Project Title:

Development and promotion of solar dryer technology for drying of crop products in North-Western Himalayas. SEED/TIME/007/2014 (G)

Name of Principal Investigator	Dr. RK Aggarwal, YSP University of Agriculture, HP
Co-Principal Investigator	Dr. Rakesh Sharma, YSP University of Agriculture, HP Dr. SK Bhardwaj, YSP University of Agriculture, HP
Thrust Area	Harnessing and conserving renewable energy
Project Area	**6 districts in HP and UK**
Total cost of Project	Rs. 27,74,300/-
Date of Start	October 2016
Date of Completion	October 2019
Achievements	**To study the physico-chemical and sensory quality evaluation of solar dried products.** √ A modular indirect solar dryer with thermal storage system, temperature controller, and dry air at inlet has been developed. √ The physico-chemical quality parameters of Pomegranate, Dhingri, Red chilli, Apple, Peas, Tomatoes, Kiwi have been studied and tabulated. **To study the shelf life of dried products.** √ The shelf life of the abovementioned dried products has been studied and tabulated. **Demonstration, installation and popularization of the developed technology.** √ 10 solar dryers have been installed at different locations in HP and UK. √ 11 awareness training programs have been conducted. √ 7 technical trainings for carpenters were organized in the field.

Project Goal

To promote the better alternative of solar drying technology for crops to provide better quality and shelf life of the same.

Approved Objectives	**Objectively verifiable indicators**
To study the physico-chemical and sensory quality evaluation of solar dried products.	List of factors considered for quality evaluation
	Details of quality evaluation
	List of products evaluated
To standardize packaging and storage requirements for dried products.	Standardization mechanism for packaging
	List of factors considered for storage and packaging
	List of products packaged
To study the shelf life of dried products.	List of factors considered for evaluation
	Details of shelf life study
	List of products studied
Demonstration, installation and popularization of the developed technology.	No. of demonstration workshops conducted
	List of trainings conducted
	Technology delivered
	List of participants
	No. of manuals/brochures distributed
	No. of solar dryers fabricated
	No. of solar dryers installed
	List of installation sites
	List of beneficiaries

Outreach and Adoption	**Indicators**
	Technology adoption
	Local skill upgradation
	Employment generation
	Increase in family income
	Drudgery reduction

	List of ecological benefits
	Improved access to energy resources
	Replicability of technology
	Institutional linkages established
	Women empowerment