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Subhash Palekar Natural Farming: Introduction and It's Four Pillars

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Subhash Palekar Natural Farming (SPNF)

It is a holistic agriculture practice that counters commercial expenditure and market dependency of farmers for inputs. Subhash Palekar Natural Farming is a unique method of farming which requires absolutely no monetary investment for purchase of key inputs like seeds, fertilizers and plant protection chemicals from the market. The farmer can grow hardy local varieties of crops without application of fertilizers and pesticides. Since it is a zero budget farming no institutional credit would be required and dependence on hired labour is also reduced to bare minimum. In (SPNF), nothing has to be purchased from the outside. All things required for the growth of the plant are available around the root zone of the plants.

Salient Features of SPNF

1. In this system of farming, no monetary investment on the part of farmer is required for purchase of seeds, fertilizers and plant protection chemicals from the market.
2. The farmer can produce his own seed or he may use seeds that are available with other farmers. More importantly, there is absolutely no place for fertilizers and plant protection chemicals in this scheme of farming.
3. Dependence on hired labour is also reduced to the bare minimum as the system discourages intercultural operations. The whole philosophy behind this system is to make the farmer self-reliant so that he is freed from the clutches of money lenders and market dispensed high cost inputs.

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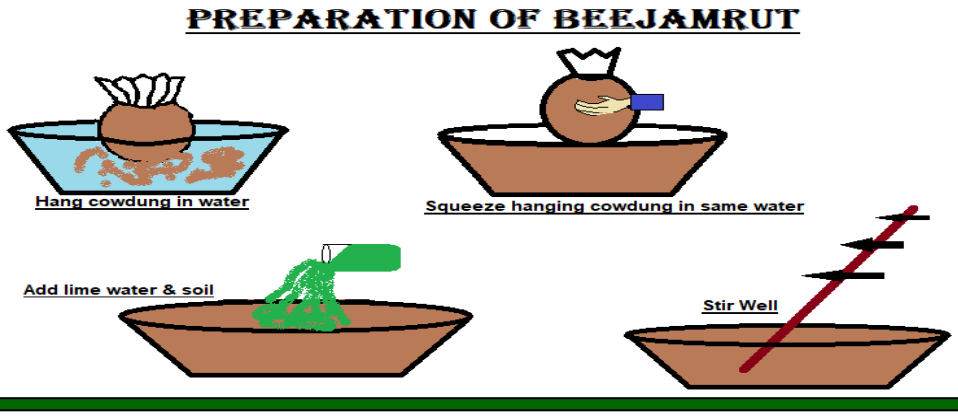
Top Four Pillars of Zero Budget Natural Farming

1. **Bijamrita**

Farmers have been treating their seeds by local cow urine, cow dung and little soil from the bund of the farm or land of the farm since time immemorial (mentioned even in our vedasas well as other ancient literature) This was the traditional method and also a totally scientific method. However, with the advent of chemical agriculture number of fungicides and insecticides have been recommended for treating the seeds before sowing. Also, when the seeds treated with these poisonous chemicals germinate and grow, these poisons are also absorbed by the roots with the soil water solution and are deposited in the body organs of the plants and when consumed, these poisons are transmitted to our body and causes number of diseases and other health conditions. The higher costs incurred on the purchase of these fungicides and other chemicals for seed treatment results in the exploitation of the farmers and also increase the cost of cultivation for the farmers.

Hence, under Natural Farming, the seeds are treated with the formulation made from cow urine, cow dung and other locally available material which is equally effective in checking seed borne diseases.

How to prepare Bijamrita?



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Materials used: 20 litre water, 5 Kg local cow dung, 5 litre localcow urine, 50 g lime& small quantity of soilfrom the bund of the farm.

