

**SUCCESS
STORY
OF**

SH. ROMESH CHANDER CHOUDHARY

A Progressive Farmer

Village Kotli Bajalian Block Katra District Reasi



ON

**“INTEGRATED FARMING SYSTEM FOR LIVELIHOOD
SECURITY”**

Chief Agriculture Officer, Reasi

Integrated Farming System for Livelihood Security

A Success story

Kotli Bajalian is a large village of Reasi district comprising 422 families, situated in close proximity of Katra Town. Earlier, most of the people of the village were engaged in farming occupation to earn their livelihood. But, nowadays people especially younger generation considers farming as least profitable & are inclined towards growing tourism industry in Katra town besides entering govt. service for earning their bread. The main reason for lack of profitability among farmers is small size of holdings & lack of irrigation facilities. However, Romesh Chander Choudhary, aged 67 years, despite living in hostile conditions, had different view towards farming. His passion for farming, eagerness to adopt latest farm technology & hard work made him to establish profitable farming model by adopting integrated farming approach at his farm unit. His farming model has potential to be successfully replicated for livelihood security among other farmers of the district Reasi, where they are faced with prospects of poor yield & income. They can take clue from success story of this farmer who is earning profit of 5.51 lacs from 2.0 hac (40 Kanals) of land holding by adopting integrated farming techniques with optimum resource utilization.



Before coming in contact with field staff of Agriculture Department, he used to follow traditional agricultural practices growing mainly Maize & Wheat crops with some fodder over his land of 40 Kanals and was finding it difficult to make both ends meet. In order to make his farm unit financially viable he acted upon advice of extension staff of Agriculture Department to adopt integrated farming system involving compatible components of Horticulture & Animal Husbandry with field crops & vegetables.

Firstly, he started growing location specific high yielding varieties of Maize/Pulses & Wheat during Kharif & Rabi respectively over 25 Kanals of land. On 8 Kanals of land, he started growing cash crop in the shape of Sugarcane. Further, he started taking seasonal vegetables from 4 Kanals of land & fodder from remaining 3 Kanals of land to meet nutritional requirement of milch animals.

In order to ensure sustainability of the system 5 years back, he planted more than 100 fruit plants including Mango, Citrus, Amla, Guava, Papaya, Litchi, Apple etc. The early bearing cultivars of some fruit plants have started bearing fruits & whatsoever marketable surplus remains after meeting requirement of his family is being sold in the market.

To further mitigate risk of farming he started domesticating 2 milch breeds of cows & buffaloes each & now his small dairy unit is able to provide him assured supply of 30 litre of milk on daily basis.



Fruit Plantation



Vegetable Production

The most crucial intervention introduced by farmer at his farm unit is lifting of water from perennial stream flowing near his farm unit by means of pump set & installing sprinkler system to supply irrigation water to vegetables, fruit plants etc. with enhanced water use efficiency. With this kind of lift irrigation system in place, the farmer is able to irrigate crops grown over 10 Kanal of land by making judicious use of water.

The switch over to organic farming became possible with effective waste recycling of crop residue to Vermicompost through Vermicompost unit constructed by farmer with assistance of Department. The optimum utilization of surplus cow dung was ensured by farmer with production of bio gas as a cheaper source of energy for cooking purpose.

In order to save time & money the farmer has shifted to mechanization with support of Department of Agriculture. He has purchased power tiller on subsidy basis from department of Agriculture for ploughing purpose in parts of his farm where it is not possible to work with tractor especially under fruit plants.



Lift Irrigation System

Mechanisation



Power Tiller



Chaffcutter

Main Interventions of the adopted Integrated Farming System:

- 1) **Vegetable Cultivation:** The Farmer has kept 4 Kanal of land near his house for cultivating seasonal vegetables. He is presently getting 3-4 produces of vegetables from his piece of land with assured irrigation. He is using sprinkler system of irrigation for irrigating vegetable crops which are being grown by the farmer organically by using Vermicompost. The farmer has also constructed low cost poly house in his field for protected cultivation of vegetables which ensure him two months advance production of vegetables with higher return. Further, the farmer has adopted bower system technique for raising cucurbits of high quality by avoiding direct contact of vines with soil. Since vegetables are short duration crops & their productivity is more than cereals, the farmer is having annual income of Rs 1.20 Lac/annum with expenditure of just Rs 0.24 Lac/annum. He is selling his marketable surplus in nearby market at Katra.



