





WWF- India, Khangchendzonga Landscape Programme C/O Sikkim Programme Office Deorali, (Near Forest Secretariat) Gangtok - 737 102, Sikkim www.wwfindia.org







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Published by

WWF - India

Khangchendzonga Landscape Programme

Suggested citation

 $WWF-India.\,2009.\,Activity\,Report.\,Khang chendzong a\,Landscape\,Programme,$

Gangtok, Sikkim

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Printed by

Systematic Designers & Printers Pvt. Ltd.

Siliguri

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Activity Report KHANGCHENDZONGA LANDSCAPE PROGRAMME

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I am extremely pleased to write this foreword for the first consolidated report of the WWF-India's Khangchengdzonga Landscape Programme (KLP). This programme, initiated with a small amount of funding but a great deal of commitment in 1993, has grown from modest beginnings to a diverse set of initiatives being undertaken in collaboration with a wide range of partners. The KLP today encompasses initiatives ranging from traditional programmes on wetland and species conservation to emerging issues such as climate change and sustainable tourism. In the KLP, as in other programmes the WWF-India is engaged in throughout the country, we work through a range of strategies and approaches including community empowerment, education and awareness, research and monitoring, policy and advocacy, communications and documentation. WWF-India is committed to working with the state governments of Sikkim and West Bengal, NGO partners, research institutions and civil society at large to ensure the long term conservation of this critical landscape through a proactive and forward-looking programme which will benefit the people and the biodiversity of the region. The activities described in the report are a step towards this direction and we look forward to scaling this up to achieve significant impacts in the future.



Dr. Sejal Worah
Programmes Director
WWF-India

E xecutive S ummary

WWF-India's Khangchendzonga Landscape Programme, initiated in 2005 from the Sikkim Programme Office has six thematic work areas. These are (i) species conservation, (ii) freshwater and wetlands, (iii) wildlife trade control, (iv) policy level initiatives, (v) eco-restoration and employment generation and (vi) awareness, capacity building and environment education. A major part of the species work is being done in partnership with the Forest, Environment and Wildlife Management Department (FEWMD) of Government of Sikkim wherein we have been studying the present status and distribution of red pandas in the state; in another work, we partnered with Wildlife Institute of India, FEWMD and Indian Army and surveyed the snow leopard habitats in northern part of the state and came up with some baseline data on the herbivores' distribution and abundance in the study area; capacity building of stakeholders for species management is also another tool which we have been using in Sikkim and northern West Bengal.

As part of our wetlands work, together with FEWMD, we identified 11 wetlands in Sikkim which require conservation actions. Out of these, Tsomgo lake or Tangyek Tsho was prioritized for urgent actions. Along with The Mountain Institute, Sikkim chapter, WWF-India helped FEWMD to develop the Sikkim Lake Conservation Guidelines and following this, a new CBO, named Tsomgo Pokhari Sanrakshan Samiti has been notified by the Government who will be responsible chiefly for conservation of the Tsomgo Lake and its environs.

Eco-restoration has been a key activity of WWF-India which has been carried out by WWF-India in the Darjeeling hills since 1995. As part of this initiative, WWF-India assists the farmers to grow saplings of indigenous plants and then those are planted in tea-gardens and degraded areas. This work not only helps in afforestation, but also helps in employment generation for the farmers. As part of livelihood improvement, we have been helping communities with apiculture, vermi-composting, off-seasonal vegetable cultivation, etc. Wildlife trade control is being done mainly through capacity building of stakeholders on technical and legal matters. The first step to control wildlife trade is to strengthen enforcement and recognizing this fact, WWF has been working with the state forest departments and different enforcement agencies.

WWF-India is working with the communities to address man-animal conflict both on ground and at a policy level also. The organization is presently also engaged in a dialogue with the stakeholders for conservation of sacred groves and protection of environment-friendly cultures and traditions of the local people.

As part of awareness and environment education, WWF-India has been working with the teachers from different parts of Sikkim in order to make the students aware about the biodiversity values of Sikkim. WWF-India appreciates the numerous partnerships, national and international without which implementing different projects of Khangchendzonga Landscape would have been impossible.