Method:

1. Take 5 Kg local cow dung in a cloth and bound it by tape.
2. Hang this in the 20 Litre water up to 12 hours.
3. Take one litre water and add 50 gm lime in it and let it stabilize for a night
4. Then next morning, squeeze this bundle of the cow dung in that water thrice continuously, so that all essence of cow dung will accumulate in that water.
5. Then add a handful of soil in that water solution and stir it well.
6. Then add 5 litre desi cow urine in that solution & add lime water and stir it well.
7. Bijamrita is then used to treat the seeds which are done by spreading it over the seeds, mixing these seeds by hands, drying it well and use for sowing.

2. JIWAMRITA

It is a fermented microbial culture. It provides nutrients, but most importantly, acts as a catalytic agent that promotes the activity of micro-organisms in the soil as well increases the earthworm activities Jivamrita also helps to prevent the fungal and bacterial plant diseases

Preparation of Jivamrita:

1. Add 10 kg cow dung and 10 litres cow urine
2. Add 2 kg jaggery
3. Add 2 kg of pulse flour and a handful of soil from the bund.
4. Put water to make 200 litres volume in a barrel.
5. Stir the solution well and let it ferment in shade for 48 hours.

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3. Acchadana (Mulching)

Mulching promotes humus formations, suppresses weeds and maintains the water requirement of crops. For the proper growth, multiplication and activity of beneficial micro – organisms that are applied through Jivamrita, a favourable definite microclimate is required. In this favourable microclimate the temperature of the soil should be in the range of 25 to 32 °C with 65 to 72 % moisture, darkness and warmth. When we much mulch the soil, this microclimate is created automatically. There are three types of Mulching:

A. Soil Mulching
B. Straw Mulching
C. Live Mulching

Straw Mulching

This application of dried straw biomass of the previous plants or crops as a soil cover in the succeeding crop is called straw mulching. This straw mulch is very important as the seeds are covered by this straw mulch and it saves seeds from birds, insects and animals. It creates a micro-climate which activates the micro-organisms and local earthworms and favourable condition to decompose the organic matter in soil such as roots and to prepare humus in the soil for future new crop.

Live Mulching (Intercrops & Mixed Crops)

Live mulching means that intercrops and mixed crops, which have a symbiotic association with each other. Specific crops, mostly legumes, are grown as intercrops as they help in fixing atmospheric nitrogen and make it available to the main crop.

4. Whapasa (Moisture)

According to Palekar, what roots need is water in the form of vapours. Whapasa is that microclimate in the soil, by which the soil organisms and roots can live freely with availability of sufficient air and essential moisture in the soil. In one sentence, shortly, the Whapasa means the mixture of 50 % air and 50 % water vapours in the cavities between two soil particles. Most of the micro – organisms and root hair (which absorb water and nutrients) are active in the top 10 – 15 cm of soil layer and it is important to maintain Whapasa in that zone of soil.

Endorsement by the Government of India

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While the country has been planning to revamp its agricultural production system including R&D to meet the formidable challenges being faced by it, the economic survey of 2018-19 made a fervent appeal for the adoption of 'Subhash Palekar Natural Farming' (SPNF) in a big way to double farmers' income and it was subsequently endorsed by the Hon'ble Finance Minister during her budget speech in the parliament. SPNF is said to be 'Zero Cost or Zero Input Natural Farming' and, therefore, whatever quantity is harvested is treated as net profit to the farmer.

References:

Anonymous (2019) Mirage of Zero Budget Farming: Is zero budget farming the new demagoguery of the state to camouflage mis-governance. *Economic and Political Weekly*. Vol. 54. No. 30 pp. 8.

Anonymous. (2001). Report of Task Force on Organic Farming, Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India, 2001, p. 76.

Palekar S. (2005). The philosophy of spiritual farming. 2nd ed. Zero Budget Natural Farming Research, Development & Extension Movement, Amravati, Maharashtra, India.

Palekar, S. (2016) Zero Budget Natural Farming. http://palekarzerobudgetspiritual farming.org

Palekar, S. (2019) https://www.thehindubusinessline.com/specials/india-file/ ground-results-validate-zero-budget-natural-farming-subhash-palekar/article 29723018.ece