

Success stories of Cotton Farmers in NTR District under Closer

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A special project on “**Cotton targeting technologies to agro ecological zones large scale demonstrations of best practices to enhance the cotton productivity**” funded by the CICR, Nagpur, conducted at NTR district of Andhra Pradesh supervised by the Dr. K.L.Rao Krishi Vigyan Kendra, Garikapadu. Project was mainly taken up to increase the production and quality of the cotton and to reduce the incidence of pink bollworm. A total of 341 farmer in 212ha area was selected for closer spacing (90x30cm) during the kharif 2023 and 2024. Farmers sensitized the impact of closer spacing in increasing the yields and gradually switching to the closer spacing. **Shri Bharothu Nageswarao from Village: Mansingh thanda, Mandal: A. Konduru, Dist: NTR**

Cotton was planted for the second time utilizing the Closer Spacing System (CS) by Bharothu Nageswarao, a cotton farmer from Maansingh Thanda village in the A.Konduru cluster of NTR District, Andhra Pradesh. He used a higher seed rate of four packets per acre and selected the cotton hybrid Siri (NCS-927) in order to implement the closer spacing cotton. He maintained an ideal plant population of 14,814 per acre by manually sowing cotton with a 90-cm row-to-row spacing and a 30-cm plant-to-plant spacing. He cultivated cotton at a wider plant spacing of 125 cm x 45 cm prior to the implementation of the special project on cotton, which led to a reduced plant population under medium to light soils. Low plant populations, unpredictable rainfall, terminal drought, and pink bollworm infestations are some of the main factors hindering production. These factors combined to affect cotton growth and development, which in turn led to low cotton yield and farm profitability. Overall, the cotton situation was altered by strong agronomic techniques like CS and four life-saving irrigations, which allowed him to produce a bumper crop of 12 quintals per acre. Compared to traditional cotton planting methods, the novel HDPS procedures created by ICAR-Central Institute for Cotton Research, Nagpur, increased

cotton production by 30–35%. Because of his early boll bursting and synchronous picking, which led to an early harvest and prevented the pink bollworm infestation, he was able to make a decent income from his cotton output. In case of CS farming, they get more yield than conventional farming. He encourages the farmers of surrounding villages also for adopting CS farming and thus HDPS in cotton paves a new way of cotton cultivation in state of Andhra Pradesh.

Details of intervention

Name of the hybrid/variety	Siri (NCS-927)
Seed rate	4 packets/acre
Spacing	90 X 30 cm
PGR Spray	Mepiquat chloride-once
No.of Pickings	Three
Cost of production	41,450
Seed cotton yield	11 q/ac
Gross income	82,150

Field visit



Crop cut demonstration conducted at farmer field



Dr. K. Bhagyalakshmi, Nodal officer visited NFSM farmer's field.



2. Shri Karnati Nageswar rao from Village: Kanneveedu, Mandal: Jaggaiahpet, Dist: NTR

Shri Karnati Nageswara rao, a cotton growing farmer from Kanneveedu village of NTR district has adopted Closer Spacing (CS) in cotton on heavy soil, following the technical advice by Dr. K.L. Rao Krishi Vigyan Kendra, Garikapadu. He selected cotton hybrid Aadhya (NCS-1134) BG II from Nuziveedu seeds Co. Ltd. for adoption of this CS technology and used higher seed rate of 4 packets per acre. He implemented this technology in 1.5 acres of farming land and was maintained by himself.

Prior to switching the new CS technology, he was practicing the traditional method of cotton cultivation with a spacing of 120×60 cm that led to lower plant population, later on he shifted to new technology of CS by reducing plant spacing i.e, of 90x30 cm, which increased the plant population up-to 14,815. In turn resulted in more yield when compared to traditional method of cotton cultivation. Two to three lifesaving irrigations along with inter cultivation operations encouraged the plant growth and development. Spraying with the growth regulator chamatkar stopped the monopodial growth and enhanced the number of sympodial branches and remaining fertilizer dose followed was same as traditional method. Maximum number of sympodial branches and an average of 25 bolls per plant were observed. Adopting good agronomic practices along with CS technology enhanced the farmer income with cotton yield of 15 quintals/acre. In case of traditional method of cotton cultivation, the farmer could get yield of 7 to 9 quintals per acre in irrigated conditions. The early boll bursting prevented the pink bollworm attack thereby resulted in early harvest and synchronous picking reduced the labour crisis and labour cost. As its having short duration, he can take up next crop on the same land if there is good irrigation facility. Adoption CS under Special project on cotton has increased the cotton yield (32%) and enhanced the profit of farmer.



Field day conducted at farmers field in Kanneveedu village



Training programme conducted at Kanneveedu village on Closer spacing in cotton

Details of intervention

Name of the hybrid/variety	Aadhya (NCS-1134)
Seed rate	4 packets/acre
Spacing	90 X 30 cm
PGR Spray	Mepiquat chloride-once
No.of Pickings	Three
Cost of production	38,500
Seed cotton yield	15 q/ac
Gross income	85,275