Dr. Dipankar Ghose Head Eastern Himalaya & TAL WWF-India





Formed in 1962 (in India since 1969), WWF has grown into one of the world's largest and most respected conservation organisation with nature conservation as its prime concern. In Sikkim, present since the last 13 years, the organisation established initially in the form of a field office and then changed into a state office and finally went through a transformation with the setting up of a programme office and underwent a shift to focus along with the Darjeeling field office, on the Khangchendzonga Landscape as a whole.

The Khangchendzonga Landscape spreading over an area of 11,500 sq.km has been declared a priority landscape by WWF and ICIMOD (2001). With a total of eleven Protected Areas shared by Sikkim and West Bengal, this landscape is home to many important species like the red panda, snow leopard, clouded leopard, rhododendrons etc.

The programme has projects on the following themes-

- Species conservation
- Freshwater and wetlands
- Wildlife trade control
- Policy level initiatives
- Eco restoration and employment generation
- Awareness, capacity building and environment education

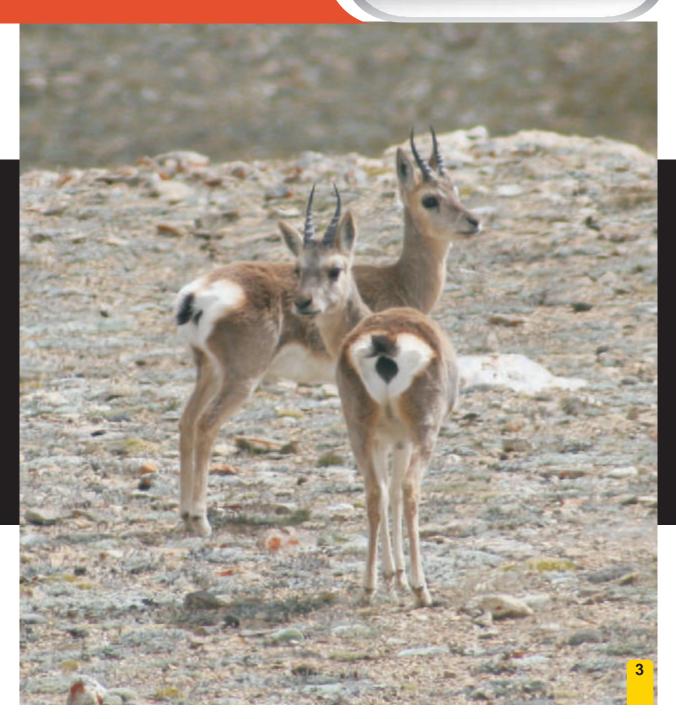
For implementation of these projects the programme collaborates with partners at different levels chief of which is the Forest Department, with whom most of the projects are jointly carried out. Collaborations are also underway with other Government agencies like Police Department, Indian Army, Science and Technology Department, Customs Department and NGOs like Khangchendzonga Conservation Committee (KCC), The Mountain Institute, SKES, Kabi Endeavors and other NGOs in the region and private agencies like the tea gardens.



