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Grain First: PQNK and the Coming Food Crisis

Erratic weather, tired soil and falling water tables are squeezing the world's food supply. A farmer's best answer for the next ten years is a living soil, grain first, and a reserve in his own store

In a food crisis, the strongest farmer is the one whose crop depends on nothing he must buy, and whose store holds his own grain.

Abstract

A practising PQNK farmer asked how the future of food security and the grain market should be seen, whether staple grains will gain in importance and value in the years ahead, and whether farmers should give more attention to wheat, maize and rice or to vegetables and fruit. This paper is the answer. The world's population is still growing while the three foundations of farming, a stable climate, a living soil and enough water, are all weakening, and the cost and supply of fertiliser and spray have become uncertain. ACI (Ancient Conventional Industrial) agriculture depends on exactly the things that are failing. PQNK does not: its soil takes in heavy rain, holds moisture through heat and drought, grows the same crop season after season without purchased inputs, and keeps pests below 2 percent where every step is followed. The farmer's best strategy for the next ten years is therefore clear: convert the land to PQNK, grow grain first, and keep a reserve of grain in his own store.

1. A Farmer's Question

The question came in a farmers' WhatsApp group. How should we see the future of food security and the global grain market? With a growing population, a changing climate and fears of falling harvests, will basic grains become more important and more valuable between 2027 and 2030? Should farmers put more of their land under wheat, maize and rice, or under vegetables and fruit? And what is the best strategy for a farmer over the next ten years?

These are the right questions. Every farming family, and every nation that feeds itself, will have to answer them. The answer begins with the pressures now acting on the world's food, and with what each kind of farming can do against them.

2. Three Pressures on the World's Food

The world has about 8 billion people today, and the United Nations projects close to 9.7 billion by 2050. More people will need more grain. At the same time, the three foundations on which farming stands are weakening:

Erratic weather. Extreme heat, untimely rain, floods and droughts now arrive in the same year on the same farm. A crop that once ripened on a reliable calendar now faces a heat wave at flowering or a cloudburst at harvest.

Degraded soil. Decades of ploughing, chemical fertiliser, spray and bare ground have destroyed the life and structure of farm soils across the world. A dead soil cannot hold water, cannot feed the crop, and yields less every year for the same expense.

Scarce water. Groundwater tables are falling in the major grain regions of the world, and river and canal water has become less certain from season to season.

On top of these, the cost of fertiliser, spray and fuel has risen and their supply can stop without warning. When the war in Ukraine disrupted the trade in grain and fertiliser in 2022, several countries restricted the export of their own food to protect their people. In a crisis, every nation feeds itself first.

3. What This Means for Grain

No one can predict exact prices. Markets rise and fall with each season, and a farmer should not plan his life on a forecast. But the direction is clear. As weather becomes less reliable, soils weaker and water scarcer, staple grain will matter more in the years ahead, not less. Grain is the food that can be stored, carried and traded across seasons and borders; it is the first thing a family, a market or a government reaches for when supply is uncertain.

The strongest farmer in such a time is not the one who guesses the market correctly. It is the one whose cost of production is lowest, whose crop does not fail when the weather turns, and who holds his own grain when others must buy. That farmer gains whichever way prices move.

4. Why ACI Agriculture Cannot Answer These Pressures

ACI agriculture runs on the plough, on purchased fertiliser and spray, and on heavy irrigation. Each of the three pressures strikes at one of these supports, and so ACI farming grows more fragile exactly as the pressures grow stronger.

The pressure	ACI agriculture	PQNK
Heavy rain and floods	Ploughed soil sealed by a hardpan cannot take the water in; fields stand under water and crops drown	Broken hardpan, permanent beds and mulch take the rain into the soil, where it is stored
Heat and drought	Bare soil bakes, loses its moisture and needs more irrigation	Mulch keeps the soil cool and moist; the living soil holds water through dry spells
Degraded soil	Each season of ploughing and chemicals leaves the soil poorer, so yields fall for the same cost	The soil gains life and structure every season; the same crop grows season after season
Scarce water	Depends on flooding and repeated irrigation	No irrigation on mature beds where rainfall is about 16 inches (400 mm) or more
Costly or scarce inputs	No fertiliser or spray means no crop	No fertiliser or spray to buy; pests stay below 2 percent where every step is followed

5. How PQNK Answers Each Pressure

PQNK (Paedar Qudratti Nizam Kashatqari, the Pristine Organic Farming System) works the field the way natural ecosystems have produced for four hundred million years: the soil is never ploughed after one correction, never flooded, and never left bare. Each of these rules answers one of the pressures directly.

