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# Revival of Natural Farming in Haryana and Neighbouring Area: A way of Sustainable Environment

**ANITA and VIJAY WANTI**

**Abstract**

Since the green revolution excess use of chemical fertiliser, insecticides and pesticides in agriculture in India have increased at an alarming rate. And it has a negative influence on the environment, biodiversity, soil, ground water, human health. In this situation, the Zero Budget Natural Farming technique has been introduced to reduce these negative impact on environment and human health. Indian economy is based on agriculture so it's survival and expansion is important and need to be studied. Zero-budget farming has the potential to reduce the expenses. Natural fertilisers, insecticides, desi seeds and other natural methods like mulching, Whapasa , green manure, soil conservation measures are used. Jivamrita, Bijamrita, Acchadana (Mulching), and Whapasa are the four main pillars of natural farming on a low budget. In India, the main issues arising in natural farming (kudarti krishi) include yield reduction in conversion to natural farm, soil fertility enhancement, integration of livestock, certification constraints, marketing and policy support. This paper attempts to study the revival of natural farming in Haryana and neighbouring areas for sustainable environment.

**Key Words –** Natural Farming, Renewable Agricultural Products, Sustainable Development, Soil Fertility, Indian Farmers.

## 1. Introduction

Organic farming is not new in India. Use of animal manure, waste material and ashes of wood burning from Kitchen 'Chulhas' or 'Wood Stoves' has been a practice and tradition in rural areas in North India. In fact, it was a system from agriculture production to waste and waste to production. It was management system of soil and living beings such as plants, animals, birds, micro-organisms etc. After independence of India in 1947, with the growth of population, need of new ways of agriculture was felt for self-reliance in terms of food grains. First five-year plan focused on new ways of agriculture which was called 'Green Revolution'

Sir Albert Howard was the father of organic farming and created the concept prior to 1940. (1873- 1947). From 1905 through 1931, Howard, who was born and raised in England, oversaw agricultural research in India. Howard's views on soil fertility and the necessity of effectively recycling waste materials, including sewage sludge, onto agriculture were backed by F.H. King's book, Farmers of Forty Centuries. A composting method developed by Howard is now widely used. The creation of soil humus served as the basis for Horward's theory of soil fertility. Today, attention is placed on the connections between human and animal health, crop health, and soil life. (J. Hackman, 2006)

When analysing the "Organic Farming Policy," Programmes like the National Center for Organic Farming (NCOF), the National Project on Organic Farming (NPOF), Paramparag at Krishi Vikas Yojana (PKVY), Mission Organic Value Chain Development for North East Region (MOVCDNER), and a soil health management programmes and schemes Rashtriya Krishi Vikas Yojana(RKVY) and the Mission for Integrated Development of Horticulture(MIDH)to promote organic farming in their respective states mentioned challenges like possibilities.

They found gaps in implementation:

Officials responsible for ground-level implementation often lack required expertise.

Careful enrolment and mobilization of farmers a concern

Inadequate farmer training and handholding

Certification still not farmer-friendly

Poor market linkages

Availability of good quality seeds suitable for organic farming

There is possibility of Zero farming budget etc.**.** (Amit Khurana ; Vineet Kumar, 2020)

Zerobudget farming has the ability to drastically cut costs associated with production. Low-cost farmers use mulching, soil safeguards, organic pesticides, and fertilisers.

The four basic pillars of natural farming on a tight budget are Jivamrita, Bijamrita, Acchadan a (Mulching), and Whapasa.(Khan, et al., 2022)

Organic farming promoted through Paramparagat Krishi Vikas Yojna(PKVY) will help in soil health management and locally available traditional resources. (Khan, et al., 2022)

Xu, Hui-lian. (2013) writes in his book- Mokichi Okada’s followers are promoting nature farming in Japan in collaboration with the recent organic movement. The principles and

technologies of nature farming have been undergone development, improvement and adaptation to today's sustainable food production. Xu, Hui-lian. (2013).

