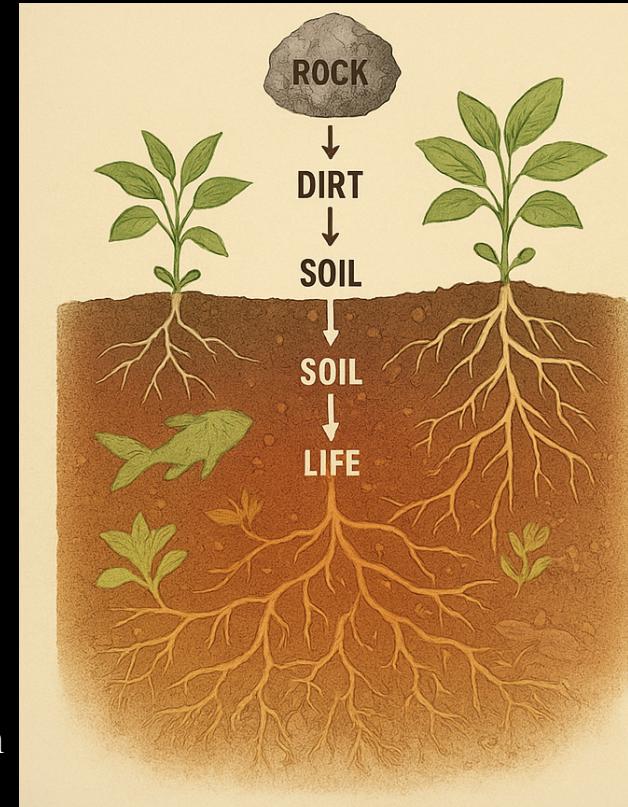
# The Natural Soil Cycle

**The Natural Soil Cycle:** Rock → Dirt → Soil → Life

- Mycorrhizal fungi - Earth's first ecosystem engineers
- Break down rock into mineral-rich dirt
- Form symbiotic relationships with plant roots
- Microbes transform dirt into living soil
- Create complex nutrient exchange networks
- Enable efficient carbon and water cycles
- Plants and fungi establish the foundation for all other life forms

At the heart of Earth's design is a remarkable transformation process: rock becomes dirt, dirt becomes soil, and soil sustains life.

This process begins with mycorrhizal fungi—Earth's first and most important ecosystem engineers. These fungi break down solid rock into mineral-rich dirt by secreting powerful enzymes. They then form symbiotic relationships with plant roots, delivering these minerals in exchange for carbon. Microbes take this process further, transforming simple dirt into complex living soil. They create intricate nutrient exchange networks and enable efficient carbon and water cycles. Together, plants and fungi established the foundation that made all other life forms possible. This is not just biology—it's the original blueprint for abundance.



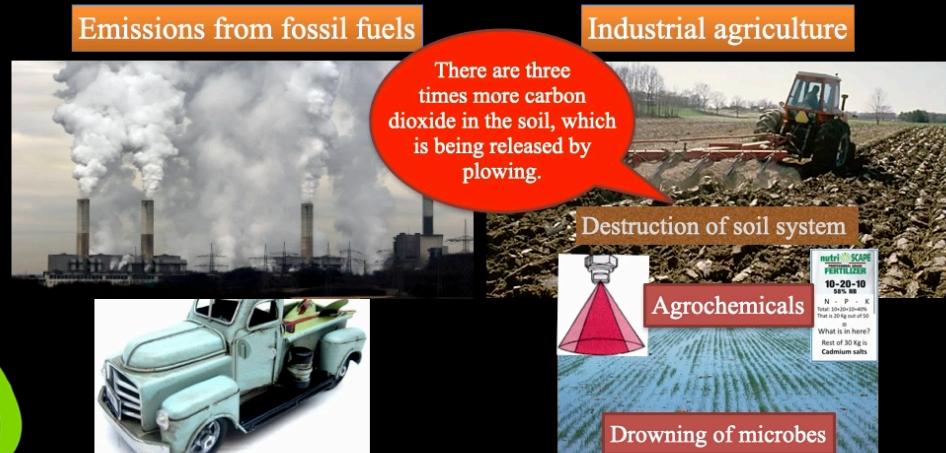
# 400 Million Years of Sustainability

## 400 Million Years of Sustainability

This system thrived for over 400 million years without:

- Depleting resources
- Requiring external inputs
- Creating pollution
- Generating waste
- A closed-loop system of perfect efficiency and abundance

What factors contributed to the decline between 1958 and the present day?



In just 62 years, the ecosystem collapsed, which sustained for millions of years... Vegetation & soil maintained the balance - **industrial crop production processes imbalanced the ecosystem by evaporating water & releasing CO<sub>2</sub> absorbed by plants & retained by soil !**

This natural system thrived for over 400 million years—a timespan almost impossible to comprehend. During this vast period, Earth's vegetation systems operated without depleting resources, without requiring external inputs, without creating pollution, and without generating waste. It was a perfectly closed-loop system of remarkable efficiency and abundance. Take a moment to consider this: for 400 million years, the planet sustained ever-increasing biodiversity through this elegant system. Nature had solved the problem of sustainable food production long before humans arrived on the scene.



