

BIHAR AGRICULTURAL UNIVERSITY, SABOUR (BHAGALPUR)

SUCCESS STORY OF PROGRESSIVE WOMEN FARMER

Village – Barikoriyan, Block – Asarganj, District – Munger, Bihar

1. Basic Information

Name of Women farmer	Kumari Archana
Father's/Husband's Name	Barun kumar singh
Village	Barikoriyan
Block	Asarganj
District	Munger, Bihar
Mobile Number	8252241155
Educational Qualification	Intermediate
Age	38
Women farmer Category (Marginal/Small/Big)	Small
Major Farming System	Crop production, agricultural machinery services, dairy/cattle rearing, poultry farming, Bee Keeping and mango cultivation



2. Background of the Women farmer

Kumari Archana is a progressive and enterprising women farmer from Village Barahkoriyan, Asarganj Block, Munger district, Bihar. Her husband is also a women farmer and the family had about seven acres of land. The family traditionally cultivated paddy and wheat, but the income from farming was low and was not sufficient to comfortably support the family. Kumari Archana assisted her husband in farm operations. After completing Intermediate education, she started thinking about ways to increase farm income. Despite hard work, low returns from conventional farming encouraged her to seek technological interventions. She approached Krishi Vigyan Kendra (KVK), Munger for scientific guidance. The major constraints were low farm income, conventional production practices, timely completion of farm operations, and the need for better management of agricultural resources. KVK interventions helped her move towards scientific, mechanized and diversified farming.

3. Association with Krishi Vigyan Kendra

With the objective of increasing farm income, Kumari Archana came in contact with Krishi Vigyan Kendra, Munger. KVK scientists advised her to adopt improved agricultural technologies along with the use of farm machinery and knowledge-based farming. She participated in the training programmes organized by KVK Munger on improved crop production technologies, farm mechanization, water and nutrient management, insect-pest and disease management, weed management, and storage, processing and marketing of agricultural produce.

With the support of KVK Munger and ATMA Munger, she also visited agricultural research institutions and fields of successful women farmers. During these exposure visits, she observed successful crop production practices and learned practical methods for increasing productivity and farm income. She subsequently implemented the knowledge gained through training and advisory services on her own farm. She gradually shifted from conventional practices to scientific agricultural practices, improved farm machinery use and diversified agricultural enterprises. The KVK guidance became an important foundation for improving productivity, reducing operational constraints and creating additional income through machinery services, livestock and poultry enterprises.

4. Innovative Technology/Practice Adopted or Developed

The major innovation in Kumari Archana's farming system is the integration of scientific crop production, farm mechanization and diversified agricultural enterprises. After acquiring practical knowledge through KVK training and exposure visits, she moved beyond conventional farming and adopted improved agricultural practices with greater emphasis on resource conservation, timely operations and cost management.

She invested in and used several agricultural machines, including a pumpset, sprinkler set, reaper, paddy transplanting and sowing machine, zero-tillage machine, sprayer, thresher and other farm implements. These machines are used on her own farm and are also provided on rent to other women farmers. Her approach enables timely completion of agricultural operations and creates an additional source of income through custom hiring of machinery.

She diversified her farming system by integrating cattle rearing and poultry farming with crop production. Paddy, wheat, mung, mango, dairy and poultry became components of her income system. Improved seed, fertilizers and plant protection measures were adopted, together with timely harvesting, cleaning, processing and storage of produce. Where market prices were low, she stored produce and sold it later at a better price. Her improved the value realization from agricultural production.

Her farming approach also includes climate-resilient practices to maintain and improve farm income despite changing environmental conditions. The combination of crop production, livestock, poultry and machinery rental reduces dependence on a single source of income. Her model differs from conventional farming because farm machinery is treated not only as an input for her own production but also as a service enterprise for neighboring women farmers. KVK Munger's technical guidance, training and exposure programmes supported her adoption of these practices. The overall approach demonstrates how scientific crop management, mechanization, diversification and service-based entrepreneurship can be integrated at the farm level.

5. Economic Impact

Adoption of improved agricultural technologies, farm mechanization and diversified enterprises resulted in a substantial increase in Kumari Archana annual farm income. Before intervention, the total annual income from traditional farming and allied activities was reported as about ₹5,17,960, with a net annual income of ₹1,84,620. After adoption of improved technologies, modern farming practices and machinery services, the total annual income increased to about ₹17,50,370, with a net profit of ₹10,55,110.

An important additional source of income was rental of agricultural machinery. Machinery rental generated about ₹6,35,400 gross income and ₹3,78,100 net income. The improved system therefore combines production income with service-based agricultural entrepreneurship. Productivity also increased in major crops. Paddy production increased from 114.7 quintals to 142.6 quintals on 6 acres, wheat from 68.3 to 84.8 quintals on 5 acres, mung from 11.2 to 15.6 quintals on 3 acres, and mango production from 9.20 to 16.7 quintals on 1 acre. Dairy and poultry activities also recorded higher income after intervention.