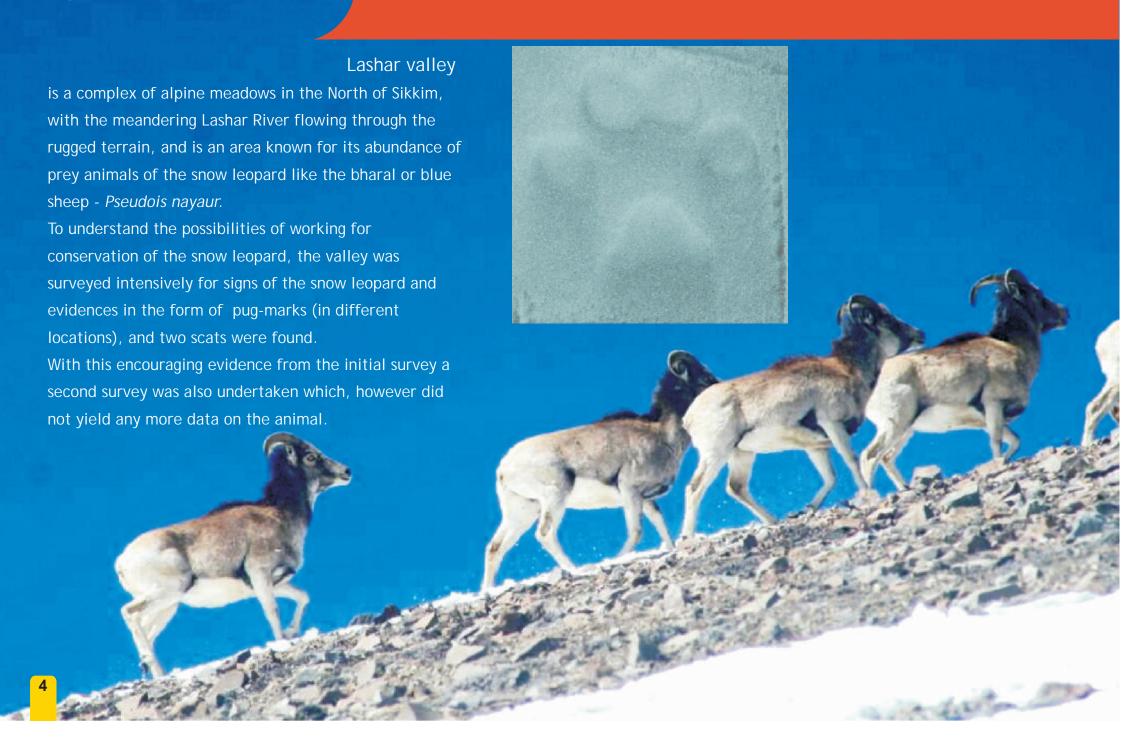
Species Conservation

The Khangchendzonga Landscape holds numerous globally threatened species including the snow leopard, red panda, clouded leopard, blood pheasant and several species of rhododendrons, medicinal plants and orchids.

In Sikkim, under species conservation, the flagship project is 'Long term conservation of red panda', which is the state animal of Sikkim. With man - animal conflict situations on the rise in forest villages of Darjeeling, a study to understand the status of Asian black bear will soon also be underway.



Species Conservation









The Red Panda Project

is implemented with the Forest, Environment and Wildlife Management Department, Government of Sikkim as the main partner. Joint surveys have been organised with the department to record the presence- absence status of the animal in protected areas of the state.

On the red panda trail...

The survey team sets up camp in a clearing

within Pangolakha Wildlife Sanctuary. This

sanctuary in East Sikkim spreads over an area

of 128 km² and is one of the three Protected

A reas surveyed for red panda evidences.

While secondary evidences in the form of scats

were found in plentiful, pug marks could be

discocvered only during the winter months.

During the first year of survey the team missed

sighting of the animal by only a few minutes on

2 -3 occasions.



Species Conservation

Building capacities of the people at field level involving both the community along with Forest Department staff has been an important component in the red panda project. Training and workshops have been organised on basic field surveys and population estimation, though much of the learning for them has come from hands - on experience during the red panda survey.









Freshwater & Wetlands



Being situated in close proximity to Gangtok, Tsomgo Lake attracts a large number of tourists each year and is counted as one of the major tourist destinations of Sikkim. While this generates employment oppurnunites for the locals, it is also seen as a threat to conservation of biodiversity.

WWF- India jointly with The Mountain Insititute, helped the Sikkim Forest Department to formulate the 'Sikkim Lake Conservation Guidlines' in 2006. This allows the government to partner with CBOs for conservation of wetlands in a participatory manner.

With the involvement of the Forest,
Environment and Wildlife Management
Department a community based organisation (Pokhri Sanrakshan Samiti) has
been formed with the residents of the
lake area to look into the conservation of
the lake.



For the locals, Tsomgo is considered as very sacred, a belief maintained since ages. Every year during the time of Guru Poornima, local healers and shamans gather at the lake side to offer pujas to the guardians of the lake for its well being.







