

## Success through farm integration- A case study of a farmer at Dhauli in the outskirts of Bhubaneswar City in Odisha

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**Abstract:** The present study is a case study method of investigation to know the impact of farm integration. The study reveals that the concept of integrated farming system may prove better than specialized or single community based farming system.

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### I. Introduction

In India, the majority of farmers hold less than two hectares of land. These farmers generally practice subsistence farming where they need to produce a continuous, reliable and balanced supply of foods, as well as cash for basic needs and recurrent farm expenditure. Therefore, there is need to develop suitable integrated farming systems for such farmers since single crop production enterprises are subject to a high degree of risk and uncertainty because of seasonal, irregular and uncertain income and employment to the farmers. Sporadic but location specific research efforts in this regard have been encouraging (Singh, 1994; Jayanthi *et.al.*, 1994). However, systematic farming systems work involving a larger number of farm families and comparing different types of integrated farming systems over multiple years remains rare.

### Benefits or Advantages of Integrated Farming System

1) **Productivity:** IFS provides an opportunity to increase economic yield per unit area per unit time by virtue of intensification of crop and allied enterprises.

2) **Profitability:** Use waste material of one component at the least cost. Thus reduction of cost of production and form the linkage of utilization of waste material, elimination of middleman interference in most input used. Working out net profit B/ C ratio is increased.

3) **Potentiality or Sustainability:** Organic supplementation through effective utilization of by products of linked component is done thus providing an opportunity to sustain the potentiality of production base for much longer periods.

### II. Methodology

The present study is a case study method in depth study of a particular situation. It is a method used to narrow down a very broad field of research into one easily researchable topic. Thomas offers the following definition of case study:

"Case studies are analyses of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more method. The case that is the *subject* of the inquiry will be an instance of a class of phenomena that provides an analytical frame — an *object* — within which the study is conducted and which the case illuminates and explicates."

### III. Case Study

Going back in time, in eighties one comes across a farmer named Bikei Bhoi living with his parents in dire poverty in Sardeipur village under Dhauli Gram Panchayat in Bhubaneswar Block of Odisha State. At about 300 meters distance from his village he has 7.00 acres of land holding out of which low land is 2.00 acre and rest of the land is upland & medium. In the year 1972 when he passed 8<sup>th</sup> grade, he left the school and joined his father for livelihood generation out of that agricultural land.



Mr. Bikei in his vegetable farm

The beginning has been small, yet incisive. The baby step promises to turn into a big stride soon and transform the way of the farmer towards higher livelihood options.

Bikei grew up and married one lady named Manju. With sheer glee and determination, Bikei, Manju and their children together have been able to lift the weight of darkness which has started descending upon them due to poverty. The Sun now rises with new hope and vigour.

Dr.B.Jamuna Rani, Prof., EEI, Dr.P.Vijaya Lakshmi, Associate Prof., EEI, Himansu Kumar Mohapatra, Asst.Agril.Officer, Khanadagiri and Bishnupriya Behera had been to the Farm of Bikei and Manju on 21<sup>st</sup> August 2015 and had a good time there. During discussion, Manju and Bikei narrated their journey to success as:



**An interaction with Mr and Mrs Bikei by EEI team  
Prof.B.Jamuna Rani,Dr.P.Vijaya Lakshmi, Assoc.Prof  
,Mr.Himanshu AAO and Bishnu Priya with the farm**

“During nineties, Manju and myself took a decision to come out of poverty and provide better



**Marigold nursery of Mr. Bikei**

livelihoods to our family. Except, this piece of land we had no other resources to work upon. We didn't choose to migrate also. We both joined hands and worked in our field day and night. We levelled our land and put bunds and also fencing around. Initially, we were able to cultivate Groundnut, Horse gram, Pumpkin, Tomato and Paddy as rainfed crops. There was no source of irrigation that time. We both dug a well to fetch irrigation water and to raise more crops a year to increase our income and also purchased a diesel pump set at Govt. Subsidy but it didn't work.

Sri Suvash Chandra Panda, the then Asst. Agril. Officer of Bhubaneswar Block advised me to go for a deep Bore Well at 50% subsidy and we dug a deep bore well during the year 2010 and Sri Panda helped us in adopting new technology, better crop production

practices, crop planning and sequencing. We both were imparted training within and outside the state of Odisha by Agriculture department.

Officers from Horticulture department trained and guided us hybrid vegetable cultivation and flowers



Marigold. Marketing of produce never was a challenge for us. Our two sons helped us in the farmland along with their study. Both of them have taken the responsibilities of marketing entire produce. We don't allow any middle men to strip away our hard earned profit.

Now, our two sons have got married and two daughter-in-laws are looking our household work while Manju and me are engaged at field. Out of five daughters, we were able to get four of them married with honour out of the earnings from this piece of land. Now we are supporting two grand children for higher education.

Village Agriculture Worker, Assistant Agril. Officer, Asst. Horticulture Officer of Bhubaneswar Block are constantly in touch. Their regular guidance and support have made us proud as a successful Agri-entrepreneur.

We are now in the process of expanding area of cultivation nearby for cash crops and floriculture. Our cropping pattern in our farm is as:



- ✚ In 2 acres of land we grow High Yielding/ Hybrid/ Aromatic rice in both Kharif and Rabi
- ✚ Marigold production and raising nursery of Marigold in 1 acre of land through out the year. We also have a shade net for that purpose. We supply seedlings of marigold to the vendors of Capital market.
- ✚ In 1 acre of land we grow Sweet Corn sequentially for regular supply.
- ✚ In 1 acre of land we have Sugar cane
- ✚ In 2 acres of land, we used to grow different Hybrid Vegetable like Okga, Bringjal, Beans, Ridge Gourd, Cucumber etc through out the year.
- ✚ Back yard poultry for domestic consumption and sale
- ✚ A small flock of goats (eight) are fetching during the off season substituting their income during the season of festivals



**Sweet corn crop of Mr. Bikhei**

**Our Crop Production Statistics for a year:**

Area	Crops Grown	Approx. Investment/ year	Gross Returns/ year (Rs.)	Net Income/ year (Rs)
2 acres	Paddy	22000	96000	74000
1 acre	Marigold	50000	140000	90000
1 acre	Sweet Corn	5800	38000	32200
3 acres	Vegetables, Groundnut, Sugarcane etc	59000	246000	187000
7 acres	Total	136000	520000	383200*

\*As the family don't engage manpower from outside, investment on labour cost remains with them which add to net income of their family.

Bikei added, once, we used sprinkler system but it didn't work properly. We are innovative and are interested in adopting any new technology suitable for us in future. As we all are engaged in the farm and having two pairs of Plough Bullock, we don't have any plan to have a tractor and if my sons desire to have mechanization, we are happy to accept that. Farmers from our village are coming to us and we are growing by helping each other through sharing knowledge and skills. Our strong determination, persistent hard work, passion and planned execution have made us successful.”



**Marigold farm**

**IV. Conclusion**

Bikei and Manju together kindled the light of hope in the outskirts of Bhubaneswar amongst the farmers in conserving their culture and marching on the road to success. Sustainable development in agriculture must include integrated farming system with efficient soil, water crop and pest management practices, which are environmentally friendly and cost effective. Integrated farming system are often less risky, if managed efficiently, it is more beneficial.

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