



# TOPIC OF THE WEEK

## FEB'18 (01 to 07)

## **Topic: Zero Budget Natural Farming**

Himachal Pradesh Government launched **Zero Budget Natural Farming (ZBNF) project** to promote organic farming. It was launched by Chief Minister, Jai Ram Thakur.

The project aims to increase agriculture produce and the income of farmers by the year 2022. ZBNF is set of natural farming methods where the cost of growing and harvesting plants is zero. It is a farming practice that believes in the natural growth of crops without adding any fertilizers and pesticides or any other foreign elements. It is different from organic farming.

Zero Budget Natural Farming, as the name implies, is a method of farming where the cost of growing and harvesting plants is zero i.e. zero net cost of production of all crops. This means that farmers need not purchase fertilizers and pesticides in order to ensure the healthy growth of crops. It is, basically, a natural farming technique that uses biological pesticides instead of chemical-based fertilizers. Farmers use earthworms, cow dung, urine, plants, human excreta and such biological

fertilizers for crop protection. It reduces farmer's investment

It requires almost no monetary investment and envisages use of 'Jeevamrutha' and 'Beejamrutha' (Liquid formulations that are used in organic agriculture). The main aim of ZBNF is to eliminate use of chemical pesticides and use biological pesticides and promote good agronomic practices. It lowers cost of inputs of farmers and gives better capacity to increase the incomes. It also protects soil from degradation and helps in retaining soil fertility and is climate change resilient.

"We have to equate with Sikkim in adopting organic farming, and to use manure instead of insecticides and pesticides," the chief minister said. He said the socio-economic studies on various aspects of research and development should be kept in mind by policy makers while framing policies. "As 90 percent of our population is dependent on farming, I believe that agriculture programs should be pushed in a big way," Thakur said.

Under this project, the university has dedicated 25-acre land to practice the zero-budget farming model. The Governor, addressing agriculture scientists, said

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traditional farming, using chemical fertilizers and pesticides, and organic farming were unviable for farmers. The organic farming was costlier than the traditional farming as the farm inputs were expensive.

The Governor said zero-budget farming was being practiced on the 200-acre farm, Gurukul, in Kurukshetra. He said manure produced from cow dung, urine, jaggery (gur) and gram flour was used. The pesticides were also produced from local products that were not toxic. He claimed that zero-budget farming was giving equal yield as compared to traditional farming. The Governor also invited the CM and other functionaries of the government to visit his farm in Haryana.

He also lamented the fact that in Himachal, 17 types of pesticides were sprayed on apple crop that makes it toxic. Jai Ram Thakur said zero-budget farming was the first program launched by the new BJP government.

The CM assured the Agriculture University of Financial Support from the state government. Ram Lal Markanday said it was a matter of concern that 513 MT pesticides were being used per annum. He urged university

professors to make a Whatsapp group of farmers to update them.

Earlier, the Chief Minister inaugurated the Animal Diseases Investigation and Research Laboratory. The laboratory has been constructed from the funds provided under the Rashtriya Krishi Vikas Yojna. He also inaugurated the lift irrigation scheme, Dhar Badol, brought up at Rs 1.47 crore and would benefit a population of 10,000.

**Health Concerns:** Organic farming involves cultivation of plants and rearing of animals in natural ways. This process involves the use of biological materials, avoiding synthetic substances to maintain soil fertility and ecological balance thereby minimizing pollution and wastage. In other words, organic farming is a farming method that involves growing and nurturing crops without the use of synthetic based fertilizers and pesticides. Also, no genetically modified organisms are permitted.

Organic food consumption may reduce the risk of allergic disease and of overweight and obesity, but the evidence

is not conclusive due to likely residual confounding, as consumers of organic food tend to have healthier lifestyles overall. In organic agriculture, the use of pesticides is restricted, while residues in conventional fruits and vegetables constitute the main source of human pesticide exposures.

Epidemiological studies have reported adverse effects of certain pesticides on children's cognitive development at current levels of exposure, but these data have so far not been applied in formal risk assessments of individual pesticides. Furthermore, aspects of environmental sustainability, such as biodiversity and greenhouse gas emissions, may also be affected by the agricultural production system and may affect human health via food security.

Consumers who regularly buy organic food are also more physically active and less likely to smoke. Depending on the outcome of interest, associations between organic vs. conventional food consumption and health outcome therefore need to be carefully adjusted for differences in dietary quality and lifestyle factors, and the likely

presence of residual confounding needs to be considered. In children, several studies have reported a lower prevalence of allergy and/or atopic disease in families with a lifestyle comprising the preference of organic food.

Organic food consumers (occasional & regular), as compared to non-consumers, exhibited a lower incidence of hypertension, type 2 diabetes, hyper cholesterolemia (in both males and females), and cardiovascular disease (in men) but more frequently declared a history of cancer. Inherent to cross-sectional studies, reverse causation cannot be excluded; for example, a cancer diagnosis by itself may lead to positive dietary changes.

### **Suggested Reading:**

- ✓ <https://www.outlookindia.com/newsscroll/hp-cm-launches-zero-budget-natural-farming-project-to-promote-organic-farming/1241314>
- ✓ <https://www.artofliving.org/in-en/zero-budget-organic-farming-sustainable-and-profitable>

- ✓ <http://www.palekarzerobudgetspiritualfarming.org/>