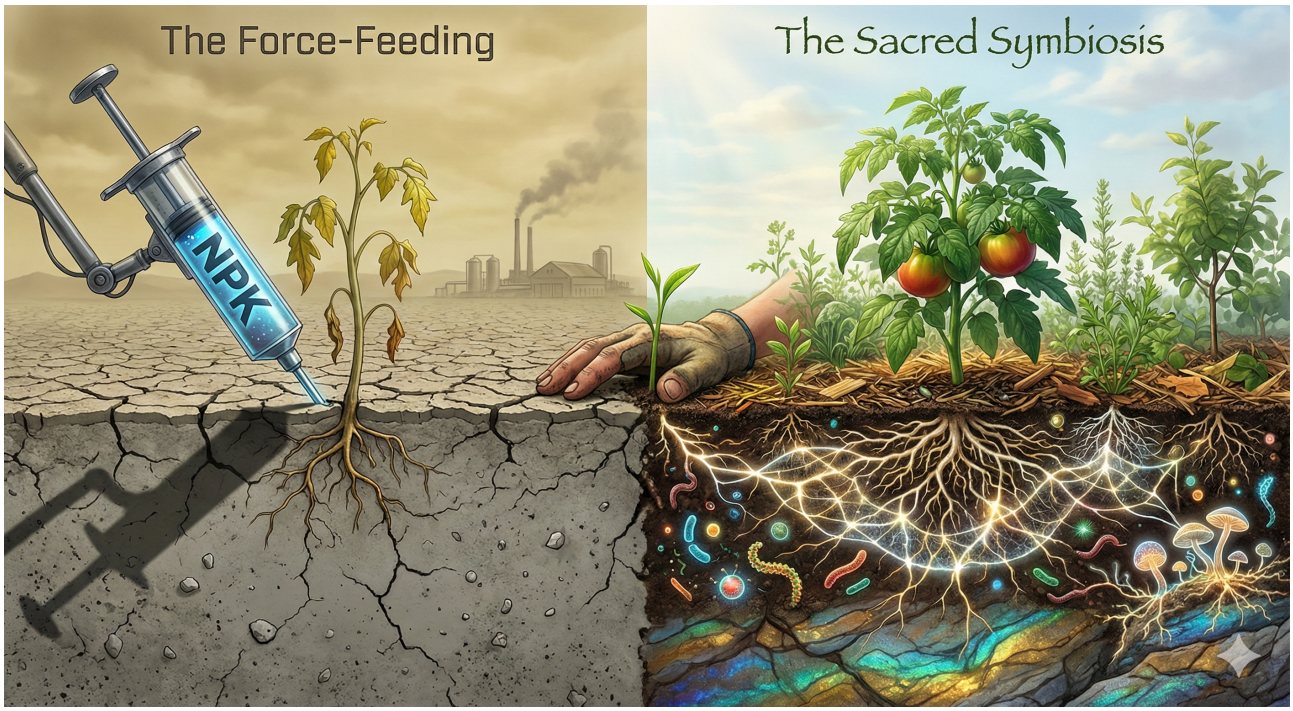
The Sacred Symbiosis: Why PQNK Feeds Plants, While Chemical Agriculture Only Force-Feeds Them



Our esteemed PQNK practitioner from India has raised a specific question that we are delighted to address, not only for her benefit but also for the benefit of all farmers.

"Namaste Dr Saab, for the valuable knowledge on the "absorption of nutrients in PQNK farming". I didn't even know the terms 'active' and 'passive absorption' of nutrients. Here we know both are live processes acting thru symbiosis of plant and microbes.
What is the process of absorption of nutrients in the chemical fertilizers? Are they ready -to-eat type or some process is necessary?
What happens to the fertilisers and to the soil microbes?
Is there any role of soil microbes in making nutrients in synthetic fertilizers available to plants, too?
What are the implications?

The natural ecosystems like Amazon forests are alive and thriving for over 40 crore years.
How is it that the modern chemical farming has exhausted the soil, spoiled air and water, worldwide, within 200 years?
Dr Saab, your valuable guidance please. Regards,
Vasudha"

Namaste Vasudha Behn,

Your questions are profound and touch the very heart of the conflict between life-giving and life-destroying agriculture. As a practitioner of PQNK, you have already felt the truth in the soil. Let PQNK, provide the scientific explanation for what you observe.

Your understanding that both 'active' and 'passive' absorption are live processes acting through symbiosis is perfectly correct. This is the cornerstone of PQNK. Let us explore the details.

1. The Process of Nutrient Absorption: A Living Dialogue vs. a Chemical Monologue

In the PQNK system, nutrient absorption is a sophisticated, symbiotic dialogue:

- **The Plant's Role:** The plant, through photosynthesis, creates carbon-rich sugars (exudates) which it deliberately secretes from its roots to feed a specific microbial community in the rhizosphere. It is essentially "ordering" its dinner.
- **The Microbes' Role:** This is where your insight is crucial. Our understanding is that the soil possesses everything in geological abundance. The role of the microbes —bacteria and fungi—is to act as the plant's digestive system. They break down organic mulch and, more importantly, weather the parent rock and soil particles, unlocking the vast spectrum of minerals. They then present these nutrients to the plant in a balanced, proportionate, and bioavailable form. The plant residue from the mulch is not just fertilizer; it is the primary fuel for this microbial workforce.

