Technology Innovations for Green Enterprises
- A Compendium of Scalable Solutions

Science for Equity, Empowerment & Development (SEED) Division
Department of Science & Technology
Ministry of Science & Technology, GOI,
New Delhi

Development Alternatives
B-32, TARA Crescent, Qutub Institutional Area,
New Delhi 110 016, INDIA
Tel: (+91) - 11 - 2613 4103. Fax: (+91) - 11 - 2613 0817
Web: www.devalt.org

K. Vijaya Lakshmi
Sunil K. Agarwal

Zeenat Niazi
M. Manoj Kumar
16. Green Rural Social Enterprise based on Household Tourism in Tribal Areas

RATIONALE
Community-based tourism has the potential advantage of giving due significance to folk lifestyles, traditional crops, food, livelihood systems, custom and cultures. It emphasises on making local people independent entrepreneurs in tourism and add additional sources of income from non-farm sector and by selling more profitable services, rather than products of agriculture sector. The tribal areas, beside their beauty, have many things to offer, like farming culture of highlands, social milieu and variety of food. With basic amenities in place, farming as a service offered to visitors is new and normally missing in organised tour-operated tourism. Household-based tourism enterprise was developed in tribal Sangla Valley of District Kinnaur in Himachal Pradesh. Beautifully wood-carved houses, costumes, food/beverages, handloom, handicraft and jewelry form major components of the tribal area household-based tourism enterprise.

OBJECTIVES
- Scientific validation and popularisation of nutritional and medicinal importance of traditional crops in tribal Sangla Valley.
- Contain haphazard growth of energy intensive infrastructure in seasonal tourism industry.
- Capacity building and training of local youth and women to revive traditional crops and preserve culture and cuisine through establishment of their household tourism enterprises.

METHODOLOGY
- Interested tribal women were trained in hospitality and hygiene techniques. Training was provided in preparing menu and serving food, in addition to housekeeping and standard code of conduct.
- Home Stay Scheme of the HP Tourism Department facilitates the registration and provides tax exemption.
- Scientific information on the traditional practices of agriculture, cattle rearing, living and culture with the involvement of local people was collated by the HRG and provided to the registered household and tribal community at large to sustain the activity and community on long term basis.
- Sangla Valley Sustainable Development Society (SVSDS) was established at Sangla to cater backward and forward linkages to the interested households and tourists to avail the facilities and opportunities of household/agri/farm tourism.
- Annual Household Tourism Festival was celebrated with participation of Home Stay households, artisan, weaver, cultural groups and farmers.

OUTCOME
- 52 households registered in Sangla Valley under ‘Home Stay Scheme’ of the Department of Tourism, Govt. of H.P.
- Promotion of unique way of tribal life, which not only helps preserve our heritage, but also provide other means of livelihood.
- Popularising the unique cuisine, culture, craft, camping and handloom of the tribal in Sangla Valley which otherwise not available to tourist and contributed to revival of traditional crops of buckwheat, wild apricot and related varieties.
- Business opportunities to local artists to showcase their tribal art through cultural presentations and exhibitions of traditional dress and jewelry.
- Interface of tribal people with experts for utilisation of natural resources and capacity building to develop household-based business enterprise through Home Stay and Agro Tourism.
- Highland tracking for knowledge of important biodiversity of the valley.
- Traditional food and craft have made a sudden comeback with this tourism model.

FEEDBACK
- Consumption of traditional crops, handicraft, handloom, dry fruits, milk, pulses, honey and butter etc.
- Help in preservation of culture, cuisine, craft and natural resources.
Replicable and Scalable Model Applicable with Location Specific Changes in Resources

INNOVATIVE ENTERPRISE MODEL
A model was designed to provide benefit to the entire tribal community, which was in contrast to the existing tour operated tourist activities based on guest house and hotel culture. The tourist season in the valley is only for 3-4 months and haphazard construction of concrete guest houses was spoiling the scenic beauty and ecosystem of the valley. Major attractions for tourists are snow clad mountains, traditional wooden houses, culture, handicraft and customs. To provide all these in one go, the existing houses having facilities of indoor toilets and rooms to accommodate the tourists were identified and registered under H.P. Govt. Home Stay Scheme to legalise the activity to establish tourism based household enterprise. Room charges were fixed by the Tourism Department. Stakeholders like women, youth, artisan, cultural groups were trained and educated in scientific importance of their agriculture and daily products to cater to the needs of the tourists and to meet their livelihood needs. In case of handicraft and woolens and cultural programme, respective artisan and group from the village were asked to provide the product and services. Tribal people were also trained in tracker guide and rescuer and about important flora and fauna to provide information on these aspects to the visitors.

