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## A CASE STUDY OF AGRIPRENEUR ADOPTING INTEGRATED FARMING SYSTEM MODEL AT SAMHAUTA VILLAGE OF WEST CHAMPARAN DISTRICT IN BIHAR, INDIA

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### INTRODUCTION

Integration of various agricultural enterprises viz., cropping, animal husbandry, fishery, forestry etc. have great potentialities in the agricultural economy. These enterprises not only supplement the income of the farmers but also help in increasing the family labour employment. The integrated farming system approach introduces a change in the farming techniques for maximum production in the cropping pattern and takes care of optimal utilization of resources. The farm wastes are better recycled for productive purposes in the integrated system. A judicious mix of agricultural enterprises like dairy, poultry, piggery, fishery, sericulture etc. suited to the given agro-climatic conditions and socio-economic status of the farmers would bring prosperity in the farming. Agriculture practiced with animal husbandry not only gives additional income and employment opportunity to the family members around the year and also livestock excreta utilized as manures lowered the cost of fertilizers. Additional yields from crops. Soil fertility was protected. Crop residues used as livestock feed will reduce the feed cost. In this method agriculture along with fodder and azolla production combined with animal husbandry we will get more benefits.

### BACKGROUND OF FARMER

Mr. Anand Kumar Singh was born in farming family hails from the village Samhauta of Narkatiaganj block, West Champaran district in Bihar. He completed his graduation and chosen

agriculture as a profession and started devoting his time focusing on a better farming. He is having 27 acre of land. Initially, he used to grow only rice, wheat, sugarcane and fisheries by adopting traditional methods. He was not getting the expected income. He felt that doing agriculture through conventional method minimized the yield and income. It is also associated with low productivity, increased cost on agriculture inputs and poor or no utilization of existing farm resources available in the farm. He came in contact of KVK scientists and other agencies like agriculture, horticulture, animal husbandry, he incorporated the major components of Integrated Farming Systems for diversified agriculture (Rice, Wheat, Sugarcane, Mustard, Mango, Makhana cultivation, Dairy, Fisheries/ Prawn farming) for enhancing his farm income. Now, he is a role model for other agri-entrepreneur in the district for adopting Integrated Farming System.

### TRAINING AND MOTIVATION

He was not happy with his traditional agriculture methods and he wanted to become entrepreneur and one day he participated in training which was conducted by Krishi Vigyan Kendra and Agriculture department, West Champaran. He also participated in various exposure visits organized by Krishi Vigyan Kendra and Agriculture department, West Champaran to update his knowledge and current information. He had discussion with KVK Scientists regarding income generating activities and afterwards with

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motivation from KVK, he adopted IFS model in their farming system.

### CONTRIBUTING FACTORS

Basically, his activeness, sincerity and hard-working nature has contributed in his success in addition to technical guidance from experts from KVK, Universities, ICAR Institutes and State agriculture department officials. With those of his qualities and timely technical advice and proper timely implementation has transformed his life which he never thought.

### ECONOMICS OF FARM ACTIVITIES

After establishing the integrated farming system, his net income increased to Rs. 2685600 lakh/-annually from 27 acre land. The overall average production growth and net income was 48.31 and 114.40 per cent more over previous baseline period. Mr. Singh has become a role model for fellow farmers in the district Wst Champaran of Bihar. His socio-economic status is recognized as a Progressive Farmers. His plan for the future is to expand IFS model and inculcating the value of

agriculture among youth who are quitting agriculture. His future plan is also to increase his area under orchards. According to Mr. Singh, “a diversified farming system is like flower plants of different colours in a beautiful garden”.

### RECOGNITION

- Abhinav Kisan Puraskar-2020 by Dr Rajendra Prasad Central Agricultural University, Pusa, Samastipur, Bihar
- Best IFS model and getting higher monetary by district magistrate West Champaran Bihar.
- Plaque of Appreciation awarded for his significant contribution to STRASA and particularly his substantial role involvement in creating generating awareness and promoting stress tolerant rice in Bihar by IRRI, Philippines, Manila.
- Recognition certificate for Fingerlings production-2021 by district Fisheries department, West Champaran, bihar.
- Kisan Shri Award by ATMA, West Champaran, Bihar.

**Table 1:** Income generation before adopting technological interventions

SN	Particular	Crop/Livestock	Area in acre/no.	Base year (2016-17)		
				Production q./lit./no.	Total Income (Rs.)	Net Income (Rs)
1.	Crop-1	Sugarcane	12.5	3750 qt.	937500	562500
2.	Crop-2	Paddy	4.5	45 qt.	54000	24000
3.	Crop-3	Wheat	2	20 qt.	28000	14000
4.	Crop-4	Mustard	2	7.5 qt.	45000	23000
5.	Horticultural crop	Mango	1	60 qt.	80000	67000
6.	Fisheries	Rohu, Katla, Mrigal, Grass carp	5	60 qt.	720000	470000
7.	Dairy	Cow and Buffalo	(2+3=5)	48 qt.	96000	40000
<b>Total</b>			<b>27</b>	<b>3990.50</b>	<b>19,60,500</b>	<b>1200500</b>

**Table 2:** Income generation after adopting technological interventions

SN	Particular	Crop/Livestock	Area in acre/no.	2020-21			Growth in percentage over the previous years	
				Production q./lit./no.	Total Income (Rs.)	Net Income (Rs)	Production	Income
1.	Crop-1	Sugarcane	12	5280 qt.	1663200	1183200	40.80	110.35
2.	Crop-2	Paddy	3.0	60 qt.	90000	45000	33.33	87.50

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3.	Crop-3	Wheat	2	30 qt.	54000	29000	50.00	107.15
4.	Crop-4	Mustard	2	12.8 qt.	102400	72400	70.67	214.78
5.	Crop-5	Makhana	0.5	3 qt.	90000	60000	100.00	100.00
6.	Horticultural crop	Mango	1	65 qt.	125000	105000	8.33	56.72
7.	Fisheries	Rohu, Katla, Mrigal, Grass carp, Common carp, Silver carp, Prawn	6.5	105 qt.	1560000	1110000	75.00	136.17
8.	Dairy	Cow and Buffalo	(3+3=6)	52 qt.	156000	81000	8.33	102.50
<b>Total</b>			<b>27</b>	<b>5607.80</b>	<b>3840600</b>	<b>2685600</b>	<b>48.31</b>	<b>114.40</b>



**Crop Production and Mango cultivation by Mr Anand Singh**



**Fisheries Production by Mr Anand Singh**

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**Fisheries Production By Mr. Anand Singh**



**Makhana Cultivation**

**A view of recognition received by Mr Anand Singh**