**Nursery raising in Poly Green House
(Protected Cultivation)**



Vegetable Cultivation



Bower System for Cucurbit Crops



Hybrid Tomato Cultivation

2) **Fruit Cultivation:** In order to mitigate risk of failure of main crops, the farmer had planted 5 years back more than 100 fruit plants including Mango, Citrus, Amla, Guava, Papaya, Litchi, Apple etc suited to the land & climate of his farm. He is having early bearing cultivars of Mango like Amarpalli & seed less Guava in his orchard. He is making optimum utilization of land under fruit trees by growing compatible crops & shade loving plants like Turmeric with the help of power tiller. The farmer is meeting the fruits requirement of his family from his own farm unit besides selling some of his produce in nearby market. Thus, farming is making saving of around Rs 0.30 lac/annum through this viable component of farming system besides selling some of marketable surplus in nearby market giving him additional income of Rs 0.10 Lac/annum.



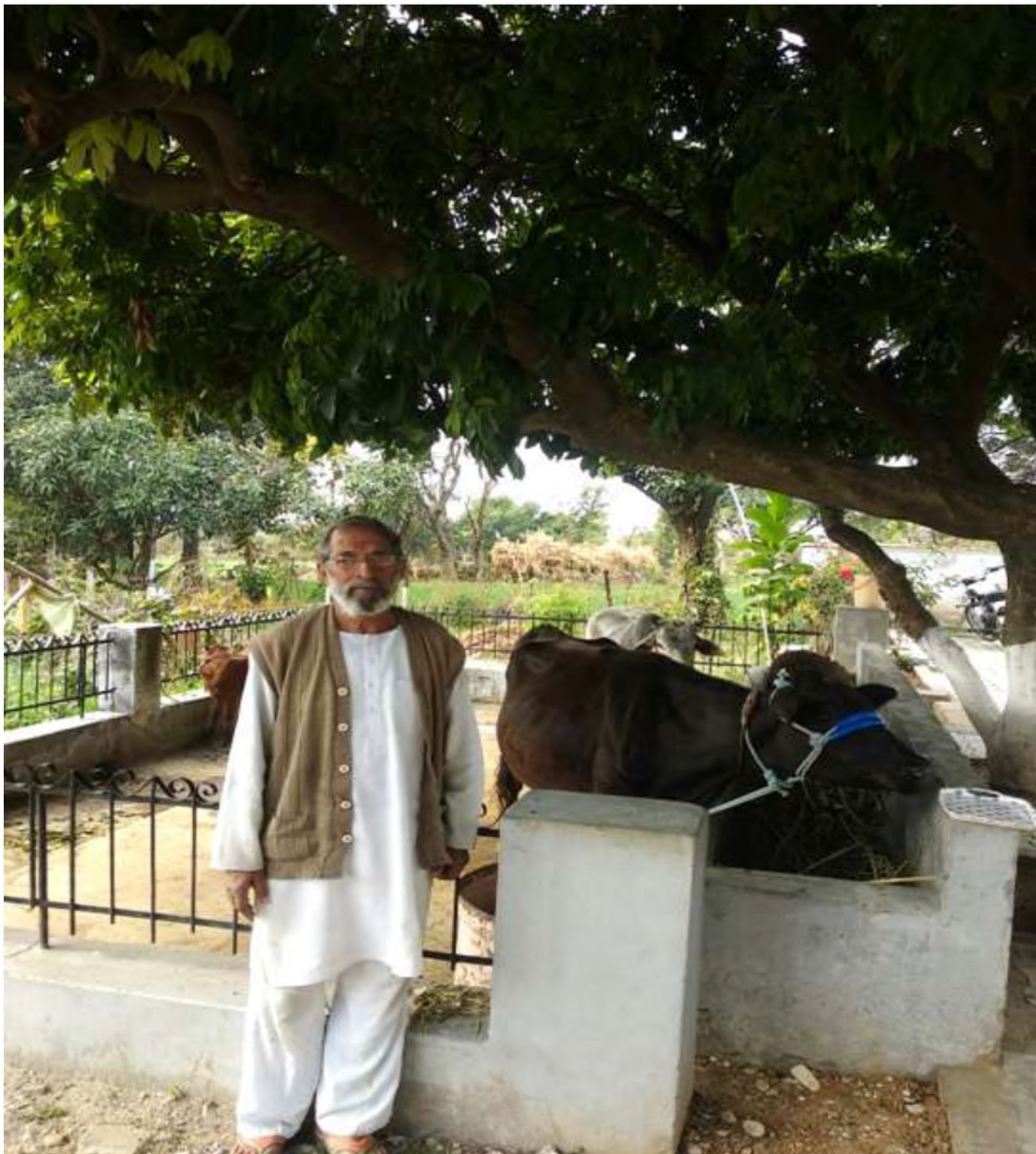
3) **Sugarcane cultivation:** The farmer is cultivating cash crop in the shape of sugarcane on 8 Kanals of land in his farm. His produce of sugarcane is of great demand at Katra for juice extraction since he is the only sugarcane growing farmer in the area. He has his own sugarcane extraction & jaggery making unit at his farm which he uses during fall of rates/decrease in demand in market besides meeting requirement for his farming. Presently, the farmer is getting income of Rs 90000/annum by just spending Rs 20000/annum.



