



## The Inspiring Success Story of Satveer Ponia: A Pioneer of Protected Cultivation in Surajgarh, Rajasthan

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In the heart of Rajasthan, a state known for its arid climate and challenging agricultural conditions, one farmer's journey stands as a shining example of resilience, innovation and determination. Satveer Ponia, a progressive farmer from Surajgarh, has revolutionized his livelihood and become a beacon of success in **protected cultivation**. His story, which began with a modest start, now serves as an inspiration for countless other farmers in Rajasthan and beyond. Through his foresight and willingness to embrace modern agricultural practices, Satveer Singh has not only transformed his farm but also improved the economic and social fabric of his community. This is the story of how Satveer Ponia achieved remarkable success in protected cultivation and set a new standard for farming in Rajasthan.

### Early Life and Farming Struggles

Satveer was born into a farming family in a small village in Surajgarh. Like many other farmers in Rajasthan, his family relied on traditional farming methods, cultivating crops such as wheat, mustard and pulses. With a small piece of land and erratic monsoon rains, the family struggled to produce enough to sustain themselves, let alone generate surplus income. Year after year, Satveer witnessed the hardships that came with farming in an area with limited water resources and harsh climatic conditions. The unpredictable weather, combined with the lack of access to modern agricultural inputs, meant that farming was more about survival than prosperity.

Despite these challenges, Satveer was deeply connected to the land and farming. He realized early on that if he wanted to succeed, he would have to do things differently. Satveer completed his schooling and became increasingly interested in agricultural innovations. His exposure to different farming techniques at various agricultural fairs and interactions with fellow farmers who had ventured into non-traditional methods planted the seed of change in his mind.

### The Turning Point

**Discovering Protected Cultivation:** The turning point in Satveer Ponia's farming journey came in the early 2010s, when he attended a government-organized workshop on protected cultivation. This new method involved growing crops in a controlled environment, such as a polyhouse or greenhouse, which allowed farmers to regulate temperature, humidity and irrigation. The benefits of protected cultivation were clear: higher yields, the ability to grow crops throughout the year and protection from adverse weather conditions and pests.

For a farmer like Satveer Ponia, who had been at the mercy of Rajasthan's extreme weather and inconsistent rainfall, protected cultivation seemed like a dream come true. He was particularly interested in the ability to **grow high-value crops like** vegetables and flowers, which had the potential to generate much higher returns than traditional field crops.

At the same workshop, he learned about the subsidies offered by the government for setting up polyhouses and this gave him the final push he needed to take the plunge.



### Initial Challenges and Investment

Satveer Ponia decided to invest in protected cultivation and start with a polyhouse on a small section of his land. In 2012, he applied for a loan from a local bank and took advantage of the government's subsidy under the National Horticulture Mission (NHM), which covered up to 50% of the cost of setting up a polyhouse. Despite the financial support, it was still a considerable investment for a small farmer like Satveer Ponia, who had to pool in his savings to get the venture off the ground.

Setting up the polyhouse was the easy part; the real challenges began when it came to managing the controlled environment. Satveer faced a steep learning curve, as protected cultivation required Satveer Ponia a different set of skills compared to traditional farming. He had to understand the nuances of regulating temperature, humidity and irrigation schedules, as well as selecting the right crops for cultivation. Additionally, pests and diseases, although less prevalent in protected environments, still posed a threat and Satveer had to stay vigilant in monitoring his crops.

### Learning from Mistakes and Embracing Innovation

In the first year, Satveer Ponia faced several setbacks. His initial attempt to grow capsicum and tomatoes in the polyhouse resulted in lower-than-expected yields mainly due to improper management of the microclimate inside the structure. However, instead of giving up, Satveer took these failures as learning experiences. He reached out to local agricultural experts, attended more workshops and continuously educated himself about protected cultivation practices. One of the key lessons he learned was the importance of precision farming techniques, such as drip irrigation and fertigation (fertilizer application through irrigation), which helped improve the growth and health of his crops.