In Andhra Pradesh, natural farming is observed to be prevalent, with the majority embracing t he movement in the last five years, whereas adoption of NF in Karnataka, despite having start ed more than 15 years ago, remains relatively sporadic. The usage of Jeevamritha, Beejamrith a, and other plant protection materials is the most widely used practise in natural farming, eve n though other procedures are required. Mulching and other types of irrigation (Wapasa) are not common practises. (Ranjit, Kumar, Yashavnath, & Meena., 2019)

With its greater focus on environmental protection and resource conservation, nature farming appears to hold a lot of potential for finding suitable answers to these issues.

The following are top priorities for research and technology transfer:

1. Efficient water use, with a focus on rainwater collection.
2. Maintain stable water tables in semi-
   arid and arid regions with brackish ground water that are watered by canals.
3. Create field, vegetable, and fruit crop varieties that are resistant to pests, drought, and salt.
4. Comprehensive nutritional control.
5. Integrated pest control
6. Determining effective crop zones and implementing effective cropping techniques.
7. Gather data on integrated agricultural methods for various agroecological settings.
8. Create infrastructure for marketing and processing products that can be preserved or processed. (Singh)

## 2. Study Area and Respondents

### 2.1 Study Area

Study area is Haryana and its neighbouring area states such as Panjab, Rajasthan and Western UP. It extends from dry soil to fertile light doab soil of Panjab and Uttar Pradesh. Climate wise it covers hot summers, cold and 100-150 cm. rainfall area. This area takes two crops per year Rabi and Kharif growing wheat, rice, sugarcane, Bajra, vegetables etc. It has Agriculture technology user Panjab.

## 2.2 About Respondents

**FIG.-1**
**RESPONDENTS**

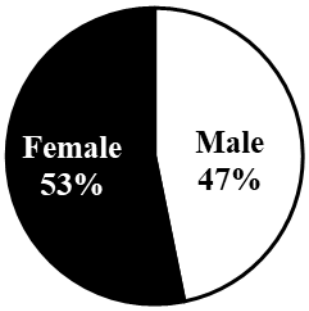



**FIG.-2**
**PERCENTAGE WISE EDUCATION LEVEL OF RESPONDANTS**

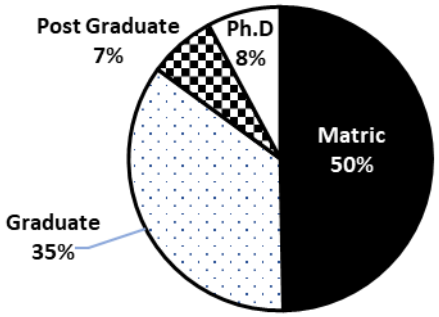
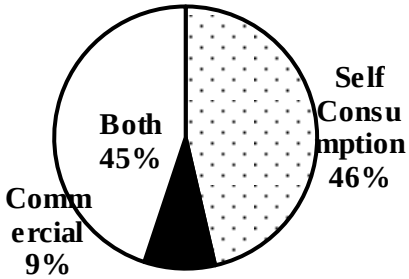


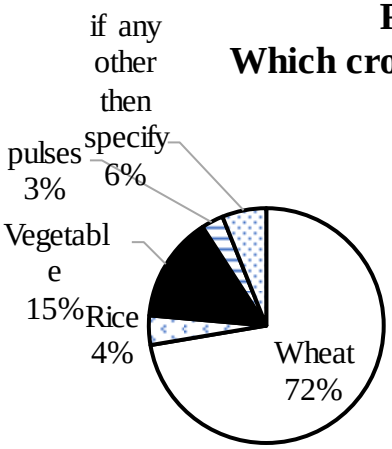

**FIG.-3**
**RESPONDANTS TYPE OF AGRICULTURE**




Respondets were nearly equal in terms of proportion in the contribution of the study and half of them had attained matriculation level of education. They were growing crops for self consumption having more focus on wheat. Fig. 1,2,3 and 4

68 percent of the respondents are using chemicals as fertilisers and insecticides. (Fig.6).

