

Title: “Drone Didi of Ayodhya: Giving Wings to Rural Women through Agri-Entrepreneurship”

2. Profile (in brief):

Name of Entrepreneur: Miss Shabina Khatoon

Age: 36 Years

Education: Bachelor’s Degree

Name of KVK: Krishi Vigyan Kendra, Ayodhya , Uttar Pradesh

Complete Address: Village Sandwa, Block Mawai, District Ayodhya, Uttar Pradesh

Mobile Number: 7054051729

Enterprise: Drone spraying in horticultural and field crops



Background/ Situation Analysis

Coming from a farming family, Shabina initially practiced traditional farming with low productivity and limited income, earning only about ₹2.0–2.5 lakh annually. She faced several constraints, including limited capital, low exposure to advanced agricultural technologies, and social hesitation toward women adopting technology-driven enterprises. Access to mechanization and modern agri-services was also limited in her area.

Catalysts of Change

Her turning point came through continuous engagement with Krishi Vigyan Kendra (KVK), Ayodhya, which provided technical guidance, motivation, and exposure to innovative agricultural technologies. With institutional support, she was selected under the NAMO Drone Didi Scheme of the Government of India and received an agricultural drone free of price, marking a major shift in her entrepreneurial journey.

Pathway(s) to Progress In 2020, Miss Shabina established a 2,000 sq. m polyhouse, adopting scientific packages of practices for the cultivation of capsicum, strawberries, and seasonal vegetables. Protected cultivation helped her achieve higher productivity, better quality produce, and efficient resource use. Simultaneously, she began using

- Shifted from traditional farming to advanced protected cultivation and drone technology via the NAMO Drone Didi Scheme.
- Increased her annual income fourfold, jumping from ₹2.5 lakh to a gross of ₹10 lakh.
- Launched a successful drone-hiring business, providing efficient pesticide spraying for tall crops like sugarcane and mango.
- Empowered over 80 women through drone training, creating a new generation of female agri-entrepreneurs.
- Stereotype Breaker: Earned the title "Drone Didi," gaining respect in a male-dominated field.

agricultural drones for pesticide and herbicide application in crops such as pigeon pea, oilseeds, sugarcane, and horticultural crops like banana and mango, where manual spraying is difficult due to crop height and dense canopy. Recognizing the demand for this technology, she started providing drone-spraying services on a custom-hiring basis across villages of Ayodhya district. Charging a nominal rate (about ₹400 per acre), her services became popular among farmers due to reduced labour cost, precision application, and time efficiency. Today, she earns ₹4,000–5,000 per spraying operation, with even higher income during peak agricultural seasons. Additional earnings come from training programmes and on-field demonstrations conducted for farmers and rural youth.

Marketing and Recognition

For promoting her drone services, Miss Shabina effectively uses social media platforms, banners, and posters, which has enhanced her visibility not only in the district but also at the state level.

Productivity & income enhancement:

Today, her enterprise generates an annual gross income of ₹8.00–10.00 lakh, with a net income of ₹5.50–6.50 lakh. Compared to her pre-intervention income of ₹2.00–2.50 lakh, this reflects a fourfold increase in income, clearly highlighting the economic impact of KVK-led technological interventions. Her initiative has also created seasonal employment opportunities, particularly for local women, through involvement in drone demonstrations, training activities, and peak-season support operations.

Social/Personal Empowerment/Awards & Recognition: Beyond income enhancement, Miss Shabina Khatoon has emerged as a role model for rural women and youth in Ayodhya district. Her improved standard of living and confidence has motivated many others to adopt agriculture as a viable enterprise. So far, she has trained 80 women farmers in drone operation and application in agriculture. Remarkably, she has also trained six women from her village Self-Help Group as “Drone Didis”, who are now independently operating drones and providing spraying services in farmers’ fields, marking a significant step towards women’s participation in technology-driven agriculture.

Influence to Other Farmers: Farmers fondly recognise her as “Drone Didi”, symbolises women’s leadership and technological empowerment in agriculture. In a predominantly male-dominated domain, she has earned the trust and respect of

farmers, with many male farmers regularly approaching her for drone-based spraying services as well as hands-on training on the use of agricultural drones in their fields. Her role has effectively challenged gender stereotypes and demonstrated the growing acceptance of women as skilled professionals in advanced farm mechanisation and precision agriculture.



Picture 1: Ms. Shabiba using drones in her own field



Picture 2: Ms. Shabiba demonstrating “how to use of drone” to farm women and farmers



Picture 3 & 4: Ms. Shabiba Demonstrating pesticides application in dense canopy crop like in sugarcane and banana





Picture 5: Ms. Shabiba participation in state-level farmers fair



Picture 5: Ms. Shabiba demonstrating “how to use of drone” for monitoring purposes in farm field.