Against erratic weather. Permanent raised beds under a continuous organic mulch shield the soil from heat and from the force of rain. Where the hardpan has been broken once with a subsoiler, the soil takes water in at a rate that ploughed land cannot approach. In Fazilka district, Indian Punjab, 13 inches (330 mm) of rain fell in eight hours; the PQNK beds had taken it in and could be walked on, while the conventional land beside them stood under water (KP-213). The rain that floods an ACI field becomes stored moisture in a PQNK field.

Against degraded soil. PQNK rebuilds the soil's life and structure every season instead of using it up. Mature PQNK soil grows the same crop season after season with no fertiliser and no spray, and where every step is followed, pests stay below 2 percent and are gone within days.

Against water scarcity. PQNK waters the crop by soil moisture management, drawing first on rain, dew, the humidity of the air and capillary rise. Mature PQNK beds need no irrigation where rainfall is about 16 inches (400 mm) or more. Rice, the thirstiest grain of all, shows the scale of the saving: on large acreages across many farms, mature PQNK Basmati yields at least 20 percent more than conventional Basmati of the same variety, with about 92 percent less irrigation water (PQNK book, Chapter 33).

Against costly and uncertain inputs. A PQNK farmer buys no fertiliser and no spray. When their prices rise or their supply stops, his crop does not stop. His cost of production is the lowest in the market, which is the greatest strength a farmer can have in a crisis.

6. Grain First

For these reasons the advice to the farmer is plain: grain first.

Staple grains first. Give most of the land to the staple grains of the region: wheat, rice and maize, and wherever they are the staple, sorghum and millets. Grain can be stored for a year or more; vegetables and fruit spoil within days or weeks, and their prices fall sharply at the peak of the season.

Keep a reserve. Every farming household should hold at least one year's grain for the family and its livestock. Store the surplus clean, dry and safe, and sell it when the time is right, not when the harvest forces it.

Vegetables and fruit in their place. Grow them on part of the land, for the family's nutrition and for cash income through the year, but do not let them take the place of grain.

Grow it in living soil. Grain from a PQNK field is whole food, carrying the minerals and nourishment that a living soil passes to the crop (KP-222). In a crisis, the quality of the grain matters as much as its quantity.

7. A Ten-Year Strategy for the Farmer

1. Bring all the land into PQNK, step by step, following the eight steps of Chapter 23 in order: design the farm; probe and break the hardpan once with a subsoiler, to about 22 inches; wash the soil where the pH is above 8; form permanent raised beds; grow a Jantar cover crop, leaving its roots in the soil and using its biomass as the first mulch; plant through the mulch; water only when the ball test shows the soil is dry; and harvest without disturbing the soil.

2. Once the beds are made, never plough again and never leave the soil bare.

3. Grow grain first, and keep a reserve in your own store.

4. Keep the cost of production as low as possible. Low cost is the strongest protection against any market.

5. Share the knowledge with neighbouring farmers. A village of living soils is safer than one living field. Questions can be sent at any time to Ask PQNK, on WhatsApp or at pedaver.com/ask.

Conclusion

The coming years will test every farm and every nation on how much food it can grow from its own soil, with its own water, without depending on what it must buy. ACI agriculture is weakest exactly where that test is hardest. PQNK is strongest there: its soil takes in the flood, holds water through the drought, grows without purchased inputs and improves every season. For the farmer who asked, and for every farmer facing the same decade, the strategy is one sentence long: build a living soil, grow grain first, and keep your own reserve.

PQNK Principle: The farmer who builds his soil today will own the food security of tomorrow.

Related PQNK Sources

1. PQNK Book, Chapter 47: Food Security, Food Sovereignty, and Economy; Chapter 23: The Eight-Step Transition Protocol; Chapter 25: Hardpan; Chapter 33: Rice as Proof of Concept; Chapter 45: Water, Floods, and Aquifer Replenishment. https://pedaver.com/books/natural-ecosystem-science/

2. KP-213: When 13 Inches of Rain Falls in Eight Hours. https://pedaver.com/papers/when-13-inches-of-rain-falls-in-eight-hours/

3. KP-209: Why the World Needs PQNK. https://pedaver.com/papers/why-the-world-needs-pqnk/

4. KP-222: Whole Food from a Living Soil: Able Bodies and Clear, Conscious Minds. https://pedaver.com/papers/whole-food-from-a-living-soil/

5. United Nations, World Population Prospects 2024.

6. Ask PQNK: https://pedaver.com/ask, or on WhatsApp at https://wa.me/923437506442

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