

**SITE INSPECTION REPORT ON THE PROPOSED ROAD FROM SOPAKHA VILLAGE
TO CHEWABHANJYANG VIA JORBOTAY IN WEST SIKKIM**

Submitted to the
Standing Committee of the National Board for Wildlife



One of the roads and landslides that team has witnessed during the site inspection in Sikkim.

Site inspection team

Dr MK Ranjitsinh, Member

Dr AJT Johnsingh, Member

Mr. Kishor Rithe, Satpuda Foundation, Member

Dr. MD Madhusudan, Nature Conservation Foundation, Member

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Background

The project proposal for inspection and survey of construction of road from Sopakha village to Chewabhanjyang via Jorbotay in West Sikkim by the Roads & Bridges Department, Government of Sikkim for connecting the Police & SSB Out Posts at Chewabhanjyang, was discussed during the 28th meeting held on 20th March 2013. The Member-Secretary had informed the committee that the proposed road from Sopakha village to Chewabhanjyang via Jorbotay is a 18 km long road in West Sikkim and will pass through the Barsey Rhododendron sanctuary (104 sq.km), but is important, mainly to provide road connectivity to the Indo-Nepal border. He had also informed the SC-NBWL that the State Board for Wildlife has recommended the proposal in its meeting held on 19th June 2012.

After discussion, the committee decided that the site be inspected by the team which would include Dr. M.K. Ranjitsinh, Dr. A.J.T Johnsingh, Shri Kishor Rithe and Dr. M.D. Madhusudan.

Following this decision, the said committee has visited the project site and nearby areas from 14th to 15th May 2013. The committee met the following representatives from the Sikkim Government's Forest, Environment and Wildlife Management Department (FEWMD) and the officials from the Roads & Bridges Department, Government of Sikkim on 15th May 2013:

Name of the officer	Designation
1. R.K. Pariyar	Addl. Chief Engineer (Roads & Bridges Department)
2. A.B. Subba	Superintending Engineer (W) Roads & Buildings Department
3. N.W. James, IFS	CF (Wildlife)
4. Tshering Pinto Bhutia	D.F.O. (Wildlife) West
5. Bhanu Sharma	Divisional Engineer, Roads & Bridges Department
6. Ganesh Kumar Pradhan	Assistant Engineer R&B, Kalul
7. Bindhya Subba	Range officer (Wildlife), Dentav
8. Lalit Kumar Rai	Range Officer (Territorial)

Observations:

We went for a site inspection of the said road project on 15th May 2013 from Pelling with the officers mentioned above and had discussions about the details of the proposed road.

The officers stated that the proposal for diversion of 9.58 ha of forest-land from the Barsey Rhododendron Wildlife Sanctuary, for construction of the road from 1st km to 18th km in length from Sopakha village to Chewabhanjyang, via Jorbotay in West Sikkim, is mainly for connecting the police & SSB out posts at Chewabhanjyang with all weather road connectivity. The road would be a lifeline for the mobility of the Sashastra Seema Bal (SSB) and the Sikkim Armed Police (SAP), who have been posted in the border to curb illegal

activities arising across the border. Presently, the security personnel have to undertake a steep climb of nearly 3 hours and rely upon pack animals to carry up their provisions to the outpost.

The officials of the Roads & Bridges Department, Government of Sikkim also explained various technical details of the road project including the location, alignment and methods of constructing the road. The total length of the proposed road inside the sanctuary would be 5.85 km and the width is 54 feet.

Specific discussions included how minimum ecological damage during road construction. It was suggested that the total number of trees to be felled, if required, should be enumerated after inspection and survey.

The Rhododendron Wildlife Sanctuary supports several species of rhododendrons and orchids, barking deer, wild pig and carnivores such as Himalayan black bear, leopard, clouded leopard, leopard cat, and marbled cat. The Executive engineer stated that the labour camps will not be set up inside the sanctuary and will carry out work from outside the sanctuary. They will also store the construction material in identified areas outside the sanctuary.

