Parachute Net Fencing: A Sustainable Solution to Blue Bull Menace in Crop Protection

Profile of Innovator

Name : Vijay Bahadur Singh

Age: 58 YearsEducation: GraduateExperience: 8 Years

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Brief description of Innovation

Parachute Net Fencing is a low-cost, farmer-devised innovation, aimed for preventing crop damage from Blue Bulls (Nilgai) and other wild animals. Shri Vijay Bahadur Singh is a leading farmer, who converted this fencing with the element of creativity. The fencing height is 6 ft and using 12 ply parachute net with bamboo support and used rope. The durability of the fencing is about 12-15 years and bamboo needs to be replaced every 4th year. The innovation uses durable parachute material as fencing, which is both strong and flexible. Unlike traditional barbed wire or thorny bushes, this fencing effectively deters animals, without harming them, offering a humane and sustainable solution. This innovation has been recognized for its effectiveness and has received the "Mahindra Samriddhi Award" in 2016. It is now widely adopted across Bihar and other Nilgai-affected areas.



A view of Parachute Net Fencing



Blue bull trapped in fence

Innovation's Highlights

Made from strong, flexible, and reusable parachute netting, this durable, weather-resistant barrier effectively protects crops from Nilgai and other large herbivores, proving more efficient than barbed wire or thorn-fencing and is widespread adopted by the farmers across multiple districts of the Bihar.

Benefits/Advantages

The total cost involved in fencing is Rs. 25000 per ha. This affordable, reusable, and easy-to-install fencing solution serves as an effective physical barrier that humanely prevents wild animals from entering crop fields, thereby safeguarding harvests without causing them harm; by significantly reducing crop damage (70-80%), it helps farmers to increase yields, improve profitability, and maintain long-term field protection, while also offering greater durability and sustainability compared to conventional fencing methods.

Scope & Potential of Innovation for Wider Reach/Out Scaling

This fencing solution is highly suitable for regions facing Blue Bull menace and other wild and stray animal interference, scalable for marginal and small landholders, eligible for inclusion in government wildlife-safe fencing subsidy schemes, promotable by FPOs, cooperatives, and NGOs in wildlife-conflict zones, and easily replicable in other states also. Huge scope in Bihar around the rivers side cultivation.

Scientific Validation required

It requires validation of net durability under field conditions, assessment of long-term effectiveness with optimized fencing layouts, and scientific trials to evaluate animal deterrence rates and their impact on crop yield.

Domain

Crop Protection/Wildlife Management/Farm Innovation. It opens vistas for community fencing of land through Government support.