4) **Field crops:** The farmer is growing cereals & pulses like Maize, Mash, Wheat, and Gram during Kharif & Rabi seasons over land of 25 Kanals mainly dependent on rainfall. The productivity & income of farmer has increased due to adoption of location specific improved cultivars of cereals & pulses besides following improved package of practices as per guidelines of concerned AEA/JAEO. Acting upon advice of field staff, the farmer has started taking 3 crops in a year by growing toria on 8 Kanals of land which is providing him additional income of Rs 0.08 Lac/annum from toria. The farmer has incorporated Pulses in his cropping pattern which fulfills his pulse requirement of family, minimizes risk coverage, and provides additional income besides improving soil fertility.



5) **Dairy unit:** The farmer is having small dairy unit comprising of 2 cows & 2 buffaloes. His dairy unit is providing him around 30 litres of milk on daily basis. After meeting needs of his family, he is selling around 25 litres of milk in market which is providing him income of Rs 1000/day i.e. Rs 3.65 Lac/annum. He has kept 3 Kanals of his farm unit for cultivating fodder to meet the requirement of his dairy unit.

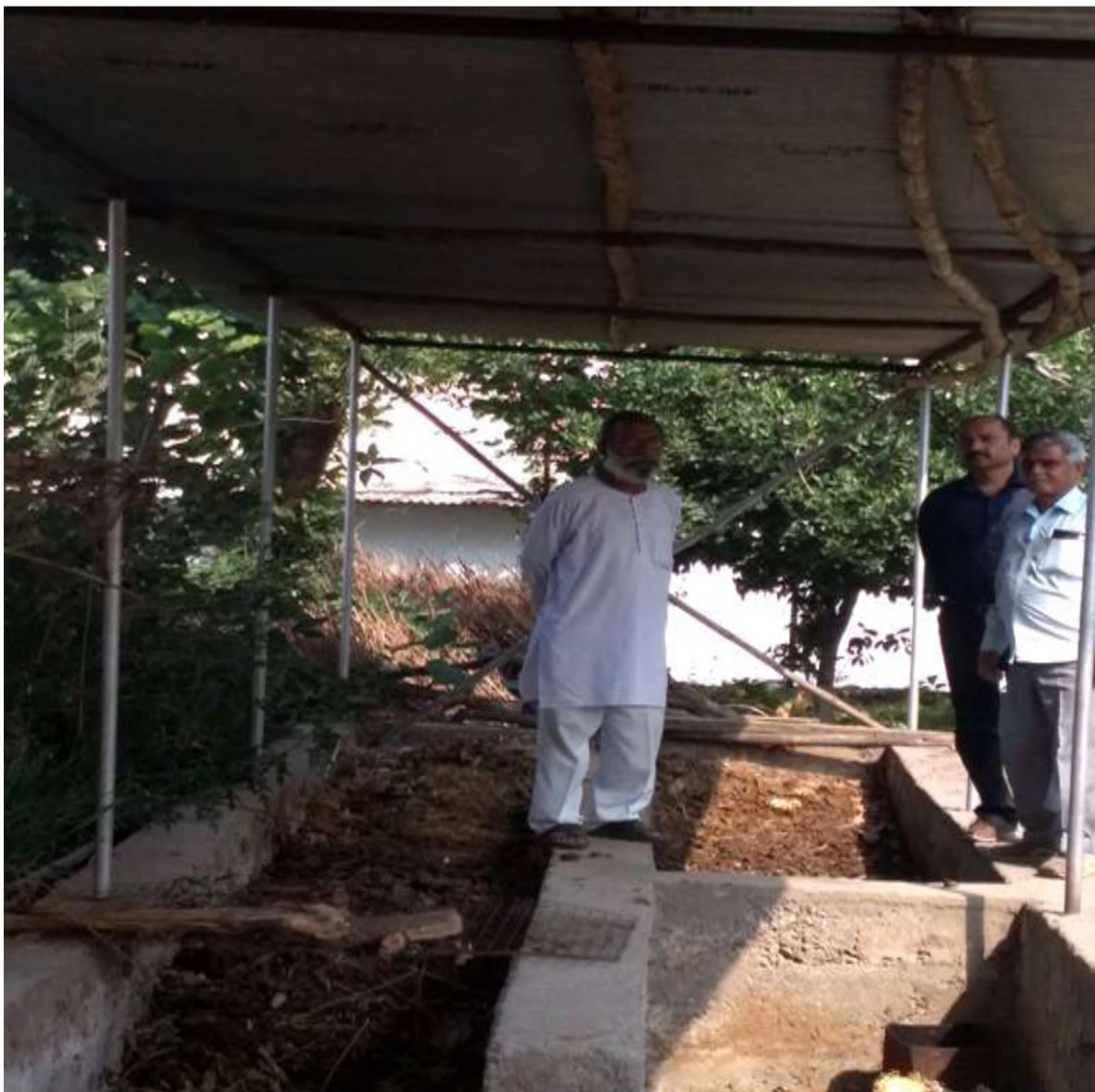


6) **Bio gas unit:** The department of Agriculture has assisted farmer in 2014 to construct one bio gas unit in his farm near his house to meet the cooking gas requirement of his family. The biogas unit is providing him 240 litres of gas/annum & thus making saving of Rs 12000/annum besides providing him slurry of 50/kg/day there by giving total benefit to farmers of around Rs 0.20 Lac/annum.



7) Vermicompost unit:

Endeavour to adopt organic farming besides recycling crop wastes has been accomplished by constructing Vermicompost unit of 30X8 feet which is able to provide him 100 qtls of vermicompost /annum (25 qtl/cycle of 3 months each) with value of Rs 800/qtl, thereby providing him financial saving of Rs 0.80 lacs by substituting vermicompost for chemical fertilizers for his entire farm unit of 40 Kanal. Vermicompost has potential to improve soil health by conserving moisture, improving soil structure, supplying essential nutrients, increasing soil organic matter etc.



Economics of Integrated Farming System:

| S No | Enterprise | Area/Nos | Income generated/annum (in Rs.) | Profit generated/annum (in Rs.) |
|------|-----------------------|--------------|---------------------------------|---------------------------------|