Previously with the shops situated above and very close to the lake, all the waste and sewage were flowing down into Tsomgo.
With proper intervention from the Government the shops were shifted to a shopping complex constructed below the lake which has led to a cleaner Tsomgo.



As a follow up to the shifting of shops, a cleanliness drive organised by the PSS got the whole area rid of all of the garbage that had accumulated over the years.

Water quality monitoring of Tsomgo Lake

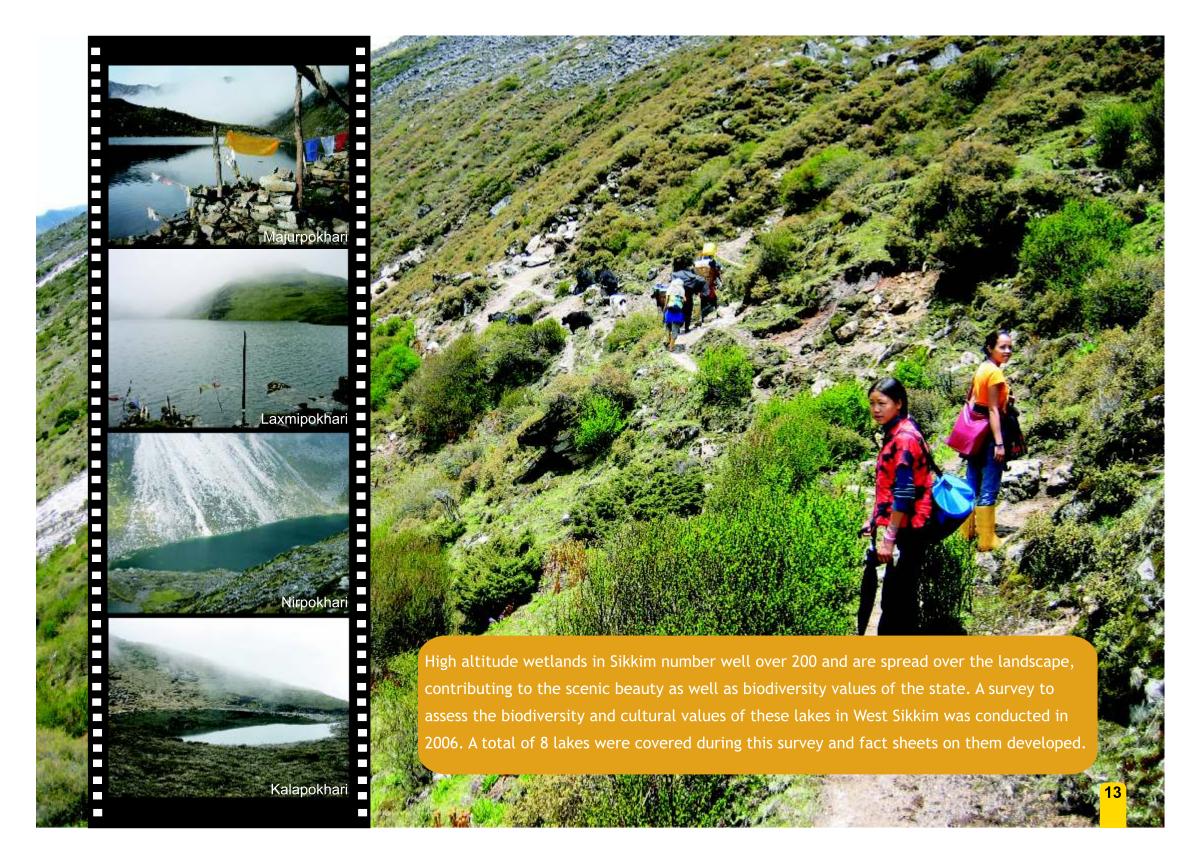


Water quality monitoring of Tsomgo Lake is also a much needed task that is carried out regularly. Parameters for water samples collected for qualitative analysis fall within the prescribed desirable limits, though some show minute fluctuations, which is attributed to human interference and increase in garbage around the lake.



