

**Assessment of alternative livelihood development
as a strategy for long term conservation of biodiversity
at the Great Himalayan National Park, India**

THESIS
SUBMITTED TO THE
FOREST RESEARCH INSTITUTE UNIVERSITY
DEHRA DUN, UTTARAKHAND
For
THE AWARD OF THE DEGREE OF
DOCTOR OF PHILOSOPHY IN FORESTRY
(Forest Ecology and Environment)



By

Sanjeeva Pandey

Wildlife Institute of India
Chandrabani, Dehradun

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2011

DECLARATION

I hereby declare that the thesis entitled “**Assessment of alternative livelihood development as a strategy for long term conservation of biodiversity at the Great Himalayan National Park, India**” submitted to Forest Research Institute (University), Dehradun, for the award of the degree of Doctor of Philosophy in Forest Ecology and Environment, is a record of original work done by me under the supervision of Dr G. S. Rawat, Wildlife Institute of India, Dehradun, and Dr Sejal Worah, Worldwide Fund-India, New Delhi and it has not formed the basis for the award of any other degree or diploma. I also declare that the thesis embodies my own work, observations and analysis and this work constitutes towards advancement of knowledge in the subject.

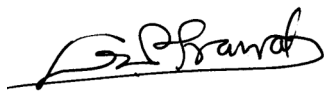
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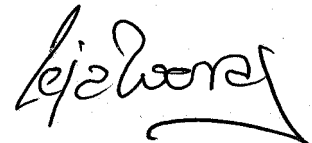
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CERTIFICATE

This is to certify that the thesis, “**Assessment of alternative livelihood development as a strategy for long term conservation of biodiversity at the Great Himalayan National Park, India**” Submitted to the Forest Research Institute (University), Dehradun, for the award of the degree of Doctor of Philosophy in **Forest Ecology and Environment**, is a record of bonafide research work carried out by Shri Sanjeeva Pandey under my guidance and supervision. No part of this thesis has been submitted for any other degree and it fulfills all the requirements laid down in the ordinance of Forest Research Institute (University) Dehradun for this purpose.

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Dated:

(Dr. Sejal Worah)

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Biodiversity Conservation

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ORIGINAL PAPER

Linking ecodevelopment and biodiversity conservation at the Great Himalayan National Park, India: lessons learned

Sanjeeva Pandey

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Abstract

There are very few actual field experiences of initiatives where fostering a harmonious relationship between conservation and development has been attempted. It is even rarer to find an example of a state-led initiative such as at Great Himalayan National Park (GHNP). The present paper is an attempt to document efforts made at the Park to address the emerging relations between people and the Park. The success of an environmental conservation programme being implemented at GHNP hinges on addressing the imbalances in resource creation or distribution as well as in the allocation of accountability of all the players including the Park management, NGOs, researchers, Friends of GHNP, and community.

Keywords : Biodiversity, Conservation, Ecodevelopment, GHNP, India, ICDP, Lessons, Livelihoods, NGO, SAHARA

Acknowledgements

The Great Himalayan National Park (GHNP) deals with the issues of biodiversity conservation and sustainable livelihoods for the villagers surrounding the Park. GHNP is the home of many endangered species and covers an area of over 750 sq. km. It is the only region of the Western Himalayas that is currently protected from human impacts. Surrounding GHNP is an Ecozone with 14,000 villagers who once used the now-Park lands for their economic benefit. Now excluded from GHNP, an Ecozone NGO and Park officials have been developing a unique model to hopefully ensure the protection of the Park environment and the economic well being of the villagers.

It was a fine morning of April 2000 when a visitor from USA, Payson R. Stevens visited me in my office at Shamshi in Kullu district where I have served as Director, Great Himalayan National Park for eight years from mid 1998 till mid 2006. That day I never knew that Payson would be an advisor to GHNP and Ecozone NGO and trek with me more than 1000 km in the Park. Together we explored the delicate balance between dependencies of local people on the natural resources and need to conserve the valuable resource base. We shared thought that the spiritually renewable values of what nature offers should also be respected. I wish to thank Payson who helped me improve the text of present thesis.