# DISRUPTION & DECLINE - The Agricultural Crossroads

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At the dawn of agricultural modernization, humanity faced two paths:

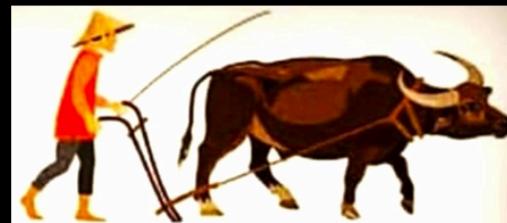
- Augment evolved practices without regard for ecosystem impacts
- Study natural ecosystems and align farming with nature's processes

We chose augmentation, setting in motion a cascade of consequences

## Agriculture Story



Agriculture has overlooked science, resulting in costly consequences.

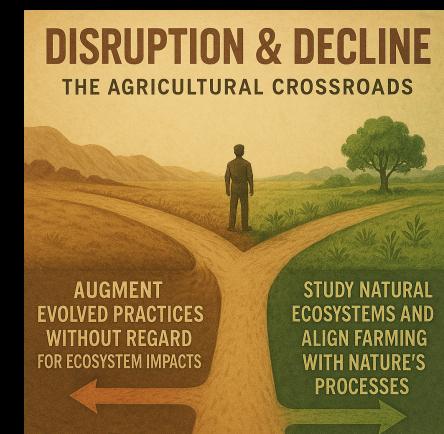


Evolved Method: Burying Seeds for Thousands of Years, Ignoring the Natural Ecosystem

Mechanization accelerated the deterioration of natural systems.



Ancient/Conventional/Industrial (ACI) Agriculture: A Destructive Production System



As human civilization developed, we reached a critical crossroads in our agricultural evolution. With increasing knowledge and technological capability, we faced two distinct paths forward. The first option was to augment our existing agricultural practices without regard for the underlying ecosystem—essentially forcing nature to conform to our methods. The second path involved studying natural ecosystems deeply and aligning our farming with nature's processes—adapting our methods to work with natural systems. Humanity, largely driven by immediate needs and incomplete understanding, chose the path of augmentation. This single decision set in motion a cascade of consequences we're still grappling with today.



# The 62-Year Experiment: 1958-Present

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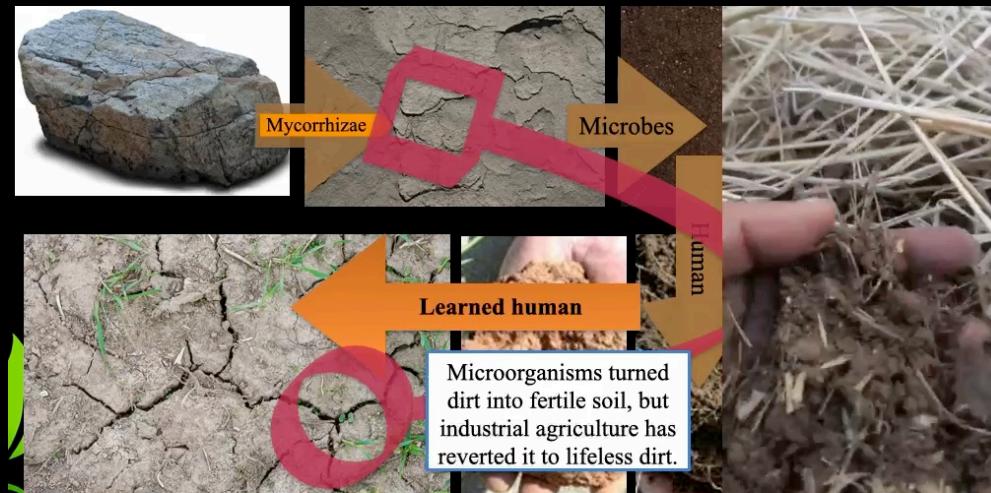
### Factors contributing to agricultural decline:

- Emissions from fossil fuels
- Industrial agriculture practices
- Massive soil carbon release through plowing
- Destruction of soil microbiome
- Introduction of synthetic agrochemicals
- Disruption of water retention cycles

Compared to Earth's 400-million-year success story, our modern agricultural system represents a brief 62-year experiment—one that is showing serious signs of failure. Since 1958, several

factors have accelerated agricultural decline: increasing emissions from fossil fuels; industrial farming practices that prioritize short-term yields over long-term soil health; massive carbon release from plowed soils—with three times more carbon dioxide now in our soils being released through plowing; destruction of the soil microbiome that regulates nutrient cycling; widespread application of synthetic agrochemicals that disrupt natural pest control; and irrigation practices that interrupt natural water retention cycles. What took nature millions of years to build, we have significantly damaged in just 62 years—less than a single human lifetime.

Fungi converted rock to dirt, and microbes made it soil. ACI turned it back to Dirt PQNK is regenerating the SOIL



ACI: Ancient practices augmented to Conventional and to devastating Industrial



# The Path of "Cover-Up Technologies"

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**Ancient Agriculture:** Limited impact, working with natural cycles

