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**ZERO BUDGET NATURAL FARMING- THE
NEED OF THE HOUR**

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ZERO BUDGET NATURAL FARMING- THE NEED OF THE HOUR

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INTRODUCTION

Zero budget natural farming is a method of chemical free agriculture drawing from traditional Indian practices. The concept of this natural farming was originally promoted by Maharashtra agriculturist Subhash Palekar, who developed it in the mid 1990s as an alternative to the green revolution's methods driven by chemical fertilizers and pesticides and intensive irrigation. Observing that both chemical and organic farming methods have deleterious impact on the environment in one way or the other, Mr. Palekar underscores the need for minimising emission of greenhouse gases.

“Natural farming can do this successfully. Emission of hazardous gases is zero in this practice. If a majority of farmers switch over to natural farming, the country can successfully reduce the emissions,” he points out.

NEGATIVE IMPACTS OF GREEN REVOLUTION-

Indiscriminate use of agrochemicals has affect the soil fertility, environment, crop productivity, product quality, adverse effect

on non target organisms and cause pest resurgence also.

NEED OF THE HOUR-

Advancement towards sustainability. To reduce the loss of pest, disease and weeds by restricting the use of harmful chemicals. Quality and poison free food. Agriculture without external input. Expense free farming. Farming with the harmony of nature . Saving the farmers from suiciding themselves.

4 Pillars of Zero budget Natural Farming-

1. Jeevamrutha
2. Bijamrita
3. Achhadana
4. Whapasa

1. Jeevamrutha

It is a mixture of fresh desi cow dung and aged desi cow urine, jaggery, pulse flour, water and soil to be applied on farmland.

This is a fermented microwater in a barrel; Add 10 Kg fresh local cow dung and 5 to 10 liters aged cow Urine; Add 2 Kg of Jaggery (a local type of brown sugar), 2 Kg of pulse flour and a handful of soil From the bund of the farm. Stir the solution well and let it ferment for 48 hours in the shade. Now jeevamrutha is ready for application. 200 liters of jeevamrutha is sufficient for one acre of Land.

How to prepare- Add 200 liters of Water in a barrel; Add 10 Kg fresh local cow dung and 5 to 10 liters aged cow urine; Add 2 Kg of Jaggery (a local type of brown sugar), 2 Kg of pulse flour and a handful of soil from the bund of the farm. Stir the solution well and let it ferment for 48 hours in the shade. Now jeevamrutha is ready for application. 200 liters of jeevamrutha is sufficient for one acre of land.

2. Bijamrita/beejamrutha - is a treatment used for seeds, seedlings or any planting material. Bijamrita is effective in protecting



young roots from fungus as well as from soil-borne and seed-borne diseases that commonly affect plants after the monsoon period. It is composed of similar Ingredients as jeevamrutha – local cow dung, a powerful natural fungicide, and cow urine, a Strong anti-bacterial liquid, lime, soil.

3. Acchadana – Mulching . 3 types practiced i.e. soil, straw and live mulch(symbiotic mixed crops and intercrops.)

4. Whapasa – moisture: Palekar challenges the idea that plant roots need a lot of water, thus Countering the over reliance on irrigation in green revolution farming. According to him, what Roots need is water vapor. Whapasa is the condition where there are both air molecules and Water molecules present in the soil, and he encourages reducing irrigation, irrigating only at Noon, in alternate furrows farmers report a significant decline in need for irrigation in natural farming.

Others Principles’- Intercropping, local species of earthworm’s, contours and bunds, cow dung.

IS NATURAL FARMING EFFECTIVE?

It will eliminate cost of external inputs especially fertilizers and pesticides. It can help in breaking the debt cycle for many small farmers.It will help in promoting environmentally friendly farming methods. It improves soil aeration, minimal watering, intercropping and topsoil mulching. Against the conventional methods, it use only 10% of the water. It is suitable for all crops in all zones.

A limited 2017 study in Andhra Pradesh claimed a sharp decline in input costs and improvement in yield. However many reports also suggest that many farmers have reverted to conventional farming after seeing their natural formings drop. In 2021, Researchers at bengaluru think-tank center

for study of science, technology and policy conducted an explanatory study in Andhra Pradesh to compare Zero Budget Natural Farming and ZBNF techniques in paddy, groundnut, chilli, cotton and maize farming, the results were encouraging.

What make Zero budget natural farming different from Organic farming?

In natural farming we did not use any chemical, fertilizer and any composting material. Instead of using the crop and vegetable wastes in compost or vermicompost that is made in industries and any suitable location (Organic Farming) , we use these wastes in between the crops as a cover crop and we didn’t burn or dump like in organic and conventional farming.

COPE WITH DROUGHT LIKE SITUATIONS-

Even if the fertilizer available and apply in field in a regular manner but still in drought condition it will not effective as much. But in case of natural farming, in drought condition also yield a good amount of return ..means not in higher amount but a required amount easily get.

HOW DO U PLAN IT TO PROMOTE IT?

There are probably 640 districts in India . So select one district and do a model in one block of that district and do natural farming for 1-2 yr. At first for short term period getting low yield as compared to organic and conventional farming but for a long period they get a good quality and high yield in future and sustainably use it for future generations. But we can’t a good quality and high yield in long term purpose in conventional farming.

Also we use raw seeds in natural farming, and by monsoon irrigation done and as we all know that 98.5 % of plant body made from water, wind and sunshine and



naturally the soil have sufficient amount of nitrogen , phosphorus and potassium amount. But by using Genetically modified and chemically treated seed yield somehow increaes but in chemically treated seeds quality reduced

In organic farming humus formation obsturcts but in natural farming humus formation easily done which is effective for production purpose.

Why don't we need any fertilizer, pesticides and herbicides in Zero Natural Farming?

Bhumi Annapurna means soil is rich with all the nutrients for plants to grow. Plants do not compete for the food with weeds, they coexist and live in symbiosis. Natural pest controls in the form of complementary crops and ashtras will help.

Government Initiatives- Finance Minister Nirmala Sitharaman in her 2019 budget into the spotlight, she called for a “back to the basics” approach. In fact states like Himachal Pradesh, Chhatisgarh, Kerala, Karnataka and Uttarakhand has invited Mr. Palekar to train their farmers about natural farming. Govt. to constitute committee to promote zero budgeting agriculture (NITI AAYOG).

GOVERNMENT INCENTIVES-

In the context of the govt.'s commitment to double farmer's income by 2022, GOI is promoting natural farming in country through dedicated schemes of Paramparagat Krishi Vikas Yojana(PKVY) and through Rashtriya Krishi Vikas Yojana.

CHALLENGES-

A growing population with rising expectations demands increased agricultural productivity. Appropriate Policy framework. Setting specific standards. Slow to achieve

results. Non availability of commercial formulations.

CONCLUSIONS-

It reduce or save the cost on fertilizer, seeds and plant protection chemicals. This farming has free the farmers from debt trap and it encourage them to make farming an economically viable venture. By doing this we get a good quality and high quality things in a long term basis. And use it for our future generations. It is the only agricultural practice that has no side effects. It is the best practice for farmers, soil and environment. Observing that both chemical and organic farming methods have deleterious impact on the environment in one way or the other, Mr. Palekar underscores the need for minimising emission of greenhouse gases. Use natural farming for betterment of life and maintain sustainability in future generation.