Freshwater & Wetlands











In Darjeeling, WWF - India has established its presence through **Project Save** the **Environment and Regenerate Vital Employment** (SERVE) which works with three objectives, of which one is environmental restoration of Darjeeling hills by reforestation activities. Under this programme plantations are carried out in degraded areas of Block Forests and also in the Senchal water catchment area that forms the main source of water for Darjeeling town. Apart from these, shade tree plantations are also done within the tea gardens of Darjeeling. Seedlings raised in the project's own nursery are supplied to the plantation area through local committees or groups for planting.



Eco restoration





For plantation purposes, farmers are provided with seeds and also the required technical training for raising saplings. They raise these seedlings in their own nurseries which are then bought back by the project for plantation at various locations. The site of nursery is selected by the altitude and the species required for next plantation. This approach helps provide farmers with a regular source of income.

Employment Generation





Traditional practice of bee keeping yields very less amount of honey and also the boxes do not hold the bee population for long. Since beekeeping constitutes a resource of sustainable income generation to the farmers a shift to improve the technique of honey bee cultivation was a long felt need.

Project SERVE has been involved in imparting apiary training to the rural communities with main focus on field practices and transferring bee colonies from traditional bee hives to the modern honey boxes.

These boxes are also distributed to each participant at a subsidized rate along with other APIARY equipment

Employment Generation









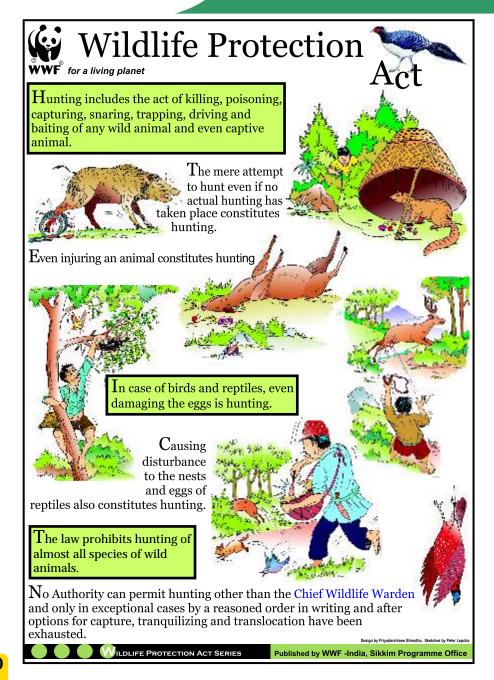


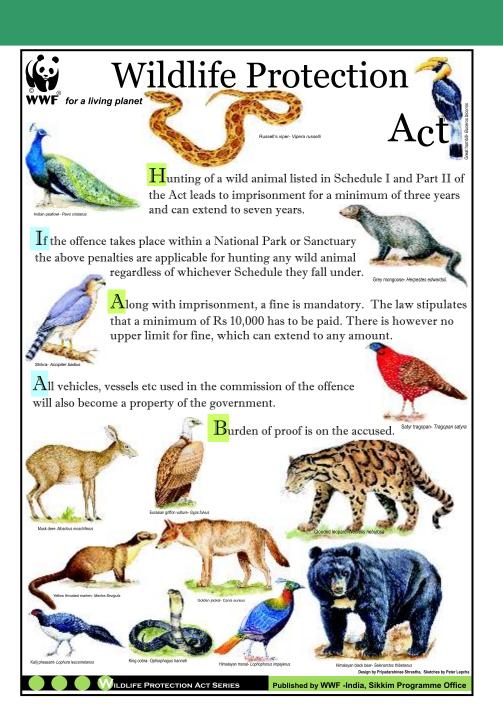


Awareness generation and building capacities of enforcement agencies is the main objective of this project. Workshops have been organised involving all enforcement agencies (Department of Police, Indian Army, Indo Tibetan Border Police, Forest Department, Customs Department, etc.) in Sikkim and northern West Bengal. Cross border meetings between officials of India and Nepal have also been organised successfully with support from TRAFFIC- India.

Posters in 3 languages on relevant issues under the Wildlife Protection Act were also printed and widely distributed.