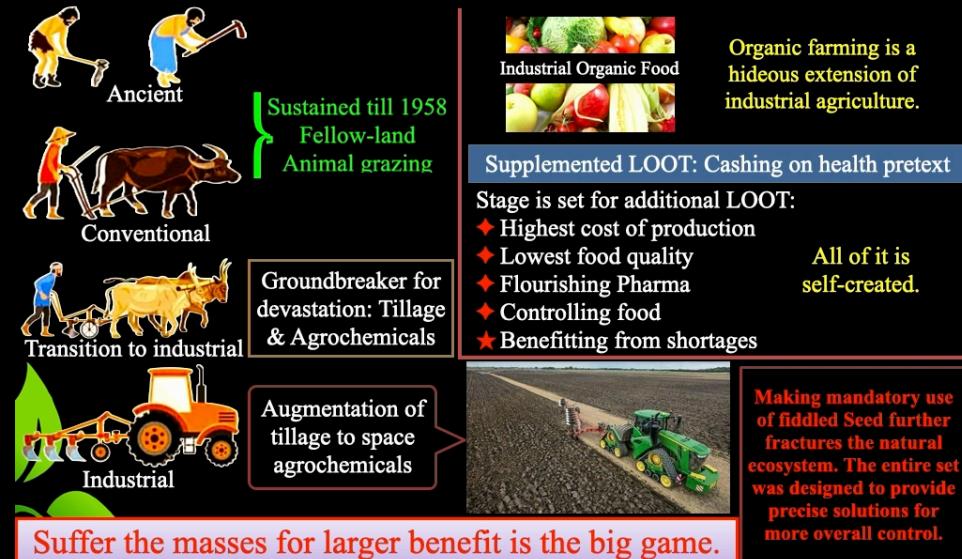
**Conventional Agriculture:** Animal power, some disruption but maintained until 1958

**Industrial Agriculture:** The tipping point

- Tillage - Breaking the soil structure
- Agrochemicals - Poisoning the soil microbiome
- Irrigation systems - Disrupting natural water cycles
- Modified seeds - Breaking natural adaptation processes

The evolution of agriculture reveals a troubling pattern of 'cover-up technologies'—each new innovation designed to address problems created by previous practices. Ancient agriculture worked largely within natural cycles with limited environmental impact. Conventional agriculture introduced animal power with some disruption but generally maintained balance until around 1958. Then came industrial agriculture—the tipping point that fundamentally altered our relationship with soil. Tillage destroyed soil structure and fungal networks. Agrochemicals poisoned the soil microbiome. Irrigation systems disrupted natural water cycles. Modified seeds broke natural adaptation processes. Each technology attempted to cover up problems created by previous interventions, creating a dependency cycle that moved us further from nature's blueprint with each generation.

## Path of Cover-Up Technologies



# The True Cost of Industrial Food Production

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### Environmental Costs:

- Three times more carbon dioxide released from soil
- Destruction of soil structure and function
- Water pollution and depletion
- Biodiversity loss

### Human Costs:

- Declining nutritional content in food
- Rising health issues
- Farmer dependency on input suppliers
- Economic vulnerability for producers
- Control of food systems by corporations

The true cost of our industrial food system extends far beyond what we pay at the grocery store. Environmentally, we've seen three times more carbon dioxide released from soils, widespread destruction of soil structure and function, water pollution and depletion, and alarming biodiversity loss. The human costs are equally severe: declining nutritional content in food—with some vegetables containing 40% fewer nutrients than they did in the 1950s; rising health issues correlated with diet; farmer dependency on expensive external inputs; increasing economic vulnerability for producers; and the concentration of food system control in fewer corporate hands. When we account for these externalized costs, our seemingly efficient food system reveals itself to be both economically unsustainable and ecologically devastating.

## THE TRUE COST OF INDUSTRIAL FOOD PRODUCTION

### Environmental Costs:



Three times more carbon dioxide released from soil



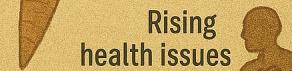
Water pollution and depletion



Biodiversity loss



Declining nutritional content in food



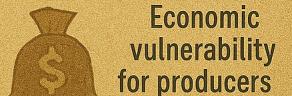
Rising health issues



Farmer dependency on input suppliers



Economic vulnerability for producers



Control of food systems by corporations



Control of food systems by corporations



# RENEWAL & RESTORATION - Understanding the Problem

## RENEWAL & RESTORATION

### Understanding the Problem:

- Tilled agriculture has reached its most destructive potential
- Soil disturbance disrupts natural plant support systems
- Creates vulnerabilities that "require" chemical interventions
- Perpetuates a cycle of dependency and degradation
- Results in profit loss for farmers and poor food quality

Before we can implement solutions, we must fully understand the systemic nature of the problem. Tilled agriculture has reached its most destructive potential in today's industrial systems. Soil disturbance fundamentally disrupts the natural plant support systems that evolved over millions of years. This creates vulnerabilities to deficiencies, pests, and diseases that then appear to 'require' chemical interventions. This perpetuates a cycle of dependency and degradation, where each intervention necessitates another. The result is profit loss for farmers, who spend increasingly more on inputs while receiving less for their products, and poor food quality for consumers, who receive less nutrition per calorie.

Understanding this cycle is the first step toward breaking it.

