

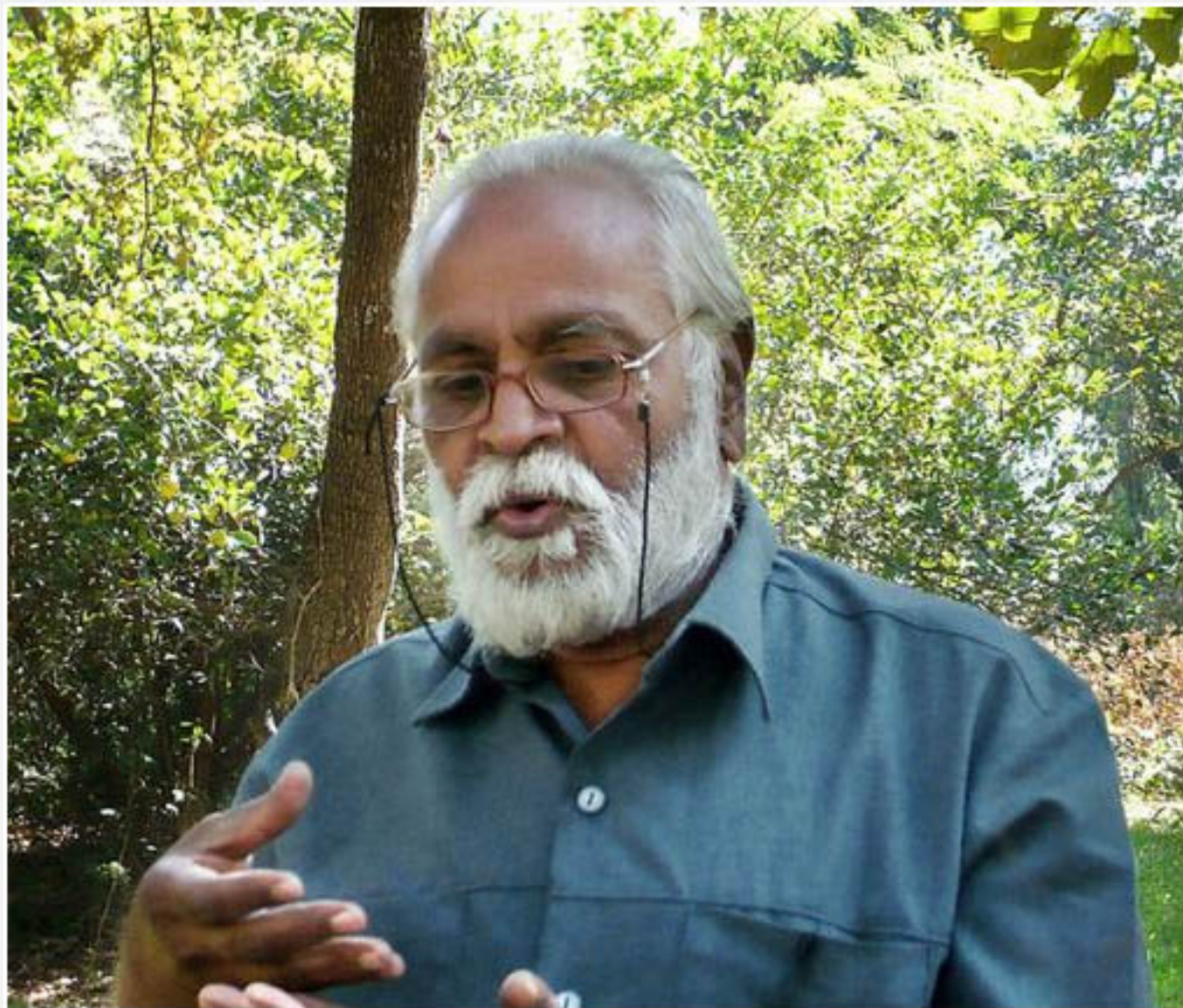
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May 6, 2012

## Grow and let grow

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GREEN FARMING: Raju Titus

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*Inspired by Japanese agricultural scientist Masanobu Fukuoka, Raju Titus has taken to 'no-till farming' and flaunting the results*

Three kilometres from Hoshangabad, Madhya Pradesh, on the road to Bhopal, is situated the Titus Farm that proudly flaunts its fertile expanse of 12 acres and a unique farming method that can potentially help overcome the worrying suicidal trend among farmers of the State, and perhaps of the country. The sole but strong characteristic of the farm that differentiates it from the rest is the use of natural methods to grow and to let grow.

