Cactus Pear: A Multipurpose Crop and Resilient Feed Source in Challenging Semi-Arid Environments

- Cactus pear thrives in harsh environments, requires minimal inputs and grows in poor-quality soils, showcasing adaptability and resilience.
- This multipurpose plant provides valuable products like livestock fodder and human food, while its high-water content helps in water-scarce regions.
- Cactus pear offers economic opportunities for low-income farmers and rural communities with diverse products, while also providing environmental benefits like erosion control, climate regulation, biodiversity conservation, and wildlife habitat.

Outcomes

- Over 500,000 cactus cladodes planted, boosting cactus pear cultivation.
- Training and capacity development benefited over 5,000 persons, empowering them with knowledge and skills.
- Cactus pear cultivation fills the green fodder gap for low-income Indian farmers.
- Growing government and partner interest in cactus as fodder and fruit in India, Jordan, and Tunisia.

Next steps

- Cactus pear, an under-utilized crop, requires dedicated efforts to raise awareness and promote its cultivation to unlock its full potential.
- Urgent action is needed to address the threat of cochineal infestation, which poses a risk to cactus pear materials. Establishing a breeding program for developing cochineal-resistant cactus pear varieties is crucial.
- Further research is necessary to explore and implement effective agronomic practices that enhance the nutritional quality of cactus and optimize its overall benefits.

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Our innovative approach

- Investigating cactus pear as a novel and sustainable feed source for livestock.
- Understanding farmers’ perceptions, attitudes, and adoption practices concerning cactus pear to ensure successful implementation.
- Evaluating the performance of various cactus pear accessions across diverse environmental conditions and developing nurseries with optimal agronomic practices.
- Enhancing awareness and building the capacity of our partners to effectively promote and utilize cactus pear.
- Establishing robust partnerships with national and international organizations.