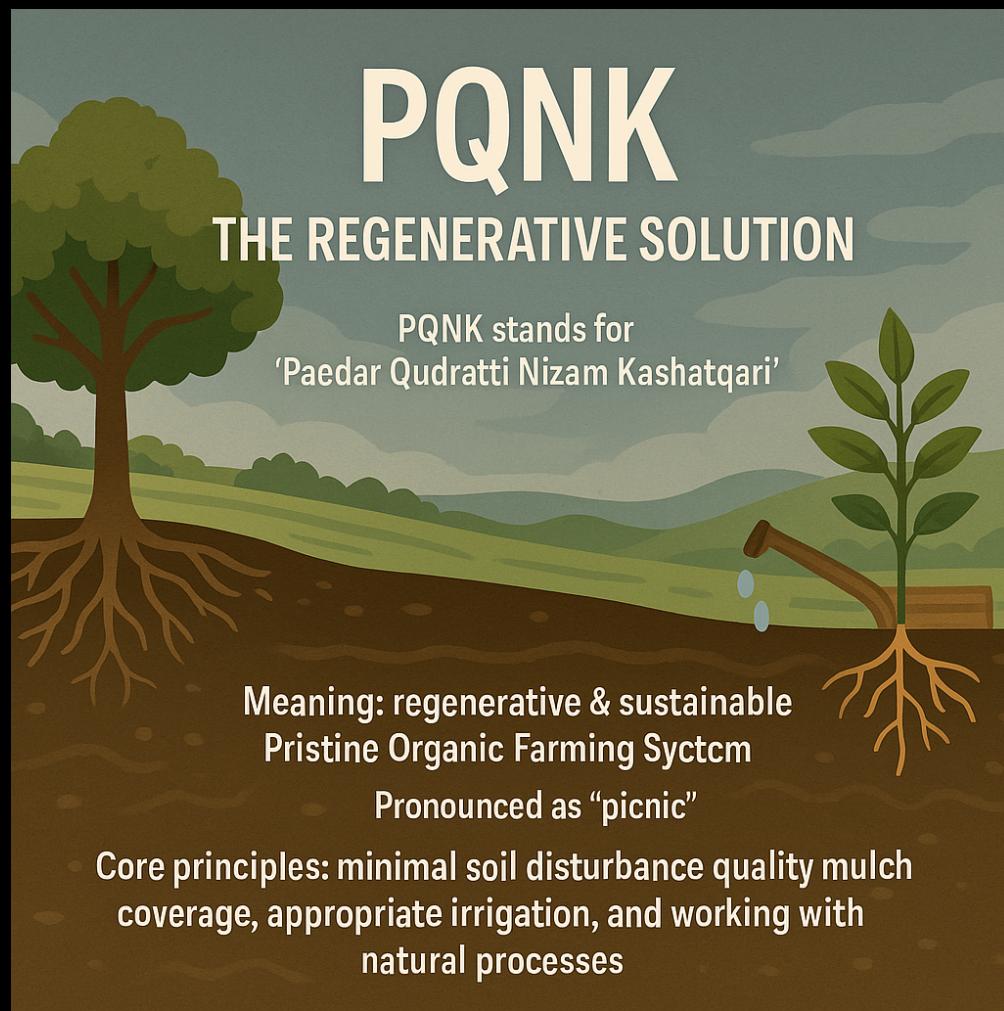


# PQNK: The Regenerative Solution

## PQNK (Picnic): The Regenerative Solution

- PQNK stands for "Paedar Qudratti Nizam Kashatqari"
- Meaning: regenerative & sustainable Pristine Organic Farming System - Pronounced as "picnic"
- Core principles: minimal soil disturbance, quality mulch coverage, appropriate irrigation, and working with natural processes

The path forward is remarkably straightforward, captured in the PQNK framework. PQNK, pronounced "picnic," stands for "Paedar Qudratti Nizam Kashatqari" - the regenerative and sustainable Pristine Organic Farming System. This approach emphasizes minimal soil disturbance to protect fungal networks and soil structure, quality soil coverage with organic mulch to mimic nature's way of protecting and feeding soil life, appropriate irrigation that respects natural water cycles, and deep knowledge of natural processes—working with rather than against the systems nature perfected over millions of years. These principles aren't new technology; they're a return to fundamental ecological principles that governed Earth's abundance for 400 million years before our brief industrial experiment.