Wildlife Trade Control





Policy Initiatives





Cases of man animal conflict have been on the rise in the state of Sikkim in areas adjacent to the forests. While on one hand farmers' livelihoods are at stake on the other the conservation angle comes in to play.

A study was undertaken in South and West districts of Sikkim to understand the conflict status of these areas and to gauge the general feeling amongst locals regarding the issue, and also to recommend suitable mitigation measures.

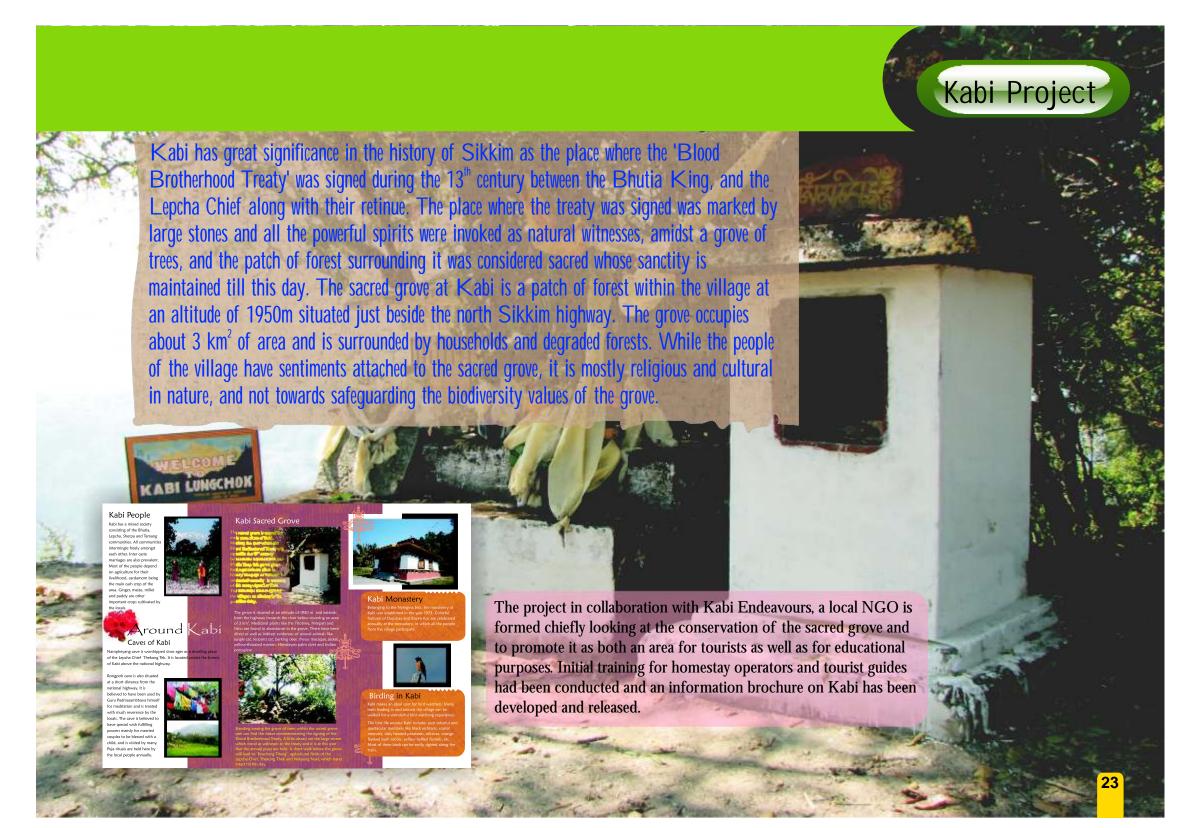
The report of the survey will soon be published.



Devithans are

small patches of forests protected by communities over centuries as a religious tradition and are found in all parts of the state. Most *Devithans* are associated with a source of water, which is the *Simsar*. In many of the cases these Devithans are as old as 150 years and beliefs that gave birth to them are lost in the tide of time. With an ever increasing population, *Devithans* all over face a lot of pressure and their areas are decreasing. A survey was conducted to ascertain the conservation status of these sites, the local laws that existed and the sentiments of the locals towards them. The findings would ultimately help understand how community conserved areas outside of the PAs were in existence over the years.