Satveer also invested in a soil testing kit, which allowed him to regularly monitor soil health and adjust the nutrient levels as needed. By optimizing the growing conditions inside the polyhouse, he was able to significantly improve the quality and quantity of his produce. Within two years, his efforts began to pay off. His second attempt at growing capsicum and tomatoes yielded an impressive harvest and he managed to sell his produce at a premium price in the local market.

**Expanding the Business: From Vegetables to Flowers:** With the success of his initial polyhouse venture, Satveer Ponia decided to expand his business. He reinvested the profits from his vegetable crops into setting up additional polyhouses, where he diversified his cultivation to include flowers, particularly roses and gerbera, which were in high demand in the nearby urban centers of Jaipur and Delhi. Flowers, being a high-value crop, offered him the opportunity to further increase his income. Protected cultivation allowed him to produce high-quality, pest-free flowers that fetched excellent prices in the market.

To streamline his operations, Satveer employed a few local workers and trained them in the nuances of protected cultivation. This not only helped him manage his growing farm more efficiently but also provided much-needed employment opportunities to people in his village. By cultivating both vegetables and flowers, he was able to maintain a steady income throughout the year, as the demand for these products was consistent regardless of the season.

### **Water Efficiency and Sustainability**

One of the key factors behind Satveer Ponia's success was his emphasis on water efficiency. Given the water scarcity in Rajasthan, he realized early on that he needed to make the best use of every drop of water available. He installed drip irrigation systems in all his polyhouses, which reduced water wastage and ensured that his crops received the right amount of water directly at their roots. This not only improved crop health but also significantly reduced his water usage compared to traditional open-field farming.

In addition, Satveer adopted sustainable farming practices by setting up a biogas plant on his farm. The plant used cattle dung and organic waste to generate biogas, which he used for cooking and heating purposes. The leftover slurry from the biogas plant was used as organic manure for his crops, thus creating a sustainable, closed-loop system that reduced his dependency on chemical fertilizers.

### **Financial Success and Community Impact**

Satveer Ponia's success in protected cultivation soon began to make waves in his community. His once modest farm had now become a model of innovation and productivity. The income from his polyhouses had increased tenfold and he was able to repay his loan within a few years. Satveer used his newfound financial stability to expand further, investing in cold storage facilities to preserve his produce and exploring new markets for his vegetables and flowers.

Beyond his personal success, Satveer's achievements had a ripple effect on the farming community around him. Local farmers, intrigued by his success, started visiting his farm to learn about protected cultivation. Satveer, ever willing to share his knowledge, began organizing informal training sessions, where he taught fellow farmers about the benefits of polyhouse farming, water management and sustainable agricultural practices.

Satveer also collaborated with the Department of Horticulture to host workshops on protected cultivation and his farm became a demonstration site for other farmers looking to adopt this modern farming technique. His story inspired many small and marginal farmers in the region to shift from traditional crops to high-value horticultural crops grown in protected environments.

### **Future Plans and Vision**

Looking ahead, Satveer Ponia has ambitious plans for the future. He aims to expand his protected cultivation area even further and introduce hydroponics, a soil-less farming technique that uses nutrient-rich water to grow crops. This would allow him to grow even more high-value crops in a resource-efficient manner, further enhancing his farm's productivity and sustainability.

Satveer also plans to establish a processing unit on his farm to produce value-added products such as tomato paste, rose water, and herbal extracts, which would open up new revenue streams and reduce his dependency on raw produce sales.

His long-term vision is to create a farmers' cooperative in his village, where local farmers can pool their resources and collectively market their produce. By doing so, he hopes to empower other farmers to adopt protected cultivation and improve their livelihoods, just as he did.

## Conclusion

The success story of Satveer Ponia is a powerful example of how innovation, persistence and a willingness to learn can transform a farmer's life. From humble beginnings in a drought-prone region, Satveer's journey in protected cultivation has not only brought him financial success but has also inspired an entire generation of farmers in Rajasthan to embrace modern farming practices. His story serves as a testament to the fact that even in the most challenging environments, with the right tools and mindset, farmers can thrive and prosper.

Satveer Ponia's achievements highlight the potential of protected cultivation to revolutionize agriculture in water-scarce regions like Rajasthan, offering a sustainable path forward for farming communities across the state.