A Success Story of a Young Educated Innovative Farmer Keshav Hole's Growering of Muskmelon, Watermelon, Marigold, and Cucumber

Keshav Babanrao Hole

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In Birobawadi, Taluka Daund, District Pune, Maharashtra Keshav Babanrao Hole, A highly Educated young Innovative Farmer, has set an example by cultivating marigold, Muskmelon, watermelon, and cucumber using scientific and modern Agricultural methods.

Keshav has been engaged in cultivating these crops for the past 19 years, utilizing advanced techniques like drip irrigation, mulching Paper, Micro Sprinkler, and Non-Woven crop covers. Recently, he experimented with polyester paper in cucumber cultivation, achieving record-breaking yields at reduced costs.

In today's fast-paced world, many young individuals strive for high-paying jobs, often sidelining traditional occupations like farming. However, Keshav Babanrao Hole, a highly educated young man from Pune, Maharashtra has chosen a different path. Hailing from Birobawadi village in Daund Taluka, Pune District, Keshav has pursued his passion for farming. With his family's 7.5-acre ancestral farmland, Keshav grows crops like Muskmelon, watermelon, marigold, and cucumber, generating an annual profit of INR 1 million (10 lakh).

Keshav Hole's Farming

Keshav owns 7.5 acres of irrigated land where Muskmelon, watermelon, marigold, and cucumber are the primary crops. He adopts strategic planning to maximize yields and minimize unnecessary expenses through innovative technology

Muskmelon Cultivation: Initiated stepwise in January using drip irrigation, mulching paper, and non-woven crop covers. Despite the higher cost of ₹18,000 to ₹20,000 per acre for crop covers, they help in weed control, pest management, and water conservation while increasing yields by 15–20%.

Watermelon and Marigold: Watermelon is planted on the second bed, and after harvesting it, marigold is cultivated on the same bed. This enables the use of one mulching paper for three consecutive crops, effectively reducing costs.

Cucumber: Sown in October with the use of polyester paper to lower production costs while increasing yield.

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Key Farming Practices

- 1. Beds spaced six feet apart with single-row planting.
- 2. Focus on high-quality seeds and balanced use of organic, biological, and chemical fertilizers.
- 3. Annual soil testing and integrated pest management practices.
- 4. Use of compost fertilizers (5–10 tons per acre) and reduced reliance on external inputs.
- 5. Water-efficient practices like drip and sprinkler irrigation.

Innovative and Integrated Farming

Keshav emphasizes continuous learning and innovation:

- 1. Uses double-lateral drip irrigation on beds.
- 2. Produces residue-free (chemical-free) crops.
- 3. Reuses mulching paper for three crops.
- 4. Implements bamboo-supported low-cost shed nets.
- 5. Attracts pollinators by planting mustard and marigold.

Annual Income Plan

- 1. Muskmelon: Yield 20 tons/acre; Profit (after ₹1 lakh expense) ₹1–1.75 lakh/acre.
- 2. Watermelon: Yield 30-35 tons/acre; Profit (after ₹60,000-70,000 expense) ₹1 lakh/acre.
- 3. Marigold: Yield 10 tons/acre; Profit (after ₹80,000 expense) ₹1 lakh/acre.
- 4. Cucumber: Yield 30 tons/acre; Profit (after ₹1.5 lakh expense) ₹2 lakh/acre.

Keshav's Achievements

Keshav's efforts have been recognized with numerous state and national-level awards. He actively participates in workshops, seminars, and agricultural exhibitions, sharing his knowledge with farmers through training and social media platforms like WhatsApp and Facebook.



Vision and Goals

Keshav aspires to inspire and guide farmers towards scientific and sustainable farming practices. By focusing on crop rotation, balanced fertilization, and advanced technology, he believes that achieving expected yields is possible with proper management.

"Farming is a journey of constant learning and adaptation. Every day, I spend 10–12 hours in the field, exploring new technologies and applying them to improve my practices."

An Innovative Approach to Farming

Keshav owns 7.5 acres of irrigated farmland, he primarily cultivates where Muskmelons, watermelons, cucumbers, and marigold flowers. His interest in agriculture developed during his childhood alongside his education. Initially, the family farm produced sugarcane, onions, wheat, and millet, but the yields were not satisfying. In 2006, Keshav began experimenting with melon cultivation, which marked the beginning of his success. To combat rising temperatures and ensure the sustainability of his Keshav adopted protected farming farming, techniques.