In chemical farming, this dialogue is broken and replaced by a monologue:

- **Are they "Ready-to-Eat"?** Yes, but in the way that an intravenous sugar drip is "ready-to-eat." Water-soluble salts (NPK) are forced into the soil solution, bypassing the microbial "digestive system" entirely.
- **No Process Needed:** The plant absorbs these salts primarily through passive absorption with water. There is no need for a symbiotic relationship. The meal is delivered, but it is incomplete and unbalanced, leading to a malnourished plant and a starving soil ecosystem.

2. The Fate of Fertilizers and Soil Microbes: A Story of Destruction

This force-feeding has catastrophic consequences:

- **Microbial Poisoning:** The high salt concentration of chemical fertilizers is a preservative and a poison to the delicate soil food web. Beneficial organisms die or go dormant.
- **The "Lazy Root" Syndrome:** Why would a plant invest precious energy in growing a vast root network or supporting fungal partners when its food is dumped on its doorstep? The symbiotic contract is nullified. The microbial life, now starved of root exudates, perishes.
- **Soil Structure Collapse:** Without microbial glues and fungal hyphae to bind it, the soil structure collapses. It becomes compacted, loses its porosity, and turns from a living sponge into dead, inert dirt.

3. The Perverse Role of Microbes in a Chemical System

In a perverse twist, microbes are forced into a destructive role:

- **Weed-Friendly Bacteria:** Chemical salts favor certain bacterial populations that thrive in degraded environments. PQNK see weeds as a solution, not a problem. They are nature's emergency response team, pioneer species that emerge to restore balance and structure in soils ruined by chemical amendments. They are a rescue force, a symptom of the disease, not the disease itself.
- **Pathogen Proliferation:** Weak plants in dead soil are easy targets. The lack of a diverse microbiome means no natural defense. This includes the collapse of beneficial systems led by bacteria like Bacillus thuringiensis (Bt), which naturally control pests. In a healthy PQNK soil, a thousand different microbes protect the plant; in a chemical system, this army is gone.

4. The Great Divergence: 40 Crore Years of Amazon vs. 200 Years of Exhaustion

Your comparison is the most powerful one can make.

The Amazon Forest is the ultimate PQNK system: a self-sustaining, closed loop.

- **No Waste, Only Food:** Everything is recycled.
- **Living Soil Accessing Geological Abundance:** The immense biodiversity of microbes and fungi does two things simultaneously: it decomposes organic matter and it continuously mines the vast mineral bank in the bedrock, making it available to plants. The system runs on sunlight and the mineral wealth already present.

Chemical Agriculture is an extractive, open-loop system.

- **It Mines the Soil:** It focuses only on soluble NPK, ignoring the trace minerals and the biological engine needed to access them. The result, as PQNK imply, is food of low nutrient density and diversity. This is a primary reason for the rise of dietary-related illnesses in our population. We are eating empty calories.
- **It Destroys the Engine:** It systematically dismantles the very biological system that creates topsoil and cycles nutrients.
- **It is Addicted to Inputs:** It is not sustainable. It requires constant external inputs to function, making it inherently fragile and costly.

Conclusion: Your Role as a PQNK Practitioner

Vasudha Behn, by practicing PQNK, you are not just farming; you are practicing ecosystem restoration.

You are:

- **Rebuilding the Soil Food Web:** Your mulch and no-till practices are feeding the microbial workforce.
- **Honoring the Water Cycle:** By avoiding the inundation of soil with water, you protect the soil structure and the aerobic organisms within. This is a non-negotiable **PQNK principle: Any production process that inundates soil with water,**

disturbs soil through tillage, or leaves soil bare without organic mulch cover does not qualify as natural ecosystem science for production agriculture.

- **Restoring the Sacred Symbiosis:** You are re-establishing the ancient partnership between plant and microbe, between rock and root.

You are aligning your work with the same principles that have sustained the Amazon for 40 crore years. You are not just growing food; you are reclaiming our agricultural future, one handful of living soil at a time.

Continue with confidence and profound respect for the work you are doing.

In service,

Asif Sharif
(PQNK - The Regenerative & Sustainable Pristine Organic Farming System)

Footnote: *Any Production Process That Inundates Soil With Water, Disturbs Soil Through Tillage, Or Leaves Soil Bare Without Organic Mulch Cover Does Not Qualify As Natural Ecosystem Science For Production Agriculture.*

PQNK, *to be pronounced as 'picnic', which stands for Paedar Qudratti Nizam Kashatqari, and means: the regenerative & sustainable Pristine Organic Farming System.*

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