| 1 | Vegetable cultivation | 4 Kanal | 1.20 Lacs | 0.96 Lacs |
| 2 | Fruits cultivation | 100 plants | 0.40 Lacs | 0.40 Lacs |
| 3 | Sugarcane Cultivation | 8 Kanal | 0.90 Lacs | 0.70 Lacs |
| 4 | Field crops | 25 Kanal | 0.85 Lacs | 0.45 Lacs |
| 5 | Dairy Farming | 04 cattle | 3.65 Lacs | 2.00 Lacs |
| 6 | Bio Gas | 01 unit | 0.20 lacs | 0.20 Lacs |
| 7 | Vermicompost | 01 unit | 0.80 Lacs | 0.80 lacs |
| | | Total | 8.00 Lacs | 5.51 Lacs |

Farming Status before & after intervention:

| Before intervention | After intervention |
|--|--|
| <ul style="list-style-type: none"> • Use of non-recommended crop varieties. • Followed traditional package of practices. • Practiced crop based farming system. • More Risk involved. • Seasonal income. • Low flow of income. • Agricultural wastes not properly utilized. • Ineffective organic supplementation. • Chemical based farming. • Manual Labour. • Low yield & minimum profit. • Felt helpless. | <ul style="list-style-type: none"> • Use of location specific high yielding varieties/cultivars • Followed scientific package of practices. • Practiced Integrated farming system involving field crops, vegetables, fruits & dairy. • Less Risk involved. • Round the year income. • High flow of income. • Effective recycling of wastes. • Effective organic supplementation. • Organic based farming. • Shifted to mechanization. • High yield & maximum profit. • Feeling self reliant. |

Conclusion:

To overcome the problems associated with traditional farming practices, integrated farming system has been adopted by Sh. Romesh Chander Choudhary at Kotli Bajialan, Katra under the technical guidance & support of Department of Agriculture, District Reasi. Field crops, vegetables, fruits, biogas, Vermicompost & dairy are the working components of the adopted system. Better water use efficiency, enhanced waste recycling & improved economic profitability realized over the years, speak the viability & productivity of the system. Supplementary effect of various components on the performance of each other has been striking feature of the system. In future, this effect will be exploited as it is the foundation to sustainability. Department of Agriculture, Reasi & KVK Reasi and Staff from ATMA admire his efforts In adopting Integrated Farming System besides becoming a role model for other farmers of the area.

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