

Success Story of Gurvinder Singh: Integrated Farming System Pioneer

***Simran**

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Farmer Profile

- **Name:** Mr. Gurvinder Singh (36 years)
- **Father's Name:** Sh. Ajmer Singh
- **Religion:** Sikh
- **Family Members:** 4 (Nuclear family)
- **Farming Experience:** Since childhood (inherited traditional knowledge)
- **Landholding:** 10 acres (owned)
- **Contact No.:** 8727989012
- **Village:** Dholan majra (Punjab)
- **Major Crops:** Rice, Wheat, Maize, Sugarcane, Vegetables, Fruits
- **Allied Activities:** Dairy, Poultry, Horticulture, Agroforestry, Fodder cultivation, vermicomposting
- **Agriculture related Apps used:** Kisan kheti, Agri Smart, IFFCO Kisan



Mr. Gurvinder Singh

Journey Towards Integrated Farming System (IFS)

Like many farmers of Punjab, Gurvinder Singh with background in farming inherited from his father, he initially practiced monocropping of rice and wheat. While it ensured a steady income, challenges such as rising input costs, declining soil fertility, and fluctuating market prices reduced profitability. In search of sustainability and stability, he attended KVK trainings and adopted Integrated Farming System (IFS) about 7–8 years ago. Since then, his farm has transformed into a diversified, self-sustaining, and profitable model, ensuring both livelihood security and ecological balance.



IFS Components on His Farm

1. Field Crops (4 acres)

- Kharif: Rice (PR-126), Maize, Sugarcane, Chilli
- Rabi: Wheat (PBW-826), Cauliflower
- Zaid: Brinjal, gourds, Chari, Berseem (fodder)
- **Cropping Pattern:** Rice–Wheat–Maize rotation with intercropping of vegetables and fodder.

2. Horticulture (3 acres)

- Fruits: Guava, Citrus, Banana, Papaya, Amla
- **Marketing:** Domestic + Mandi, earning around ₹90,000–1,20,000 annually.

3. Livestock (Backyard Dairy & Poultry)

- 3 HF cows and 2 Murrah buffaloes (producing ~25–30 L/day milk).
- Local hens for eggs and meat.
- Livestock dung used for FYM and vermicompost production.
- Income: ₹2,33,600 annually.
- Diary serves as backbone of income and supports family nutrition.

4. Fodder Production (2 acres)

- Chari, Maize & Berseem grown to ensure year-round feed availability for livestock. Surplus sold in local market.

5. Poultry & Vermicomposting

- Small-scale poultry with 15-20 birds providing meat, eggs, and manure.
- Vermicomposting ensures organic input for crops and reduces fertilizer cost.

6. Agroforestry

- Boundary plantations of forest and medicinal trees (shade, fodder, timber, bio-pesticidal use).

7. Soil Health Management

- FYM, compost, and vermicompost used along with balanced fertilizers.
- Crop rotation and green manuring improve fertility and reduce input cost.
- Partial organic farming with neem-based bio-pesticides.

8. Floriculture

- Gurvinder Singh has also taken up **floriculture** on a small portion of his land and around farm boundaries. He grows seasonal flowers such as marigold, gladiolus, and roses, which enhance the **aesthetic appeal** of his farm.
- Moreover, flowers like marigold are also used for **pest management** as a trap crop in vegetable fields, making this practice both profitable and eco-friendly.

Impact of IFS on Farmer's Life (estimation)

• Before IFS:

- ✓ Total cost: ₹3,00,000
- ✓ Net income: ₹2,00,000

• After IFS:

- ✓ Total cost: ₹7,00,000
- ✓ Net income: ₹9,60,000

Benefits Experienced

Through the adoption of the Integrated Farming System (IFS), the farmer was able to increase profitability nearly fivefold while ensuring sustainability by recycling crop residues, fodder, and manure. Diversification within the system reduced the risk of crop failure and by recycling nutrients through vermicomposting and reducing reliance on chemical fertilizers, his farm contributes to soil biodiversity and lowers greenhouse gas emissions. Agroforestry trees act as carbon sinks, provide shade, and prevent soil erosion, while green manuring

enhances soil health and resilience against climate variability. The approach also guaranteed food, fodder, fuel, and nutritional security for the entire family.

Challenges Faced

Despite the multiple benefits of Integrated Farming Systems, farmer continue to face several challenges that limit its full potential. Market fluctuations, especially in perishable horticultural produce like fruits, vegetables, and dairy products & Limited market linkages and lack of direct access to organized markets or Farmer Producer Organizations (FPOs) make farmers dependent on middlemen, which reduces their profit margins. Inadequate infrastructure, such as irrigation facilities, cold storage, and processing units, further hampers value addition and year-round income. Moreover, small landholdings pose difficulties in balancing multiple enterprises within a limited area. Lack of technical knowledge and training in advanced practices like biogas installation, solar integration, and efficient nutrient recycling often leads to underutilization of resources. Additionally, vulnerability to pests, diseases, and climatic uncertainties increases the complexity of managing multiple enterprises. These challenges collectively highlight the need for stronger institutional support, capacity building, and policy interventions to ensure the sustainability and profitability of IFS.

Future Plans

Looking ahead, the farmer plans to expand mushroom cultivation on a commercial scale, strengthen market linkages through Farmer Producer Organizations (FPOs), and adopt renewable energy solutions such as solar power and biogas units for energy self-reliance. Additionally, the farmer seeks government support in terms of financial aid, irrigation facilities, and skill training to enhance the commercialization and long-term sustainability of the farming system.

Conclusion

Mr. Gurvinder Singh's **farm is a model of sustainability and profitability**. Through Integrated Farming System, he has not only **multiplied his income** but also ensured ecological security, soil health, and nutritional self-reliance for his family. His farm is now a model for neighbouring farmers, demonstrating that diversification in farming ensures economic stability, resilience to climate stress & a secure livelihood. He truly demonstrates that **IFS is the future of Indian farming**—a pathway towards **Doubling Farmers' Income** while conserving natural resources.