

**Concentrated Solar Thermal Project
Steam Cooking System in JNV Khumbathang
Status Report**

Concentrated Solar Thermal Technology

- ❑ Kargil is by nature, gifted with annual average 300 days of sun shine and average solar radiation of 5-7 KWH/m², where power potential @ 22-25 MW/sq Km is incident during the average clear days, which discerns the scope of tapping solar energy in the District.
- ❑ Concentrated Solar Thermal (CST) Technology is very new to Kargil District, though the district has an immense potential to make use of it in various applications with DNI levels.
- ❑ An effort of beginning the CST technology has been made by KREDA this year only.
- ❑ It is hoped that by 2020 KREDA shall install more than 05 nos. of Steam Cooking System in Kargil.
- ❑ KREDA has installed the first Steam Cooking System at Jawahar Navodaya Vidyalaya Campus, Khumbathang. After this successful demonstration, efforts to create awareness about CST and promote the technology shall be taken up.

JNV

KHUMBATHANG



CST

SYSTEM

Physical Status

Status As on 07-09-2017	
Name of the Project	CST Project JNV Khumbathang
Name of the Nodal Agency	Kargil Renewable Energy Development Agency (KREDA) Kargil, Ladakh Jammu and Kashmir
Name of Executing Agency	<i>M/s Unisun Technologies & Solar Renewable Energy</i>
Date of Start of Work	01-03-2017
Date of Completion of work	2 nd of June-2017
Name of work	Detail of Physical Progress
i) Completion of Reflectors Sheet , Aluminium Channel and bonding for mirrors fixing	Completed
ii) Installation Reflector frame 1. Rotating Support 2. Upper and Lower Stand	Completed
iii) Fixation of Central Tracking System (CST) 1. Winch 2. Solar PV panel 3. Battery 4. Electronic Controller 5. DC drive Motor	Completed
iv) Finishing of Steam Header System 1. Steam Drum 2. Header pipes IBR Grade 3. Receiver 4. Pressure reducing Station 5. Steam pipe line 6. Platform and supports	Completed
v) Piping and Tank Insulation (High Density Rock wool Insulation) Suitable for -30 celsius.	Completed
vi) Steam Cooking Utensils	Completed
vii) Reflectors Sheet , Aluminium Channel and bonding for mirrors fixing	Completed