Particular	Before Intervention	After Intervention
Paddy – 6 acres	114.7 q; Gross ₹1,71,710; Net ₹85,240	142.6 q; Gross ₹2,48,900; Net ₹1,41,300
Wheat – 5 acres	68.3 q; Gross ₹1,02,450; Net ₹66,710	84.8 q; Gross ₹1,61,120; Net ₹92,500
Mung – 3 acres	11.2 q; Gross ₹52,400; Net ₹33,700	15.6 q; Gross ₹76,500; Net ₹51,860
Mango – 1 acre	9.20 q; Gross ₹25,900; Net ₹13,840	16.7 q; Gross ₹58,450; Net ₹40,330
Cattle – 2 animals	4,800 litres; Gross ₹1,31,800; Net ₹50,600	6,000 litres; Gross ₹2,30,000; Net ₹1,62,400
Poultry	1,000 birds; 1,600 units; Gross ₹1,12,000; Net ₹67,310	20,000 birds; 3,200 units; Gross ₹3,40,000; Net ₹1,88,620
Agricultural machinery rental	Not reported	Gross ₹6,35,400; Net ₹3,78,100
TOTAL	Gross ₹5,17,960; Net ₹1,84,620	Gross ₹17,50,370; Net ₹10,55,110

Note: The source document does not provide a separate Benefit-Cost Ratio. Therefore, no B:C ratio has been independently added.

6. Social Impact and Women farmer-to-Women farmer Extension

The visible improvement in Kumari Archana farm income and the performance of her crops and enterprises attracted women farmers from surrounding areas to her farm. Women farmers visited her fields to observe the practices being followed and to seek technical information on increasing agricultural production and income. Her shared information on the use of agricultural machinery, improved production practices, improved seed, fertilizers, plant protection, timely harvesting, processing and storage of produce.

According to the source document, she guided hundreds of women farmers in nearby areas on increasing agricultural income through improved agricultural technologies and use of farm machinery. She also helped connect women farmers with KVK Munger, ATMA Munger and other women farmer-oriented institutions. KVK Munger conducted project technologies/demonstrations on her fields and women farmers' fields. Her practical approach and willingness to share experience helped her emerge as a successful women farmer and local source of agricultural information. The source specifically mentions recognition as an excellent, leading and progressive women farmer by agricultural institutions and KVK Munger. The exact number of women farmers adopting her technologies, number of demonstrations, farm visits or trainings conducted is not separately quantified in the source document.

7. Entrepreneurship and Employment Generation

Kumari Archana developed agriculture as a diversified enterprise rather than depending only on crop production. Her entrepreneurial activity includes ownership and rental of agricultural machinery such as pumpset, sprinkler set, reaper, paddy transplanting and sowing machine, zero-tillage machine, sprayer and thresher. By providing these machines on rent to neighboring women farmers, she helps them complete farm operations on time while earning additional income himself.

Her also integrated cattle rearing and poultry farming with crop production. The available figures show that machinery rental alone generated about ₹6,35,400 gross income and ₹3,78,100 net income. The overall annual gross income from farming and allied enterprises increased to approximately ₹17,50,370, with a net profit of ₹10,55,110. Her enterprise model therefore combines crop production, livestock, poultry and custom hiring of agricultural machinery. The source document does not provide a specific figure for the number of persons employed or the number of jobs generated, nor does it give a quantified future expansion target.

8. Awards, Recognition and Media Coverage

Kumari Archana has received recognition for her contribution to agriculture and farm mechanization. The source document states that district-level agricultural institutions, Krishi Vigyan Kendra Munger and ATMA Munger recognized him as an excellent women farmer. Bihar Agricultural University, Sabour also honored her, and the Government of Bihar is mentioned as recognizing him as an excellent women farmer.

ATMA Munger awarded him first, second, third and consolation prizes in different agricultural exhibitions/events, including agricultural mechanization and organic products fairs. KVK Munger recognized him as a leading and progressive women farmer. Her fields have also been used for conducting technologies under a KVK project, allowing other women farmers to observe the practices. The source document does not provide specific details of newspaper, television, radio, YouTube, social media or magazine coverage; therefore, such details have not been added here.

9. Future Vision

Kumari Archana intends to continue increasing agricultural income through modern agricultural machinery and improved technologies. Her aims to sustain diversified farming and strengthen the combination of crop production, livestock, poultry and agricultural machinery services. She also intends to continue adopting climate-resilient technologies to cope with changing environmental conditions. An important part of her future vision is to share practical knowledge with other women farmers and encourage them to adopt scientific farming, mechanization and income-diversification practices. He wishes to continue supporting women farmers in her area by linking them with KVK Munger, ATMA Munger and other women farmer-oriented institutions. Her continued focus is on scientific management, hard work, innovation and increasing the income of both her own farm and fellow women farmers.

10. Message to Fellow Women farmers

“Keep your courage high and work continuously with sincerity and dedication. Success in agriculture depends on our thinking, confidence, hard work, commitment and wise implementation. Women farmers should adopt scientific agricultural technologies, farm mechanization, proper management practices and continuous learning instead of depending only on traditional methods. By combining hard work with scientific thinking and appropriate technologies, we can improve productivity and agricultural income. Agriculture can become a successful enterprise when we plan carefully, use resources efficiently and remain ready to learn and innovate. Hard work and right action can change our circumstances and create a better future for farming families.”

Photographs

