

## **K.V.K. FARM SOIL HEALTH IMPROVEMENT PROGRESS**

### **REPORT 2024**

**Several practices have been adopted to improve the soil organic matter content, nutrients status and other health parameter of the soil :-**

- Use of Green manure crop Dhaincha (*Sesbania aculeate*) cultivation in April of each year
- Use of Halophilic bio-formulation (Halo-Azo, Halo-PSB and Halo-Zinc) for seed, root and soil treatment.
- Use of FYM and Vermicompost in crops before sowing.
- Use of bio-decomposers to convert the crop residue in quality compost to improve soil health and crop production.
- Balance use of fertilizers on the basis of soil test recommendation and ICM practices.
- Use of laser land leveler to improve the physical condition of soil
- Recently we also started preparing and use of different Natural Farming components such as Beejamitra, Sanjeewak, Jeewamitra, Neemastra etc to improve the soil health and quality of produce and adopted 2 plots each of 1 acre for Organic and Natural Farming.

### **CHANGES IN SOIL PARAMETERS AND CROP PRODUCTIVITY OF FARM FROM 1999 TO 2024:**

S. NO.	PARAMETER	CHANGES
1	Soil pH	10.1-10.5 to 8.0 –10.1
2	Organic Carbon (%)	0.00 -0.01 to 0.10-0.45
3	Available Nitrogen (Kg/ha)	7.0-25.0 to 49.5-225
4	Available Phosphorus (Kg/ha)	3.0- 7.0 to 6.8-27.5
5	Available Potassium (Kg/ha)	270-285 to 218 to 234
6	Available Sulphur ( Mg/Kg)	3.6 to 10.1
7	Available Zinc ( Mg/Kg)	0.15 to 0.90
8	Available Boron ( Mg/Kg)	0.1 to 0.8
9	Available Iron ( Mg/Kg)	0.65 to 3.29
10	Available Copper ( Mg/Kg)	0.65 to 2.95
11	Manganese ( Mg/Kg)	1.93 to 4.80
12	Paddy(Q/ha)	15 to 45
13	Wheat(Q/ha)	06 to 34