

Natural Farming: Relearning to Live with the Soil, the Farmer, and the Future

Seema Behera*

*M.Sc. Scholar, Department of Soil Science and Agricultural Chemistry,
College of Agriculture, OUAT, Bhubaneswar, Odisha, India-751003*

Corresponding Author

Seema Behera

Email: theseemabehlera@gmail.com



OPEN ACCESS

Keywords

Natural farming; Living soils; Soil regeneration; Biodiversity; Climate resilience

How to cite this article:

Behera, S. 2026. Natural Farming: Relearning to Live with the Soil, the Farmer, and the Future. *Vigyan Varta* 7 (01): 161-163.

ABSTRACT

Modern agriculture has done a lot for food production and global food security. However, it's also taken a pretty heavy toll on the planet and on people—Soil is worn out, biodiversity is fading, farmers are stuck relying on expensive inputs, and profits aren't what they used to be. Moreover, more people are starting to worry about how all of this affects human health. A lot of researchers have pointed out that when we only chase higher yields, we tend to ignore the long-term health of soil and the people who work it (Reganold & Wachter, 2016). This is where natural farming comes in. It's not about turning our backs on science—it's about shifting the way we farm so we work with nature, not against it. In this article examines natural farming as a whole system. It ties together soil health, the lives of farmers, the environment's ability to bounce back, and the health of the public. Here is what have been seen in the field, what farmers say, and plain old ecological sense. Natural farming isn't just another option—it's a change we need if we want food systems that last. I'll dig into how farmers actually make the switch, what governments can do to help, and what this all means for the future of farming and society.

INTRODUCTION: When Productivity Outpaced Prudence

For years, people have measured farming success by how much you can grow, how efficiently you use your inputs,

and whether you have extra to sell. That's fine, but it only tells part of the story. Real farming goes deeper. It's about the life in the soil,

keeping ecosystems in balance, and making sure farmers can actually make a living. Lal (2015) put it bluntly, the loss of soil organic matter and the breakdown of living soil threaten the future of food everywhere. Today, you'll find fields still growing crops, but the soil underneath is running on empty. It takes more and more fertilizer and chemicals just to keep up. Natural farming steps in right at this breaking point. It's shaped by what farmers face every day: tired soil, rising expenses, and a sense that the land just isn't as steady as it used to be. Natural farming asks the big question: Can we keep feeding everyone without wrecking the very systems that let us grow food in the first place?

Understanding Natural Farming: Beyond the Absence of Chemicals

A lot of people think natural farming just means ditching synthetic chemicals. That's missing the point. Natural farming is about seeing the farm as a living system, not just a factory for crops, something agroecologists have been saying for years (Altieri, 2018).

Natural farming is built on the following principle

- Bringing soil back to life, mostly through microbes
- Recycling everything you can right on the farm
- Growing a mix of crops to keep things balanced
- Working with natural cycles, not trying to replace them
- Instead of pouring on fertilizer, farmers use things like local microbial mixes, plant extracts, mulches, and fermented brews.

These aren't just substitutes for chemicals, they actually kickstart the biology in the soil and help it do its job better.

Soil as the First Farmer: The Ecological Foundation

Soil isn't just dirt you plant in. It's alive, teeming with millions of microbes in every pinch. They break down organic matter, cycle nutrients, and keep plants healthy. Lal (2015) pointed out that soil organic carbon is at the core, it holds soil together, keeps water in, and powers all that life. When we farm with heavy tillage, overdo the fertilizer, or spray too many chemicals, we tear up these soil communities. Natural farming puts soil back at the center. By building up organic carbon and microbial diversity, and making the soil more stable, farms become better able to handle droughts, floods, and crazy weather.

The Farmer at the Centre: Economics, Dignity, and Autonomy

Natural farming isn't just about ecology. It's about giving farmers a shot at real security. Input prices keep climbing, markets swing wildly, and debt weighs down too many farm families. Reganold and Wachter (2016) found that systems built around ecological processes often put more money in farmers' pockets because they don't have to buy so much from outside.

With natural farming, you get:

- Lower costs to run the farm
- Less risk with your money
- More control over decisions
- A better sense of well-being

Most farmers don't flip a switch overnight. They try things out, see what works where they live, and adjust as they go.

Human Health: The Silent Link Between Soil and Society

Food shapes the closest connection between agriculture and our health. These days, people worry about pesticide residues, falling nutrient

levels, and the rise of chronic illnesses, so scrutiny of our food systems keeps growing. The FAO (2018) points out that agroecological and natural farming systems lead to healthier diets. They cut down chemical exposure and bring more variety to what we eat. When soil teems with life, crops pull up more micronutrients. The healthier the soil, the better the public health, simple as that.

Climate Resilience and Ecological Stability

Climate change has made input-heavy agriculture riskier than ever. Natural farming leans on mulching, crop diversity, minimal tilling, and returning organic matter to the earth. These practices build up soil organic matter, lock away carbon, and keep the land resilient. Lal (2015) calls soil carbon restoration one of the most powerful natural climate solutions, bridging the gap between mitigation and adaptation.

The Role of Government: From Control to Collaboration

The FAO (2018) makes it clear: moving toward agroecological systems takes more than just good ideas. We need smart policies, hands-on research, and real institutional dedication. Governments should focus their support on:

- Research tailored to local needs Networks where farmers teach and learn from each other.
- Support systems to help during transitions.
- Extension services that stay grounded in real-world farming
- Natural farming thrives when government shifts from enforcing rules to helping farmers succeed.

Challenges and Honest Reflection

Natural farming isn't without hurdles, early yield swings and a lack of technical know-how are real problems. Still, as Altieri (2018) points out, these issues are temporary. They fade as farmers adapt and learn from the ecosystem itself.

CONCLUSION: Choosing Regeneration Over Extraction

Natural farming marks a deep transformation. It moves us from extraction to regeneration, from dependence to resilience, from chasing short-term gains to building lasting sustainability. More and more evidence backs this up: soil health, farmer well-being, and environmental stability all go hand in hand (Lal, 2015; Reganold & Wachter, 2016). Natural farming isn't just another option. It's an ecological imperative, grounded in science, rooted in lived experience, and anchored by our responsibility to the future

REFERENCES

Altieri, M. A. (2018). Agroecology: The science of sustainable agriculture (3rd ed.). CRC Press, Boca Raton, USA.

FAO. (2018). The 10 elements of agroecology: Guiding the transition to sustainable food and agricultural systems. Food and Agriculture Organization of the United Nations, Rome.

Lal, R. (2015). Restoring soil quality to mitigate soil degradation. *Sustainability*, 7, 5875–5895

Reganold, J. P., & Wachter, J. M. (2016). Organic agriculture in the twenty-first century. *Nature Plants*, 2, 15221.