



INNOVATION DRIVING NUTRITION AND COMFORT

GREEEN HOUSE, UNION TERRITORY OF LADAKH



A technology for improving food security with efficient Green House to grow crops.

he temperature in Ladakh drops down to -30°C in winter and long harsh winter months reduces the cropping season to just 4 - 5 months in a year. The Union Territory of Ladakh remains cut-off for six months in a year due to heavy snowfall and closure of the highways connecting with the mainland and the availability of fresh vegetables decreases significantly during the winter months resulting in an unbalanced and nutrient

deficient diet. Studies have established that deficiency of micronutrients is highly prevalent during the winter months due to lack of fresh vegetables and fruits. A phenomenon that is known as 'hidden hunger'.

To address this critical concern of the Ladakhi people, UT Ladakh and Defence Institute of High Altitude Research (DIHAR) undertook an innovative project- Ladakh Greenhouse Project. The project aims at improving food security and promoting livelihood in Ladakh.

CHALLENGES

The temperature inside the Green House often drops to 6 to 10° C at night in winter months.

Only leafy vegetables can be grown in winter.

The cladding material needs to be removed from the greenhouse structure during summer months due to excessive heat.

Not suitable for heavy snowfall regions.

Need frequent repair and maintenance.



This green house is also a part of Mission Organic Development Initiate (MODI), which aims to make Ladakh an organic region by year 2025. The project aims at establishing about 1,000 number of Ladakh Greenhouses in Leh and Kargil districts between 2021-23 with 75% subsidy by the Agriculture Department, UT of Ladakh.

A single Green House can generate up to Rs 75,000 in a year for the farmer.

"I have earned Rs 1.75 lakh from the crops grown and my income from farming has increased and doubled." Tashi Tundup, farmer in Thiksay village.

"Women Self-help Group Barba, Village Shey, Leh Ladakh generated an income of approx. Rs.40,000 in just five months by installing Green Houses."



FINAL OUTCOMES

Reducing the cost of living index for local population.

Water and Energy Conservation through Sustainable Organic farming.

Women empowerment.

Creating agricultural entrepreneurs.