**PQNK: Cultivating Sustainable Tomorrow Through Regenerative Agriculture**

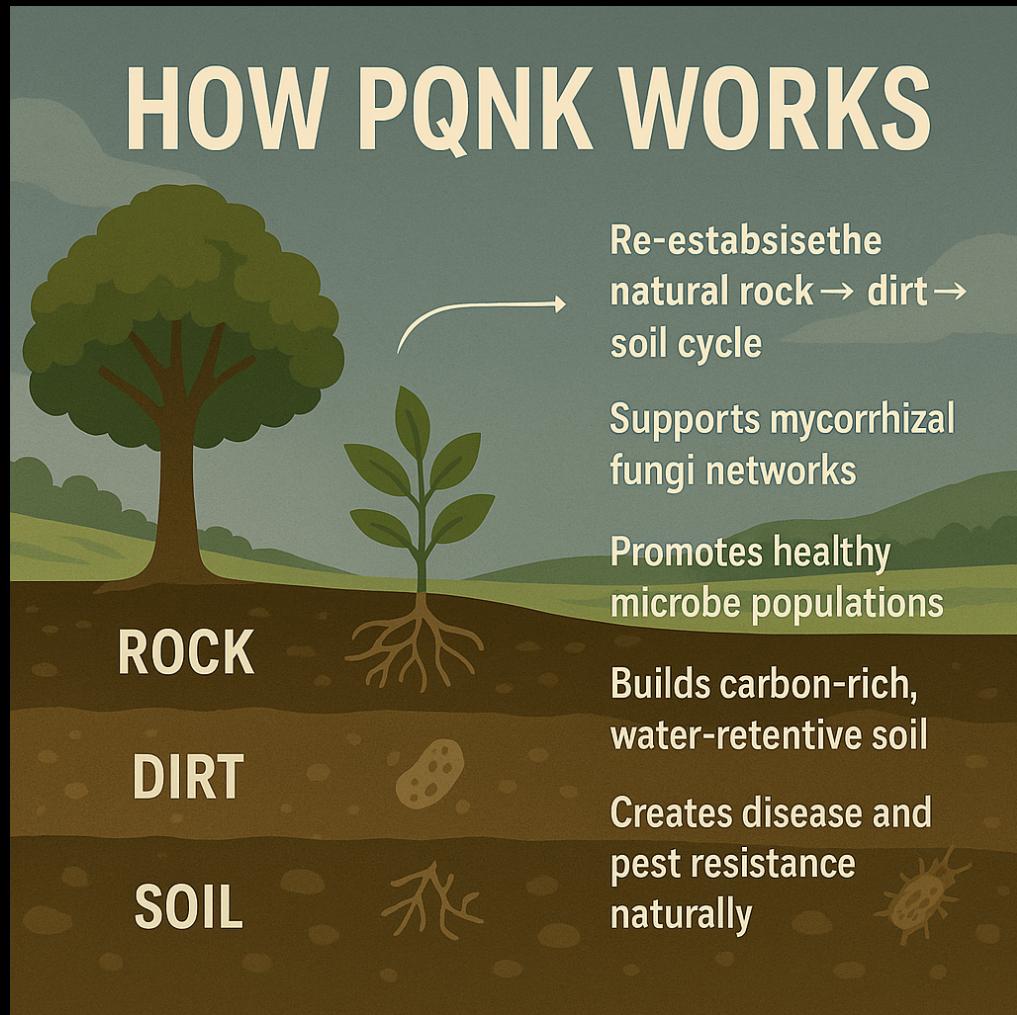
# How PQNK Works

## How PQNK Works

**Re-establishes the natural rock → dirt → soil cycle**

- Supports mycorrhizal fungi networks
- Promotes healthy microbe populations
- Builds carbon-rich, water-retentive soil
- Creates disease and pest resistance naturally

PQNK works by re-establishing the natural rock to dirt to soil cycle that industrial agriculture disrupted. By minimizing soil disturbance, we support the mycorrhizal fungi networks that convert minerals to plant-available forms. The quality ground cover promotes healthy microbe populations that transform dirt into living soil. Together, these practices build carbon-rich, water-retentive soil that becomes increasingly resilient over time. Perhaps most importantly, this approach creates natural disease and pest resistance by supporting the complex soil food web that regulated plant health for millions of years before synthetic pesticides existed. PQNK isn't fighting nature—it's reestablishing our partnership with it.



## PQNK: Discover the Latest Scientific Insights!



Tilled agriculture, initiated by Homo sapiens, has been exacerbated to its most detrimental extent.

Soil disturbance disrupts the natural plant provision and protection systems, making crops vulnerable to deficiencies, pests, and diseases. Consequently, farmers are compelled to rely on fertilizers and pesticides, resulting in a loss of profits to input suppliers and the production of low-quality food.



Solution: No flooding, no tilling, and soil covering with organic mulch. This approach retains farmers' profits and improves food quality. That's PQNK!

# Benefits Across the Value Chain

## Benefits Across the Value Chain

### For Farmers:

- Reduced input costs (fertilizers, pesticides, irrigation)
- Improved yield stability
- Enhanced crop resilience to climate extremes
- Greater profit retention
- Reduced dependency on external suppliers

### For Consumers:

- More nutritious food
- Reduced chemical exposure

- Better taste and quality
- Connection to natural food systems
- Improved health outcomes

### For the Environment:

- Carbon sequestration
- Water conservation
- Biodiversity protection
- Reduced pollution
- Climate change mitigation

### For Communities:

- Food security
- Economic resilience
- Reduced healthcare costs
- Sustainable livelihoods
- Environmental health



### For Farmers

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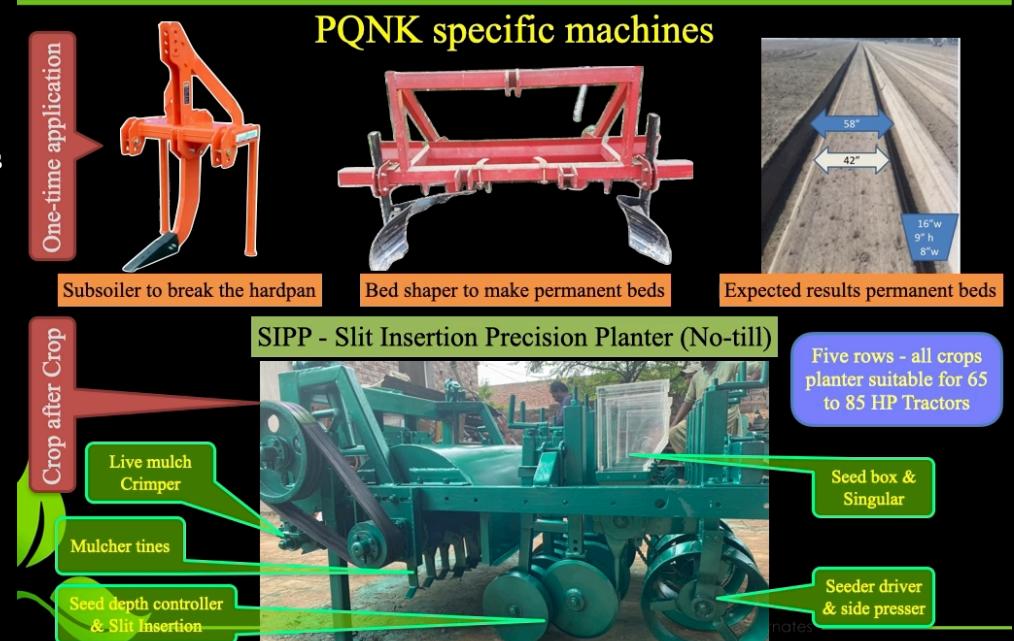
The beauty of regenerative agriculture is that it creates benefits across the entire food value chain. Farmers experience reduced input costs as their need for fertilizers, pesticides, and irrigation diminishes over time. They see improved yield stability, even during climatic extremes, enhanced crop resilience, greater profit retention, and reduced dependency on external suppliers. Consumers receive more nutritious food with higher vitamin, mineral, and phytonutrient content, reduced chemical exposure, better taste and quality, a connection to natural food systems, and improved health outcomes. Environmental benefits include carbon sequestration, water conservation, biodiversity protection, reduced pollution, and climate change mitigation. Communities gain food security, economic resilience, reduced healthcare costs, sustainable livelihoods, and environmental health. This is a rare solution that truly benefits everyone involved.



