

The Project on Strategic Plan for Extending Green Revolution in Bihar

The Govt. of India has allocated 6394.34 Lakh for bridging the yield gap in by Extending Green Revolution in Eastern India by initiating the Programme under sub Plan of R.K.V.Y during 2010-11 under RKVY sub scheme for Bihar State.

In Bihar, contribution of Agriculture ,Gross Domestic Product (GDP) is 33 per cent while at the national level, it contributes only 18 percent.

The Gross and net sown area in the state is 78.82 lakh ha and 57.12 lakh ha respectively. The intensity of cropping is 138%. The principal crops are paddy, wheat, pulses, maize, potato, oilseed and Sugarcane. Rice, wheat and maize are the major crops.

2.2 Food grain production in Bihar

The total area under rice in 35.21 lakh ha. with productivity 16.1 Q/ha. which is very low in comparison to leading states of rice production. The average productivity of Eastern region is 17.05 Q/ ha (TE 2003-04) which is less than the national average (19.71 Q/ha).

The average wheat productivity of the state in 20.50 Q/ha. as compare to 21.61 Q./ha (TE 2003.-04) of the region which is less than the national average 26.96 Q/ha.

The average productivity of Maize is 25.02 Q./ha. is higher then 19.92 Q./ha in the region and national average 19.11 Q/ha.

The average production of Rabi Maize is 36.60 Q./ha. which is highest in the country.

The average production of Arhar 13.83 Q/ha. as against national productivity 8.26 Q/ha. where as masoor(lentil) 7.96 Q./ha against 6.22Q./ha Which is highest in the country.

Agriculture in the state is prone to natural calamity. Whereas the District of North Bihar are affected by the recurrent flood. The south Bihar districts are prone to lack of rainfall. The coverage under rice, wheat, total maize and oilseeds crop is estimated to increase about 9.6, 6.7, 2.0 and less than 1 per cent respectively in 2008-09 from 2004-05, while the area under total pulses decrease to about 10 per cent (Graph1). However, the productivity trend shows a positive slope over the same period

Objectives of the Project:-

- ❖ To enhance the Productivity of Rice, Wheat, Maize (both Kharif as well as Rabi) and Pulses (Arhar, Bangal gram, lentil, Rajma, Green Gram).
- ❖ To improve soil health with the use of Bio fertilizers and micro-nutrients.
- ❖ To increase the area of Arhar and lentil as intercrop for increasing production in Kharif maize & sugarcane respectively.
- ❖ To enhance water use efficiency by the applications of sprinkler and drip irrigation.
- ❖ Mechanization of the Agriculture farms.
- ❖ Reclamation of problematic soils by pyrites/ phospho gypsum.
- ❖ To enhance the technology for crop production among the farmers.

Benefit from the Project

- A large number of small and marginal Farmers will be benefited.
- Average productivity of Rice would increase from 1.6 t/ha to 2.5t/ha.
- Average productivity of Wheat would increase for 2.1 t./ha to 3.0 t./ha.
- Average productivity of Maize would increase from 2.2t./ha to 3.0t./ha.
- Average productivity of Pulses would increase from 0.9t./ha to 1.2t/ha.
- Soil Health will be improved.
- Water use efficiency will increase by use of sprinkler especially in undulating landscape.
- Mechanization of Farm to enhance crop production.
- Reclamation of problematic soil by use of phospho gypsum/pyrites. These area will have additional food production at least 0.5 to 0.6 t/ha.

Out come of the Project

- Additional production of Rice, Wheat, Maize & Pulses will improve standard of living of farmers as well as Gross State Domestic Product the state.
- Soil health will improve by using balance fertilizer including organic manures and micronutrients.
- To improve farmers knowledge for proper crop cultivation

Present Status of the selected crops

Name of the crop	Area (Lakh Ha.)	Productivity (Qtls./Ha)	Production (Lakh M.T.)
Kharif Rice	35.15	16.00	56.24
Boro & summer Rice	1.05	17.81	1.87
Total Rice	36.20	16.05	58.10
Wheat	21.31	23.80	50.71
Kharif Maize	2.58	16.78	4.33
Rabi Maize	2.06	35.97	7.41
Summer Maize	1.81	31.55	5.71
Total Maize	6.45	28.10	18.12
Total Pulses	6.10	9.00	5.49

Expected outcome after the implementation of the project

Name of the crop	Area (Lakh Ha.)	Productivity (Qtls./Ha)	Production (Lakh M.T.)
HYV Rice	30.04	22.50	67.59
Hybrid Rice	2.18	58.00	12.64
Boro & summer Rice	2.93	25.70	7.53
Total Rice	35.15	25.00	87.87
Wheat	21.31	30.00	63.93
Kharif Maize	2.58	18.01	4.64
Rabi Maize	2.06	38.65	7.96
Summer Maize	1.81	33.35	6.04
Total Maize	6.45	30.01	19.35
Total Pulses	6.10	12.0	7.32

FUNDING OF THE PROJECT

The different component wise financial requirement for the programme proposed under project is as follows:

Sl. No	Component	Activities	Total Cost (Rs lakh)
1	Rice (Kharif) Rice (Summer) Boro Rice	Demonstration(Hybrid Rice with S.R.I. Technique, Hybrid Rice with P.P.C), Seed distribution of Hybrid and High yielding varieties, capacity building, Distribution of micro nutrients, weedicides and Plant Protection Chemicals, demonstration of Summer Rice and Boro Rice, Distribution of seed of Summer Rice and Boro Rice.	1985.23
2	Wheat	Demonstration (With S.W.I. Technique) Distribution of HYV seed, Micro Nutrients & Pump sets for irrigation and contingency.	1987.16
3	Maize	Demonstration, seed distribution, capacity building (farmers/officers), Distribution of Irrigation Pipes, Plant Protection chemicals & equipments, Distribution of Micro Nutrients and weedicides, Contingency.	423.33
4	Intercropping of Maize+Arhar	Demonstration, Seed Distribution of Maize & Arhar, Distribution of Rhizobium Culture, Plant Protection equipments, Plant protection chemicals/Bio-pesticides.	246.39
5	Pulse Production	Demonstration, Distribution of Seed Sprinkeler Sets, Rhizobium culture, Plant Protection implements and Plant Protection Chemicals.	699.05
6	Intercropping of sugarcane	seed distribution of Lentil, Green gram, Rajmah, Black gram, coriander and Potato.	391.00
7	Reclamation of acidic and sodic soil	Reclamation of acidic & sodic soil in different districts of Bihar.	662.18
Total Amount			6394.34

S.R.I. → System of Rice Intensification

S.W.I. → System Wheat Intensification

P.P.C. → Plant Protection Chemical