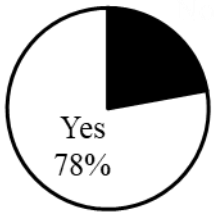
**Fig.-4**
**Which crop do you grow**




Source Data-Primary Survey 2022

Fig.-5

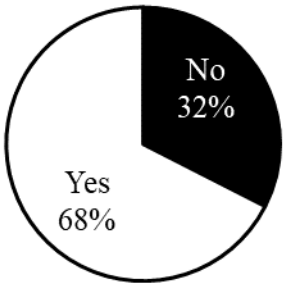
## Do you know about natural farming




Source Data-Primary Survey

**Fig.-6**

**Do you use chemical and pesticides as fertilizer and insecticides**

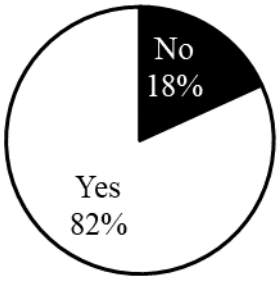



2022

Source Data-Primary Survey 2022

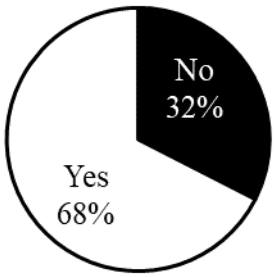
**Fig.- 7**

**Is natural farming a organic farming**



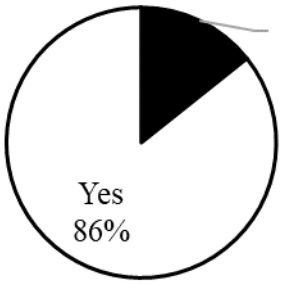

Source Data-Primary Survey 2022

**Fig.-8**
**Do you use chemical and pesticides as fertilizer and insecticides**




Source Data-Primary Survey 2022

**Fig.- 9**
**Do you know disadvantages of chemical farming**




Source Data-Primary Survey 2022

## 3 Objective of the Study

1. The main objective of study is to know the present status of adopting Natural farming keeping in mind cost and income.

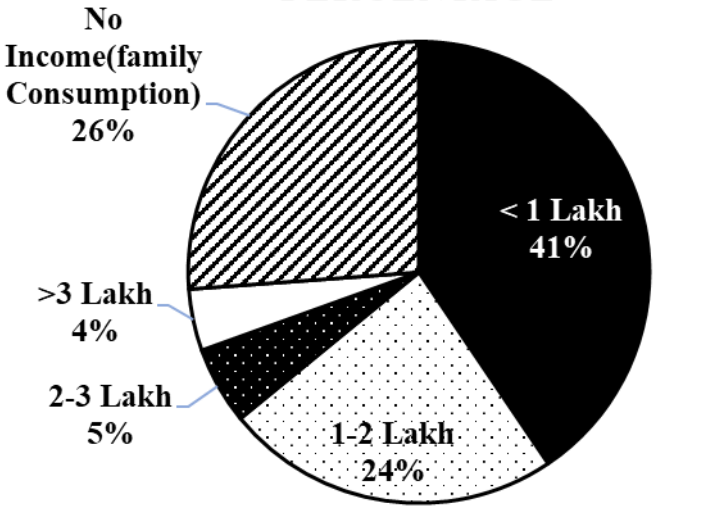
2. To know about view of farmers on impact of organic farming on soil health and environment.

## 4 Methodology

It is a primary data based empirical research using both Quality and Quantitative data. 78 google forms have been collected from farmers of study area adopting organic farming. Pie charts have been used to display the data for analysis/

