Sub-surface Drip Irrigation in Sugarcane: Embracing Change for a Prosperous Future

Farmers Profile

Name: Sh. Hakam Singh

Village: Jhaguri

Block: Radaur

District: Yamunanagar

State: Haryana



In the district of Yamunanagar, traditional flood irrigation methods were prevalent in sugarcane farming, leading to significant water wastage and uneven distribution. Recognizing the imperative for a sustainable and efficient alternative, the Atal Bhujal Yojana introduced drip irrigation to the sugarcane fields of Shri Hakam Singh in 2021. Before the introduction of the Atal Bhujal Yojana, Shri Hakam Singh had been cultivating sugarcane in his own way for many years, employing traditional methods that resulted in low yields of 30 tons per acre, with net profitability falling below the expected potential.



During the implementation of the Atal Bhujal Yojana, Shri Hakam Singh embraced a subsurface drip irrigation system and undertook two significant initiatives: wider spacing planting and cultivating sugarcane at 6 feet intervals. This strategic shift resulted in a remarkable increase in sugarcane yield.

Results: Shri Hakam Singh, with undying determination, attributes the success of his venture to his diligent efforts and the adoption of prudent agricultural practices, including wider spacing, the implementation of a drip irrigation system, and the

incorporation of intercropping. He acknowledges the valuable assistance provided by Atal Jal experts, a privilege that accompanies his association with Atal Jal.

The new interventions implemented by Shri Hakam Singh have resulted in a significant increase in sugarcane yield, reaching up to 45-50 tons per acre as compared to average yield of 30-35 tons per acre along with water saving upto 60-70%. This success underscores the positive impact of strategic farming practices and the collaboration with experts, demonstrating how a thoughtful approach to agriculture can lead to substantial improvements in productivity.

Economic Benefits: With an average cane price of Rs. 3820 per ton, Shri Hakam Singh has achieved an impressive income of almost Rs.1.72 lakh per acre. This stands out, especially considering that the per-acre cost of cultivation ranges from approximately Rs.25,000 to Rs.30,000. The profitability is not only attributed to the enhanced cane yield but is also complemented by additional financial support from intercropping. This supplementary income effectively helps Shri Hakam Singh offset expenses incurred during the season, showcasing a well-rounded and economically sustainable agricultural approach.

Farmer's Experience: The farmer expresses his sincere gratitude to the Atal Jal team for introducing him to innovative MI techniques in sugarcane cultivation, particularly sub-surface drip irrigation. This method has been instrumental in conserving water, especially during the summer months. Encouraged by the positive outcomes, he felt motivated to expand his sugarcane cultivation area from 3 acres to an impressive 20 acres land.

Now, he is actively sharing his learning experiences and the lessons learnt from adopting these techniques with his fellow farmers. His goal is to spread the sustainable and efficient farming practices, benefiting not only individual farmers but also fostering a collective improvement in agricultural methods in this modern era. Moreover he adds Groundwater is a precious resource which needs to be used in an optimum manner and conserved for future needs. He is thankful for the support and inspiration provided by the Atal Jal PMU team, and he stands committed for playing his part in spreading awareness and dissemination of valuable techniques among the farming community.