For exchange and sharing of experiences JFMC (Joint Forest Management Committees) members along with field level forest officials from Sikkim went on an exposure trip to Gorumara National Park in West Bengal, mainly to get an insight into the eco tourism projects being run by the Forest Department with the Eco Development Committees and the partnership that existed between the two.

Awareness generation programmes cater to a variety of target groups and also through various means. While for Forest Department staff it is mainly through training and orientation programme, for schools contests and events are held regularly for them to participate in a spirit of fun and learning.



For the staff of West Bengal Forest Department training on legal matters have been organised regularly and these are well appreciated by the participants.







Project SERVE with a strong Environmental Education component, organises varied events throughout the year for schools to participate. Wildlife Week, Earth Day, Environment Day are important times when the schools gear up for healthy competition amongst themselves. Nature trails, quiz shows, debates, painting contests, zoo visits, town rallies are some of the programmes that are organised for the students to enjoy, share and learn.











Environment Education

in schools has gained prominence over the years and when taught effectively can encourage children to be more responsible and sensitive towards nature. With proper environment education being imparted it would not stop only with generating awareness amongst the children, but facilitate that important next step to inspire them into taking action.

A workshop for teachers was organised which saw participation from 10 schools of Gangtok to develop a way forward for EE.



POSILER CONTEST

For generating more awareness amongst the children regarding the red panda, a state level poster contest was organised, in which 22 schools of Sikkim from 3 districts participated.

An interesting and colourful presentation on the animal was made to the students and they pledged to join hands for the red panda by signing with their handprint on a banner.

The six winners of the contest were taken on an educational trip to Singalila National Park in West Bengal, which is an important red panda habitat.







A red panda happily smiles at the Gangtok zoo while adjacent to its enclosure the "Red panda notebook" is formally released by the Hon. Minister for Forests, Government of Sikkim, Mr. SB Subedi.

The notebook was published jointly by WWF- India and FEWMD with support from Gorlitz Zoo, Germany for the Himalayan Zoological Park in Gangtok. A similar notebook was also published jointly with the Padmaja Naidu Himalayan Zoological Park in Darjeeling, West Bengal.









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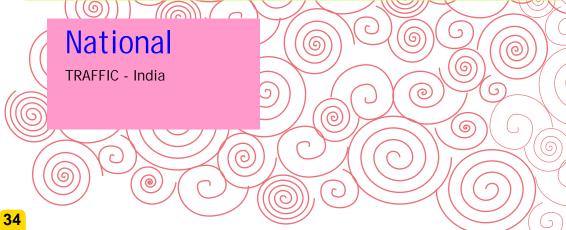
Mr. DC Pant





Sikkim

- ➤ Forest, Environment and Wildlife Management Department
- Department of Science and technology, Government of Sikkim
- Human Resource Development Department, Government of Sikkim
- Department of Home Affairs, Government of Sikkik
- Rural mangement and Development Department
- ▶ Police Department
- 17 Mountain Division along with brigades and units under this, Sikkim
- Educational Institutes
- > Khangchendzonga Conservation Committee, Yuksam
- > Sindrabong Khangchendzonga Ecofriendly Society, Sindrabong
- > The Mountain Institute, Sikkim Unit
- Kabi Endeavours
- Pokhri Sanrakshan Samiti
- ▶ Greater Rangit Eco-tourism Committee



West Bengal

- ▶ Planters' Association
- > Forest Department, Government of West Bengal
- Police Department
- Customs and Excise Department
- ▶ Department of Revenue Intelligence

WWF- US

WWF- UK

WWF- Germany

German Zoo Directors' Association

WWF- Netherlands

WWF- International

Projektwerkstatt Teekampagne, Berlin, Germany

TRAFFIC -International

Rotterdam Zoo

Gorlitz Zoo

WWF -Nepal

WWF- Bhutan