

Natural farming:

A success story of progressive farmer

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Now a days, sustainable agriculture is major concern of the world, all leading agricultural countries like China, India, USA, etc are working together in several organizations such as Food and Agriculture Organization (FAO), The Global Goals, World Food Organization to overcome the problem of food security and environmental health in upcoming years to meet the food demand goal in 2050 in a sustainable manner. Natural farming is amongst one of the ways to meet these demands. Natural farming mainly works on minimum inputs with minimum effect to environment and soil. Now, Indian farmers are also getting attracted towards natural farming as it does not require any kind of certification and also causes minor reduction in yield as compared to organic farming. Jasbir Singh is a farmer from Haryana who is practicing natural farming since 2015, and is getting better results from natural farming. According to him natural farming is the best way to enhance the economic condition of farmers, sustain the resources and to protect the environment from the problems we currently face and those that will arise in the future.

Keywords: Cow, Crops, Disease, Natural farming, Organic, Weeds

ZERO Budget Natural Farming (ZBNF) is the practice of growing vegetables without the use of any external materials, such as pesticides and fertilisers. Providing all the essential nutrients to the plants for growth and development in a natural way is termed as natural framing. The phrase zero budget applies to all crops with zero production costs. The farmers' income is increased as a result of ZBNF's guidance towards sustainable farming methods that help to maintain soil fertility, guarantee chemical-free agriculture, and ensure low cost of production (zero cost). Simply put, ZBNF is an agricultural technique that emphasises cultivating plants in harmony with the environment.

In the middle of the 1990s, agriculturalist and Padma Shri recipient Subhash Palekar pushed the idea as an alternative to the Green Revolution's intensive irrigation,

chemical fertilisers, and pesticides-driven practices. The states of Andhra Pradesh, Karnataka, Himachal Pradesh, Gujarat, Uttar Pradesh, and Kerala have adopted the Bharatiya Prakritik Krishi Paddhati (BPKP) programme. Numerous studies have documented the efficiency of natural farming-BPKP in terms of raising output, sustainability, reducing water use, improving soil health, and improving the ecosystem of farmland. It is regarded as a profitable farming method with potential to boost employment and rural development. NITI Aayog and the Ministry of Agriculture and Farmers Welfare has organised a number of high-level meetings with international experts on organic farming methods. Around 2.5 million farmers in India are thought to already engage in regenerative agriculture. It is anticipated that 20 lakh hectares of organic farming, including

natural farming, will be practiced over the course of next five years. In India, natural farming is promoted



Mr. Jasbir Singh Arya (Farmer)



Panchagavya



Jeevamrut

any inorganic input is a very difficult task for a farmer now a days, because crops as well as soil have become used to the inorganic substances and even starts resistance against inorganic insecticides and pesticides. But Jasbir Singh put all his efforts to manage his crops with various natural methods to protect the crop from pests, diseases and also to get maximum yield. He prepares several products at his farm which are mainly prepared from the cow dung, urine and also some processed product from cow milk such as buttermilk.

Nutrient management: Proper nutrient management is followed by him. He uses self prepared farm yard manure and Panchagavya. He also prepares Jeevamrut and Ghan jeevamrut for the improvement of pH of soil as well as soil nutrients (micro and macro nutrients).

Jasbir Singh also prepares Gokrupa amrutam which is prepared by mixture of buttermilk and jaggery in water. It is one of the best natural sources to maintain the beneficial bacterial population in the soil.

Insect and pest management: Mainly he prepares the liquid mixture of garlic, neem extract and camphor to control the pest in the field. He also sprays the cow urine in order to control the insect population.

Disease management: According to Jasbir Singh, he faced problem of

through the Paramparagat Krishi Vikas Yojana (PKVY), a centrally sponsored programme known as BPKP-PKVY. The BPKP aims to promote traditional indigenous practices that use fewer inputs from outside sources. It is largely predicated on the recycling of biomass within the farm, with a focus on biomass mulching, the use of cow dung-urine formulations within the farm, periodic soil aeration, and the avoidance of all synthetic chemical inputs. The HLPE report states that natural farming will lessen the need for purchased inputs and will lessen the burden of debt on smallholder farmers.

