Project Title:

Innovative technological interventions to address basic household needs of the tribal people of Zanskar valley. (SEED/TIME/004/2014)

Name of Principal Investigator	Dr. Rizwan Rashid, HARES-KVK-Zanskar SKUAST-K
Co-Principal Investigator	Dr. Lal Singh, HRG, Shimla
Thrust Area	Harnessing and Conserving Renewable Energy
Project Area	District Kargil (<u>Block</u> Zanskar- Padum, Shila, Ubarak, Salapi, Starasani, Dena, Marutse, Ufti, Kisharak villages)
Total cost of Project	Rs. 39,28,218 lakhs
Date of Start	15 September 2016
Date of Completion	14 October 2018
Achievements	Introduction of solar passive retrofitting for space and water heating.
	√ Installation of 158 solar panels in 10 villages.
	√ Data logger output for one year of solar water and space heating system is being analyzed.
	Fodder development and processing as silage for livestock nutrition.
	√ 3 trainings (1 in KVK campus, 2 off- campus) organized and trainees were provided silage bags.
	√ 186 households trained in this technology and silage preparation.
	√ Analysis of different silage carried out.
	Enhancing capabilities of local artisans for repair and maintenance of retrofit.
	V Local artisans (12) provided with hands on training in designing and fabrication of solar panels.
	√ Contractors involved in house construction in the valley were provided with details to incorporate solar room

heating panels to reduce the cost of space heating panel.

Project Goal

To address the basic issue of clean energy and fodder development in the Zanskar valley through appropriate technological intervention.

Approved Objectives	Objectively verifiable indicators
Introduction of solar passive retrofitting for space and water heating.	Design of solar water and space heating panels
	Demonstration of technology
	No. of awareness workshops/meetings conducted
	No. of panels installed (water heating and space heating)
	List of beneficiaries
Fodder development and processing as silage for livestock nutrition.	Details of the technology
	List of appropriate trainings imparted
	List of participants
	No. of manuals/brochures distributed
	Technological packages distributed
	List of beneficiaries
Enhancing capabilities of local artisans for repair and maintenance of retrofit.	List of trainings imparted
	Skill upgradation
	No. of manuals/brochures distributed
	List of participants

Outreach and Adoption	Indicators
	Technology adoption
	Local skill upgradation
	Alternate livelihood opportunities generated
	Increase in family income
	No. of women SHGs established
	Increased availability of resources
	Improved health and sanitation of beneficiaries
	Drudgery reduction
	Improved access to energy resources
	List of ecological benefits
	Institutional and market linkages established
	List of documentations/publications