# Policy Interventions

## POLICY INTERVENTIONS - Supporting PQNK: The Regenerative Sustainable Pathway

- Officially recognize and endorse PQNK as a national agricultural framework
- Fund widespread propagation through research institutes and extension services
- Develop comprehensive training programs for farmers and rural youth
- Provide subsidies for PQNK-specific equipment:
  - Subsoiler
  - Crimper-Mulcher
  - Bed shaper
  - No-till raised bed precision planters for seeds
  - No-till raised bed precision planters for tubers
  - No-till raised bed precision planters for garlic
  - No-till raised bed precision transplanter
- Create incentives to encourage youth participation in PQNK farming



For meaningful change, policy interventions must focus on officially recognizing and endorsing PQNK as the Pristine Organic framework that bridges theoretical research with practical implementation. Government support should fund widespread propagation through agricultural research institutes and extension services, making this valuable knowledge accessible to all farmers. We need comprehensive training programs targeting both existing farmers and rural youth, who represent our agricultural future. Specific subsidies for PQNK equipment—including subsoilers, crimper-mulchers, bed shapers, and various no-till precision planters—will accelerate adoption by reducing financial barriers. By empowering rural youth with the knowledge, tools, and opportunities to implement PQNK practices, we can harness their energy, creativity, and desire for change to build regenerative food systems for tomorrow. PQNK isn't just a farming method—it's a comprehensive pathway to agricultural sustainability that deserves policy support at every level.



# For Agricultural Implementors & Extension

## For Agricultural Implementors & Extension Services

- Retrain staff in PQNK principles and practices
- Establish PQNK demonstration farms with all six specialized implements
- Create farmer-to-farmer PQNK learning networks with successful adopters
- Develop technical assistance programs for transition to PQNK systems
- Document and share measurable PQNK outcomes for soil health and productivity
- Engage rural youth through PQNK training and mentorship programs

Agricultural implementors and extension services are the vital bridge between PQNK knowledge and on-farm practice. To properly support this regenerative transition, extension services need to thoroughly retrain staff in PQNK principles and specialized practices. They should establish comprehensive demonstration farms where farmers can see PQNK methods in action, including the proper use of all six specialized implements: subsoilers, crimper-mulchers, bed shapers, and the various no-till precision planters. Creating structured farmer-to-farmer PQNK learning networks leverages the practical wisdom of successful adopters. Building technical assistance programs specifically for transition periods helps farmers navigate the challenging shift to PQNK systems. Consistently documenting and sharing measurable outcomes provides the evidence base for wider adoption. Finally, extension services should actively engage rural youth through specialized PQNK training and mentorship programs, cultivating the next generation of regenerative farmers. Extension services have historically been crucial in agricultural transitions, and they're equally essential in bringing PQNK practices to mainstream agriculture.



# For Farmers

## For Farmers

- Start with small test plots implementing full PQNK methods
- Document changes in soil health, input costs, and yields
- Connect with successful PQNK practitioners in your region
- Gradually expand PQNK practices across your farm
- Consider acquiring PQNK-specific equipment as you scale
- Mentor youth interested in PQNK farming techniques

To the farmers watching this: you are the most essential implementors of PQNK, and we recognize the considerations involved in any transition.

We recommend starting with small test plots using complete PQNK methods to see the results firsthand with minimal risk. Document changes in soil health, input costs, and yields to track your return on investment. Connect with successful PQNK farmers who have already navigated the transition in your region and climate. As you gain confidence and observe improved soil health, gradually expand these practices across more of your land. Consider investing in or accessing PQNK-specific equipment —like subsoilers, crimper-mulchers, and no-till precision planters—as you scale up. Take time to mentor young people interested in these techniques, as they represent the future of regenerative agriculture.

Remember that PQNK isn't about adding more work or cost; it's about aligning with natural processes to let soil ecosystems do more of the work for you, resulting in truly sustainable production.