Mr. Jasbir Singh Arya s/o Omprakash Singh is a resident of village Mangoli, Dist. Kurukshetra, Haryana. He is graduated and owns 5 hectares of land. He took inspiration from lectures of Rajiv Dixit (a reformer who promoted ayurveda and natural farming) and influenced by the impacts of inorganic farming to human health, he started natural farming in 2015. In his initial journey, he had a lot of concerns in his mind regarding the sale, yield, weeds and insect/ pest management. Initially the yield was very low and he also faced problems in managing weeds and pests, but support from family and his will power did not let him go off track. He continued the organic farming and gradually started getting profit.

Current status

Currently, the successful farmer (Jasbir Singh) has experience of 7 years in organic farming and is a well known progressive farmer in his locality. He is practicing natural farming in his whole land (5 hectares). Now he grows all major crops (wheat, paddy, sugarcane, legume crops) in his fields. Knowing the importance of mixed cropping, he grows chana and wheat as a mixed crop in *rabi* season. He is also practicing apiculture and livestockto increase the economic status of his family.

Agronomical practices

Managing the crops without



Gokrupa amrutam

diseases for initial two years after switching to natural farming. After 2–3 years of continuing natural farming, rate of crop diseases started decreasing gradually. He also uses the technique of disease escape by changing the sowing dates of the crops. At present, he is not facing any major crop disease in his fields.

Weed management: He follows cultural method as well as mechanical methods to control the weeds. To reduce the weed population, he does crop rotation and also does hand weeding to manage the weeds in the fields.

Jasbir Singh has good extension contacts with agricultural departments such as KVKs, Agricultural officers and also has contact with other natural progressive farmers. He always stays updated in terms of new innovations and inputs used in natural farming due to which he is able to manage all the agronomical practices in a proper way.

Output

Jasbir Singh is the only farmer in his locality who is engaged in natural farming and is a well known trusted farmer. Now, he sells all his major crops like wheat, als, potato, legume crops from his own farm. Demand of his crop is very high. Every year people approach him before the

Table 1. Yield record of major crops grown by Jasbir Singh in 2021–2022

Crop	Yield (q/ha)	Price/quintals (2021) ₹
Wheat	25–30	6000
Paddy	50–55	4000
Potato	60–70	2500
Sugarcane	625–650	-

harvesting of the crop and book the grains in advance. In case of sugarcane, he processes it into jaggery and jaggery powder (shakkar) and then sells it at the price of ₹120/kg. Demand of these two products is also very high because it is free from all the inorganic compounds and is very healthy for consumption (Table 1).

In order to generate more income, Jasbir Singh is doing integrated farming. He has one unit of apiculture in his farm and is also engaged in livestock farming. To save the input cost, he prepares all the main products like Panchagavya, Gokrupa amrutam, Jeevamrut etc. by himself. According to him, cow is very important for the natural farming because all these products are mainly obtained by it.

Way forward

The world's leading agricultural nations, including China, India, United States, and others, are cooperating in a number of

organisations, including the FAO, The Global Goals, and the World Food Organization, to address the issues of food security and environmental health in the coming years and achieve the goal of meeting global food demand in 2050 sustainably. Natural farming not only maintain the environmental and soil health but also enhances the economic condition of farmers. Low cost inputs are used in this farming and farmer get higher prices of their crop by adopting natural farming as compared to inorganic crop produce. Farmers like Jasbir Singh are getting even double prices for their crops and generating good income from the natural farming.

SUMMARY

Natural farming is one of the best way towards sustainable development. Inputs used in this kind of farming are completely organic in nature, do not cause any kind of harmful impact on soil as well as on environment. Low cost inputs such as cow dung, cow urine, jaggery, corn flour and plant extracts are widely used in natural farming. Following natural farming continuously for longer duration naturally reduces the problem of diseases and insect/pest. Jasbir Singh (a successful farmer) practicing natural farming suggests other farmers to adopt natural farming not only for profit but also for making soil and environment healthy and for sustainable development too. He follows the old saying “You reap what you sow”, according to him if we pollute the soil and environment with inorganic substances, then we will get low grade crops which further result in severe human diseases.

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Farm

Know Krishi Unnati Yojana

The *Krishi Unnati Yojana*, a central sector scheme, is envisaged as umbrella programme for focusing on food security, by merging schemes on Soil-health Card, Integrated Scheme on Agricultural Co-operation and Agricultural Marketing, National Mission on Agriculture Extension, Horticulture Development, Price Stabilization Fund, National Mission on Sustainable Agriculture and other programmes.