TECHNICAL INNOVATION
- Tourists were attracted through scientific validation and serving of traditional food of *Fagopyrum esculentum* (Oghla), *F. Tataricum* (Phaphra) & *Prunus armeniaca* (Chuli).
- One cup of Fagopyrum (168 gm) contains 154 calories, 33% manganese and 22% magnesium. Rich supply of flavonoids, rutin, protects against diseases by acting as antioxidant. Fagopyrum lipid lowering activity is largely due to rutin. Maintain blood flow and high ratio of good cholesterol (HDL) to total cholesterol.
- Strength of local cuisines, scenic beauty, rich culture and wooden houses were the major attraction to the tourists under Home Stay in this tribal valley.
- Cozy wood houses are less energy consuming and provide required ambience.
- Upgraded traditional loom and weaving technology for natural sheep woolen fiber with better design has helped towards local micro-enterprise creation and drudgery reduction.

LINKAGES
- Model designed with S&T support for field implementation by HRG.
- Field implementation jointly by HRG and Sangla Valley Sustainable Development Society Sangla, Kinnaur H.P.
- Hospitality, health and hygiene training by faculty of Home Science College, CSK HPKV, Palampur.
- Household registration under ‘Home Stay Scheme’ of Department of Tourism, Govt. of Himachal Pradesh.

CONTACT DETAILS
Dr. Lal Singh
Director
Himalayan Research Group (HRG)
Core Group, Department of Science & Technology
(Govt. of India)
Umesh Bhavan, Chotta Shimla-171002, H.P. India
Telefax: 0177 2626820, Email lalhr@gmail.com
For further information, please contact:

Dr. Vinita Sharma
Scientist G & Head, SEED Division
Department of Science & Technology
Science for Equity, Empowerment & Development (SEED) Division, Ministry of Science & Technology
Technology Bhawan, New Mehrauli Road,
New Delhi - 110016, Phone No. +91-11- 26964793
Email : vinita.sharma@gmail.com, sunilag@nic.in
Website: www.dst.gov.in;
www.scienceandsociety-dst.org

Dr. K. Vijaya Lakshmi
Vice President
Development Alternatives
B-32, TARA Crescent,
Qutub Institutional Area,
New Delhi 110 016, INDIA
Tel: (+91) - 11 - 2613 4103.
Fax: (+91) - 11 - 2613 0817
Email: kvijyalakshmi@devalt.org
Web: www.devalt.org

About SEED Division
The Science for Equity, Empowerment & Development (SEED) Division has been set up under the Department of Science and Technology. It was established with the broad objectives of providing opportunities for motivated scientists and field level workers to take up action-oriented and location-specific projects aiming towards socio-economic upliftment of the poor and the disadvantaged sections of the society through appropriate technological interventions, especially in the rural areas. Under this programme, efforts have been made to associate the concerned National Labs or other specialist S&T institutions with each major programme so as to build-in expert input, utilise national S&T infrastructure and link it up with grassroots S&T interventions/initiatives.

About DA
The Development Alternatives Group, comprises the Society for Development Alternatives (DA), the research arm, along with its subsidiary, Technology and Action for Rural Advancement (TARA), the marketing arm of The DA Group. The group and its subsidiaries are responsible for large scale implementation, especially through social enterprises.

The DA Groups’ activities broadly cover the three primary areas that underline any form of sustainable development processes: the design and large-scale dissemination of appropriate technologies, rationale environmental management systems and equitable people-oriented institutions and policies.