Document changes  
in soil health, input  
costs, and yields

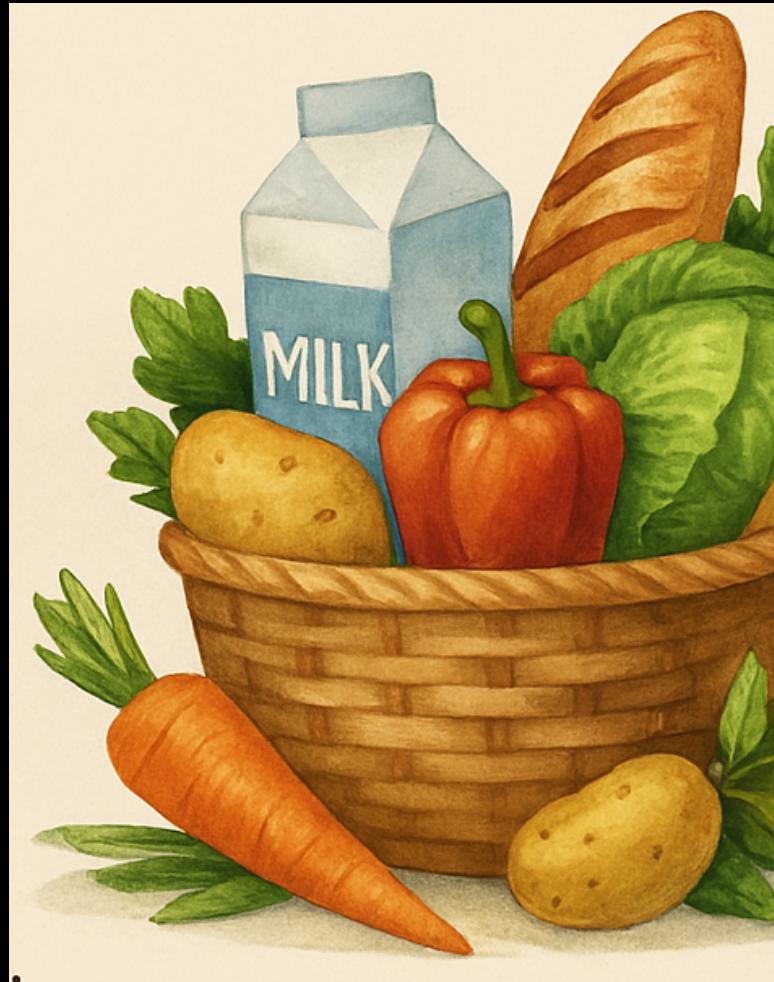


# For Food Chain Actors

## For Food Chain Actors

- Develop preferential purchasing programs for PQNK-certified products
- Create transparent supply chains that highlight PQNK practices
- Educate consumers about the soil health and nutritional benefits of PQNK farming
- Pay premium prices that reflect the true value of PQNK production methods
- Invest in supporting farmers transitioning to PQNK systems
- Partner with youth-led PQNK initiatives to build future supply chains

Food processors, distributors, retailers, and other food chain actors have significant power to accelerate the PQNK transition. Developing preferential purchasing programs specifically for PQNK-certified products sends a powerful market signal. Creating transparent supply chains that clearly communicate PQNK soil health practices connects consumer demand with farm implementation. Educating consumers about the specific benefits of PQNK agriculture—including improved nutrient density and environmental sustainability—builds targeted market demand. Paying premium prices that reflect the true production value and reduced externalities of PQNK products provides crucial financial support for farmer transition. Directly investing in producer support programs accelerates the shift to PQNK practices. And partnering with youth-led PQNK initiatives helps build the next generation of regenerative supply chains. Forward-thinking food companies are already recognizing that the PQNK approach to soil health is fundamental to secure supply chains and quality products in a changing climate.



# For Environmentalists

## For Environmentalists

- Recognize PQNK farmers as essential ecosystem stewards
- Partner with agricultural communities implementing PQNK practices
- Help document ecological improvements from PQNK implementation
- Advocate for policies that specifically support PQNK approaches
- Engage youth in monitoring PQNK environmental outcomes
- Bridge urban-rural divides through shared understanding of PQNK benefits

Environmentalists have sometimes viewed agriculture as part of the problem, but PQNK farming represents our greatest opportunity for widespread ecological restoration. We ask environmental advocates to recognize PQNK farmers as essential ecosystem stewards who manage more land than all parks and preserves combined. Partner with agricultural communities around the specific soil health practices of PQNK rather than focusing on divisions. Help document the ecological improvements that result from PQNK practices—including improved water retention, carbon sequestration, and biodiversity—to build a compelling evidence base. Advocate for policies that specifically support PQNK agriculture as a climate and biodiversity solution. Engage young people in monitoring and communicating PQNK environmental outcomes. And help bridge urban-rural divides by focusing on the common interest in the healthy ecosystems that PQNK practices foster. The PQNK approach may represent the largest potential positive environmental impact available to us—one that simultaneously addresses climate, water, biodiversity, and pollution challenges while building more resilient food systems.

## For Environmentalists



# For Consumers

## For Consumers

- Ask retailers about PQNK-grown products
- Support farmers implementing PQNK practices
- Learn to recognize the quality and nutrition of PQNK-grown food
- Share knowledge about PQNK soil-food-health connections
- Advocate for PQNK recognition in food labeling

As consumers, your everyday choices collectively shape the food system. You can drive change by specifically asking about PQNK-grown products and creating demand for this regenerative approach. Support farmers who are implementing PQNK practices by seeking out their products, even if they cost slightly more—recognizing their true value. Learn to identify the superior quality in food grown using PQNK methods, which often shows enhanced nutrient density and flavor due to healthier soil biology. Share knowledge about the specific soil-food-health connections fostered by PQNK practices with your family and community. Advocate for PQNK recognition in food labeling to increase transparency. And encourage young people to consider PQNK farming as a viable and rewarding career path. Consumer demand has already transformed many food categories, and PQNK represents the next frontier in this evolution toward a healthier, more sustainable food system built on regenerative principles.



