SRI AUROBINDO INSTITUTE OF RURAL DEVELOPMENT

KRISHI VIGYAN KENDRA, GADDIPALLY

SUCCESS STORY OF VEERABOINA LINGAIAH WITH HIGH-DENSITY PLANTING SYSTEM IN COTTON

Farmer Profile:

Farmer Name	: Veeraboina Lingaiah
Age	: 46
Education	: 3nd Class
Adress	: Macharam (V), Penpahad (M), Suryapet Dist. Telangana
Farming Experience	: 21
Farming Focus	: Cotton cultivation in light soils

Background & challenges faced by farmer:

Mr. Veeraboina Lingaiah, a progressive farmer from Macharam village, had been cultivating cotton using traditional practices on his light-textured soils. Despite his efforts, he faced several agronomic challenges:

·Low yields: Yield stagnated at around 7.5 quintals per acre

·Poor fibre quality resulted in lower market prices

·Imbalanced nutrient use caused inadequate soil nutrition and reliance on excessive chemical inputs

·Crop health issues increased the vulnerability of cotton crop to pests and diseases

These constraints limited his productivity, profitability, and soil health in the long run.

KVK Intervention & Technological Adoption:

To overcome these challenges, Mr. Lingaiah collaborated with KVK, Gaddipally, and adopted the High-Density Planting System (HDPS); a proven scientific method for improving cotton productivity in light soils.

Key Interventions Implemented:

High-Density Planting (HDPS):

- Spacing: 90 cm × 15 cm
- Seed rate: 6 packets per acre
- Plant population: 29,629 plants per acre
- Integrated Crop Management (ICM)

Integrated Pest Management (IPM):

- Use of pheromone traps, sticky traps, and Azadirachtin 1500 ppm sprays
- Integrated Nutrient Management (INM):
- Balanced application of nutrients with emphasis on foliar feeding
- Integrated Disease Management (IDM):
- Preventive and curative approaches to maintain crop health

Sustainable Practices:

- Shredder-based residue management after harvest
- Crop rotation with Green gram to enrich soil organic matter and break pest/disease cycles

Results & Impact:

The shift to HDPS and ICM practices resulted in outstanding improvements

Parameter	Before (Traditional)	After (HDPS & ICM)
Yield per acre	7.5 quintals	12.0 quintals
Fibre Quality	Low	Improved fineness & strength
Market Realization	Moderate	Higher due to better quality
Chemical Input Usage	High	Reduced with IPM practices
Field Preparation	Manual	Mechanized shredding
Cropping Intensity	Single crop	Crop rotation with green gram

Key Benefits Achieved:

- 60% increase in yield over traditional practices
- 20–25% higher productivity due to early maturity and dense plant population
- Enhanced fibre quality, ensuring better prices at market
- Reduced environmental footprint with lower pesticide and fertilizer dependency
- Sustainable soil health through effective residue management and crop diversification

Epilogue:

Mr. Veeraboina Lingaiah's story exemplifies how scientific innovations like HDPS, when combined with integrated crop management and sustainable practices, can transform cotton farming into a more productive, profitable, and eco-friendly enterprise.

With continued support from KVK Gaddipally, Lingaiah has not only improved his own livelihood but has also become a source of inspiration for neighboring farmers who are showing their willingness to adopt HDPS in cotton cultivation.