Keshav has set up a cost-effective shade net structure using bamboo and polyester paper over 1.25 acres of his land, specifically for cucumber cultivation. The polyester paper helps regulate temperature, prevent flower drop, and control pests and diseases while conserving water and reducing fertilizer use. The protected farming method ensures better yields compared to open-field cultivation. His focus on modern technology and sustainable practices has significantly improved production.

Keshav has planted watermelons on 2.5 acres and melons on 2 acres. To reduce production costs and increase output, he combines organic, biological, and chemical fertilizers in a balanced manner. Melon cultivation typically begins in January, and Keshav employs modern technologies such as drip irrigation, mulching paper, and crop covers. Although crop covers cost an additional INR 18,000–20,000 per acre, they help control weeds, protect crops, conserve water, and increase yield by 15-20%. The improved fruit quality results in better market prices. After harvesting watermelons from the second bed, he plans to grow marigold flowers on the same plot.

Embracing Protected Farming

To make farming sustainable amid rising temperatures, Keshav has embraced protected farming methods. For cucumber cultivation, he built a low-cost shade net structure using bamboo and polyester paper over 1.25 acres. This structure helps control the microclimate and conserve resources, resulting in higher yields compared to open-field crops. By using mulching paper for cucumber planting, soluble fertilizers, and bacterial fertilizers, he has significantly reduced water use. Pest and disease control is managed as needed, further enhancing his productivity.

Keeping Detailed Records

Keshav places great emphasis on financial planning and crop management. He meticulously keeps a record of crop yields, profits, and losses, helping him plan for future seasons. Every year, Keshav assesses his profits and losses, creating a budget for the following year. He tracks key details such as crop planting, harvest dates, sales prices, and expenses, maintaining thorough records. This enables him to make informed decisions and improve his farming practices continuously.

Steady Progress Through Innovation

With his 7.5-acre farm, Keshav rotates crops like Muskmelons, watermelons, marigolds, and cucumbers, increasing both soil fertility and productivity. His hard work, dedication, and forward-thinking have resulted in remarkable success and economic stability. He is always looking for new ways to innovate and improve, studying the scientific methods behind each crop he grows.

Learning from Experts

Keshav's management of melon, watermelon, marigold, and cucumber cultivation has gained attention from experts and fellow farmers alike. He regularly interacts with agricultural scientists and progressive farmers to expand his knowledge. He reads extensively on farming techniques and documents expert advice in his journal. Before implementing new techniques, Keshav conducts small-scale trials on a portion of his land. This careful combination of study and experience allows him to refine his farming methods.



Awards and Recognition

Keshav credits his success to the blessings of his parents and hard work. In 2018, he was honored with the "Outstanding Farmer Award" by the Maharashtra Agriculture Department's ATMA initiative. Various social organizations have also recognized his contributions to farming.

Overcoming Challenges

Farming is not without its challenges. Climate change has made it difficult for vegetable farmers, with issues like uneven seed germination and pest infestations often leading to increased costs. Natural disasters can double management expenses, but Keshav has shown resilience, maintaining his crops despite adverse conditions. He continually seeks knowledge through study tours and training programs at institutions such as the Agricultural University in Rahuri and the Baramati Agricultural Science Center.

Incorporating Technology and Social Media

Keshav actively shares agricultural knowledge through Facebook and WhatsApp, participating in farmer gatherings, webinars, and online discussions. He connects with agricultural researchers and Ph.D students, ensuring a continuous exchange of ideas and technology. Despite facing a major setback during the COVID-19 lockdown, which resulted in a loss of INR

1-1.5 million due to market closures, Keshav remained determined, reinvesting his efforts into farming.

Building a Farm Brand

With guidance from experts, Keshav has successfully developed his farm into a thriving business. His farm brand, "Keshav Hole Agrotech Delicious Farm Fresh Fruits And Vegetables," is gaining recognition, with a growing demand for his residue-free watermelon, Muskmelon, and cucumber in the Pune and Mumbai markets. He also plans to diversify into agro-processing in the future, adding further value to his farm produce.

Earning INR 1 million Annually

Keshav Hole's farming techniques allow him to harvest up to 20 tons of melons, 30-35 tons of watermelons, 10 tons of marigolds, and 40 tons of cucumbers annually. This yields an impressive income of INR 1 million (10 lakh) per year. By adopting advanced farming techniques, maintaining detailed records, and embracing innovation, Keshav has become a role model for farmers in his community.

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