For the last 25 years, a unique experiment of natural farming is being practised here by a local farmer, Raju Titus, who abandoned traditional plough-based and chemical methods of farming in his farms. He favours farming without tillage, known as “No-Till” farming. By doing so, Raju attracted the attention of people who comes from across the country to see his experiments with natural farming.

The unfortunate incident of farmer suicides that had jolted the nation in recent years has not yet come to a halt, even though it has lost visibility in the media. In November last year, three farmers committed suicide in Hoshangabad. Perturbed by the suicides, Raju feels that days of chemical farming are over. Excessive use of chemical fertilizers, insecticides and unnecessary tillage of the land leaves soil susceptible to erosion and leads to agricultural runoff.

Irrigation by water from the Tawa dam had raised hope initially, but now, the dream has been transformed into a nightmare. This year, the soybean crop in Hoshangabad was completely destroyed — producing only two quintal of soybean per acre. In such situations, alternative farming is what one needs to think of. Farmers disappointed with the “revolutionary” methods of cultivating crops are attracted towards this promising idea of natural farming.

Equal contribution in his experiments comes from his wife who, along with a young worker, is painstakingly levelling weeds on the farm with a crimper roller. One part of the farm, where wheat has already been sown, is covered with green ground cover of paddy straw along with *gajar ghash* (carrot grass). Once the sunlight reaches the seeds, filtered by the green ground cover, the young wheat saplings will grow out, celebrating life.

Proud of his experiments, Raju shares, “Covering the fields with weeds and grass gives birth to microbes, earthworms and insects which bore holes in the soil and make it softer and porous. It collectively increases the fertility of the soil, resulting in a good harvest.” He disapproves of chemical farming for several reasons. In chemical farming, water that is filled in the paddy field

doesn't go deep inside the soil while in natural farming water penetrates deep, increasing the level of water. Under the green cover reside many insects which can easily foil attacks from insects harmful for the crop.

According to him, tilling the field, which entails weed removal, contours the soil into rows to plant and dig channels for irrigation — leading to adverse effects like loss of organic matter, death of soil microbes and soil erosion where topsoil is washed away. Every year, rainwater washes away some fertile soil leaving behind parched fields. The result: debt traps, since farmers are forced to fall back on the desperate measure of relying on chemical fertilisers.

Natural farming increases the fertility of the soil, whereas in chemical farming, it is on a constant decline, till there comes a point when the soil is rendered completely infertile. The organic fertilizer, the carbon, formed inside the soil is lost in the air after tillage as the soil's organic matter is broken down more rapidly. This increases the carbon dioxide level in the atmosphere, thus contributing to global warming. A no-tillage technique gives hope for a solution to a worrying global problem.

Raju owns 13.5 acres, of which 12 acres are used for farming. On 11 of these 12 acres, there is a dense forest of *subbool* (Australian *Agesia*) which is a type of fodder for the animals and a good source of wood. Only one acre is used for agricultural purposes.

His farming is dictated by his requirement, not by what the market requires. He explains, “One acre of land is sufficient for our need. We get food grains, fruits, milk and vegetables from it, which is sufficient for the need of our family. We sow wheat in winter, corn and green gram in summer and paddy in rainy season.”

The steps he is following are those of a famous Japanese agricultural scientist Masanobu Fukuoka, who practiced natural farming for years and wrote a book ‘One Straw Revolution’. This natural agricultural practice is also believed to be popular in the United States of America.

Typically considered to be the enemy of the crops, weeds are the backbone of natural farming. Raju has developed a friendly relationship with the weeds as they create the green zones in the field. When asked if these plants harm the crops, Raju replies, “Not at all,” adding, “The roots of these plants and trees run deep, thus strengthening the soil.” It is natural to assume that no-till farming is tough. People usually tend to disbelieve the methods adopted as part

of natural farming. But seeing Raju's farm, those sceptics come away convinced.

*(Charkha Features)*

Keywords: [Masanobu Fukuoka](#), [Raju Titus](#), [no-till farming](#), [Hoshangabad](#)

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