# Conclusion

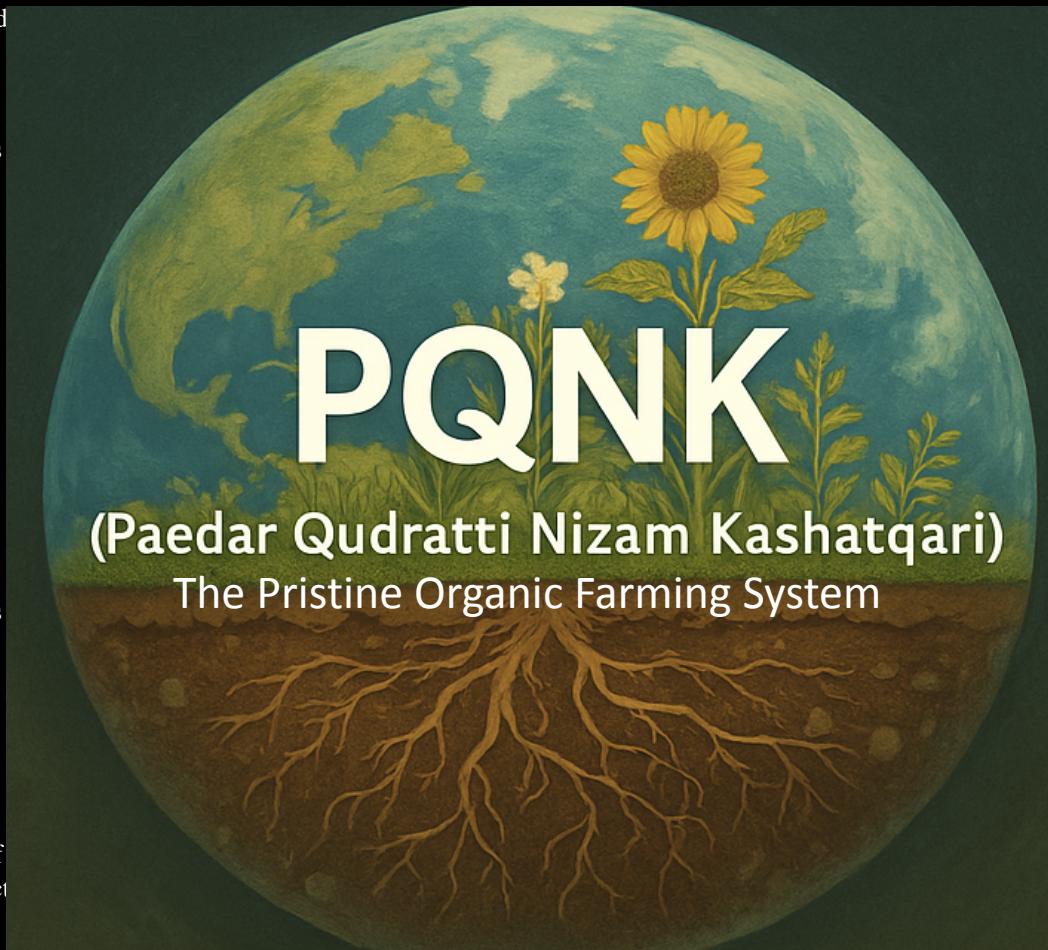
**CONCLUSION** The story of Earth's soil is our story. For 400 million years, natural processes created abundance without waste or depletion. In just 62 years, industrial practices have severely damaged this system—but not beyond repair.

By implementing PQNK (Paedar Qudratti Nizam Kashatqari), we can restore the natural harmony between rock, dirt, soil, plants, and all living beings. This regenerative & sustainable Pristine Organic Farming System has been proven successful by hundreds of thousands of farmers across Pakistan, India, and beyond over the past decade.

The research is complete, the methods are thoroughly field-tested, and the specialized tools exist. The time to act is now.

Together, we can reclaim our agricultural future through PQNK.

The story of Earth's soil is our story. For 400 million years, natural processes created abundance without waste or depletion. In just 62 years, industrial practices have severely damaged this system—but not beyond repair. By implementing PQNK—Paedar Qudratti Nizam Kashatqari—we can restore the natural harmony between rock, dirt, soil, plants, and all living beings. This isn't theoretical—PQNK has been successfully implemented by hundreds of thousands of practicing farmers across Pakistan, India, and beyond over the past decade, demonstrating its effectiveness across diverse climates and conditions. These farmers have witnessed firsthand how PQNK rebuilds soil health while maintaining or improving yields and profitability. The research has been done, the methods have been tested at scale in real farming communities, and the specialized equipment has been refined through years of practical application. The choice is clear, the path is known, and the time to act is now. Together, we can reclaim our agricultural future through PQNK—for the health of our soils, our food, our bodies, and our planet. Thank you.



**PQNK: Cultivating Sustainable Tomorrow Through Regenerative Agriculture**

These are a few success stories of PQNK practitioners growing crops without purchased inputs.



**PQNK:** Cultivating Sustainable Tomorrow Through Regenerative Agriculture



The Regenerative & Sustainable Pristine Organic Farming System



**PQNK: Cultivating Sustainable Tomorrow  
Through Regenerative Agriculture**