After the site inspection, members explained the following concerns to project proponent:

Sikkim has a geographic area of 7096 sq.km, 82% of which is forest. The committee appreciated that 30.77% of the total forest area comes under the PA network. However the committee highlighted the fact that most of this 82% forest and 30.77% of, which is under PA network, is hilly and mountainous. This poses a major constraint and concern for road building activity, not only at this site but also in the entire state of Sikkim, given that road construction in the mountains often leads to landslides. Especially, the deposition of overburden while constructing any road has been a critical issue as vacant flat areas close to roadsides are not available for depositing them.

We found that most of the time road-building agencies in Sikkim simply push the overburden (rubble, soil, etc.) into the valleys, which subsequently slide in to the streams and rivers and get also deposited in the downstream agriculture fields. Such deposition often leads to changing of river courses leading to enormous erosion and damage to property and settlements if there is a natural calamity like a cloudburst.

This committee is therefore concerned about the impact of road building activity in the Sanctuary, which, instead of providing eco-system services such as soil conservation or water provisioning and regulation, might pose dangers to people living downstream.

The Committee, therefore, requested the project proponents to revise the project to make it more ecologically responsible. While recommending the request for survey of this

road in the sanctuary, the Committee suggested that the following prerequisites and conditions would have to be met with and these should be incorporated in the revised proposal for the construction of the road, after the survey has been carried out.

Pre-requisites & Conditions:

1. We recommend permission for inspection and survey of the proposed road. We expect the revised proposal clearly state that the road will only have a gravel surface within the precincts of the sanctuary and the width would be confined within the prescribed limit. It will not be a cemented or a blacktopped road on this stretch, but an all weather gravel and metal, road, which must have firm shoulders, and a good drainage system on both sides of the road to prevent its erosion.
2. The status of the land will remain unchanged as a sanctuary and need not be diverted/ de-reserved.
3. All the construction and road maintenance material will come from outside of the Sanctuary limits. The camps of the construction workers would also be situated outside the Sanctuary.
4. The specification of the streams in this 18 km stretch to build bridges/culverts should be mentioned in detail (clearly mentioning their location on the 5.85 km road within the sanctuary).
5. The height and width of the bridges and culverts should be decided and built as per the all season movement of the small and large animals in the area. The movement of wild animal data should be acquired from the Wildlife Department.
6. No debris that would result from the cutting of the road along hill sides, would be tipped over into the slopes below nor deposited anywhere within the Sanctuary. The topsoil should be separated from rubble and stones and could be offered to the local people to carry it away themselves. Topsoil, which is the most productive element in the rubble, is in short supply in the hills and may be a commodity, which the local people can use in their own fields. The stones and rubble could also be offered to the local people if they wish to use it for construction purposes. If not, the construction agency must transport the material to outside the Sanctuary premises and deposit them at selected safe sites, preferably at level areas
7. If during construction or maintenance it comes to the notice of the officer-in-charge of the Sanctuary or of the Chief Wildlife Warden of Sikkim that these conditions above have been violated, he would be authorized to stop the construction /maintenance, as well as impose any other penalty under the provisions of the Wild Life (Protection) Act.

8. A *chowki* manned by the Sanctuary staff would be established at the entrance of the Sanctuary, to prevent any violation of the law by those using the proposed road.
9. To prevent soil erosion, which is so prevalent in Sikkim wherever roads are constructed, indigenous suitable species vegetation such as ringal, *Thysanolaena maxima* and *Rubus ellipticus* and bamboo. Such processes for ecological restoration may need to be initiated well in advance before starting the road construction. Such roads are likely to have long life serving well the people and the country.
10. As the sanctuary shares the boundary with Khangchandangzonga Biosphere Reserve in Sikkim and, Singalila National Park in West Bengal, the movement of large animals should be given due consideration while planning the mitigation measures, if needed.
11. Mechanism of accessibility to this road inside the sanctuary by various stakeholders also should be suggested in the revised proposal along with the traffic regulation, if any for the safety of wildlife. This should be done in consultation with Chief Wildlife Warden.