Many-many thanks to Dr G.S. Rawat, Wildlife Institute of India and Dr Sejal Worah, WWF-India who agreed to be my Ph D guides on the present research work on livelihoods and biodiversity conservation at GHNP. Both of them painstakingly tried to bring me out of inclination of writing my experiences at GHNP in my thesis. Instead they taught me nuances of research work based on systematic investigation of field data. Understanding role of socially inclusive policies in biodiversity conservation became very interesting through the knowledge of twin disciplines of sociology and ecology.

As I progressed with my research work, scholars such as Dr K. Ramesh, Dr Ishwari Rai, Dr Gajendra Rawat helped me processing my data on pheasants, ungulates and vegetation. Visiting GHNP with them in company of Dr Rawat has been my most valuable learning of methodology to work in the field. Mr Satyapranna, popularly known as Bambam Bhai assisted me with the analysis of socio-economic profile of villagers of GHNP Ecozone. Dr Sandeep Rattan gave me lessons in preparation of pie-charts and bar-diagrams. He aligned and formatted thesis in a most professional manner. Kasey Allen provided me a beautiful map of GHNP landscape. My heartfelt thanks to all of them.

Special thanks are due to my colleagues in Himachal Pradesh Forest Department. They include Mr Vinay Tandon, Dr G. S. Goraya, Mr Joginder Singh, and Mr Satpal Dhiman. It is a pleasure to recall role of Mr Gopal Krishan and Lal Singh of BTCS, the Ecozone NGO in arranging interviews with the members of Women Saving and Credit Groups. At the Wildlife Institute of India, scientists Dr V.B. Mathur, Dr P.K. Mathur, Dr Vinod Uniyal, Dr Y.V. Jhala, Dr K. Sankar, Dr Qamar Qureshi, Dr A.K. Bharadwaj, Dr Dhanajay Mohan, Dr S.P. Goyal contributed to the present research work by their scholarly comments during various presentations to the WII faculty and researchers organized by the Research Advisory Committee (RAC).

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The present research work may be considered as very special as there are very few studies about state-led community based conservation efforts in India. The research outcomes around livelihoods and conservation can be of use for the practitioners of biodiversity conservation in developing countries.

I will like to dedicate my present work to the Great Himalayan National Park which is source of physical, mental and spiritual well being of Indians as individuals, and Himachalis in particular. The Park induces simple and fundamental values such as good citizenship, love of country, and appreciation of the natural and historic fabric of western Himalayas.

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Abbreviations

BTCA	Biodiversity Tourism and Community Advancement
BiodCS	Biodiversity Conservation Society
CoB	Conservation of Biodiversity
DFID	Department for International Development
EBA	Endemic Bird Areas
FLS	Front Line Staff
GHNP	Great Himalayan National Park
GoHP	Government of Himachal Pradesh
GTZ	German development cooperation
Govt.	Government
HH	Household
HPFD	Himachal Pradesh Forest Department
HPFSRP	Himachal Pradesh Forest Sector Reforms Project
HPW	Himachal Wildlife Project
IGA	Income Generation Activity
JFM	Joint Forest Management
LTEM	Long Term Ecological Monitoring
MoEF	Ministry of Environment and Forest
MEA	Millennium Ecosystem Assessment
MNAREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MPPA	Medicinal Plants Propagation Area
NABARD	National Bank for Agriculture and Rural Development
NGO	Non Government Organization
NWFP	Non Wood Forest Produce
PA	Protected Area
PAN	Protected Area Network
PAPU	Policy and Planning Unit
PFM	Participatory Forest Management
PRI	Panchayati Raj Institutions
SAHARA	Society of Advancement of Hill and Rural Areas
SVY	Sanjhi Van Yojna
UK	United Kingdom
WII	Wildlife Institute of India
WSCG	Women Saving and Credit Groups