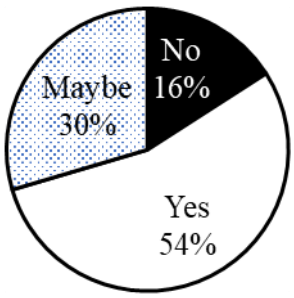
## 5 Results and Discussion

**FIG.10**
**INCOME WISE RESPONDENTS PERCENTAGE**




Source Data-Primary Survey 2022

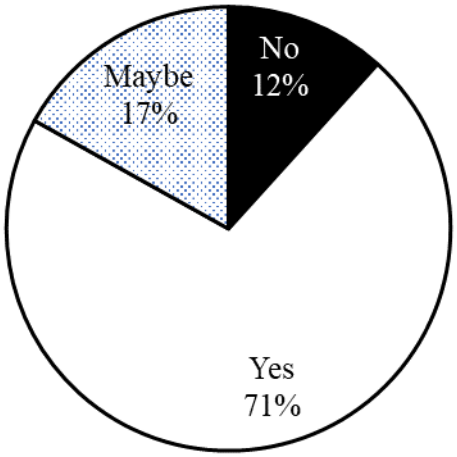
**Fig.11-**
**Do you find chemical farming costly**




Source Data-Primary Survey 2022

**Fig.-12**

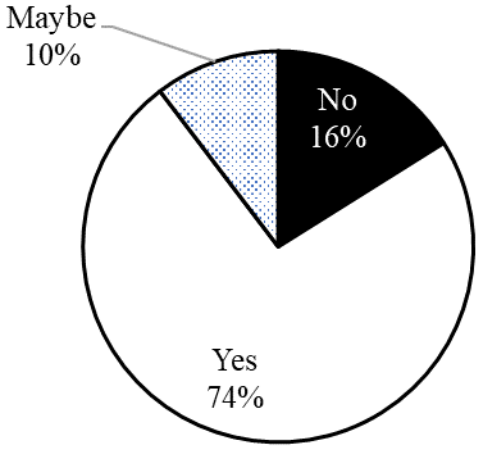
**Do you know ill- effects of chemical farming on human health and soil quality**




Source Data-Primary Survey 2022

**Fig.13**

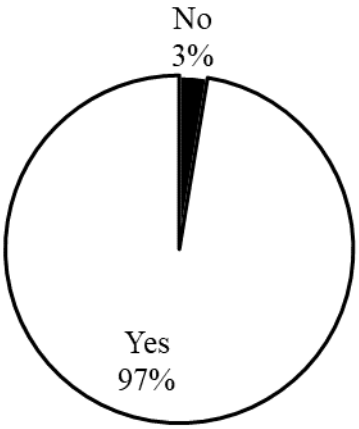
**Do you feel natural farming is better option for human health and soil quality**




Source Data-Primary Survey 2022

**Fig.-14**

**Do you agree to adopt natural farming**

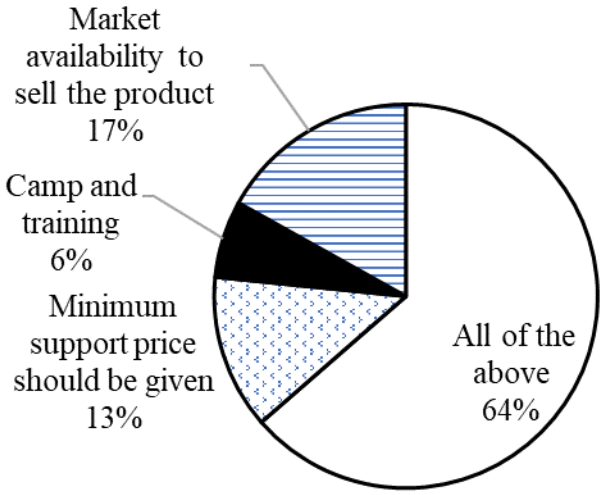



Source Data-Primary Survey 2022

It cannot be denied that majority of the farmers agree to adopt the natural farming knowing the illeffects of chemical farmingand costly; and feeling natural farming as better option for human health and soil health. (Fig.11,12,13,14).

**Fig.-15**

**Suggestion for promotion of natural farming**




Evidence show that majority of the farmers wants market availability to sell the product, camp and training and minimum support price should be given (Fig.15)

## 6. Conclusion

Of course farmers want to adopt organic farming. They also agree with that natural farming is better than chemical farming and it is good for human health and soil health. They are aware of the ill effects of chemical farming. Majority finds chemical farming costly. Nonetheless, majority of the farmers need market availability to sell the product, camp and training and minimum support price should be given.

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