

Char Dham Road Project Of Uttarakhand - Importance Of All Weather Road, Impact On Environment And Suggestions

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Abstract: The importance of Char Dham Road Project of Uttarakhand lies in the fact that it will not only make the pilgrimage to Badrinath, Kedarnath, Gangotri and Yamunotri convenient and safe but will also boost economy of the State through promotion of tourism and employment generation. But the concerns of harm to environment and biodiversity needs to be given the due importance as well.

I. HISTORICAL BACKGROUND

Establishment of char dhams in Uttarakhand by Adi Guru Shankaracharya was an attempt to keep the cultural and religious form of India strong and united, in which heavenly abode on land Badrinath is prominent. The virtue of the journey of all the four dhams including Badrinath as well as Kedarnath, Gangotri, Yamunotri in Uttarakhand is also considered to be similar to the four dhams established in the four directions of India. Before independence, it has been a tradition to walk on foot from Haridwar to these pilgrimages with sticks, Kandi and horses; lots were on the way for the convenience of the travelers; Baba Kali Kamali Panchayat area and other institutions established Dharamshala on the yatra route; markets and deployment of Chaudharies (guards) were also done by the administration; Agencies were created for stables and porters for which separate land and buildings were also allocated; walkway, foot bridges and suspension bridges were constructed by the PWD and the responsibility of maintenance was also given to this department in later years. After independence, the motorway to Badrinath and Gangotri has been completely built up to the present, though for Yamunotri and Kedarnath, there is still a little walkway. Due to modern development, the footpaths and bridges built for the four dhams are deserted, which used to provide employment to unemployed locals. In the current motorways, most of the Dharamshalas of the institutes, which were built 125 years ago, are in chronic condition due to poor management observed in

recent years and this issue is not included anywhere in the concerns of the local administration and government.

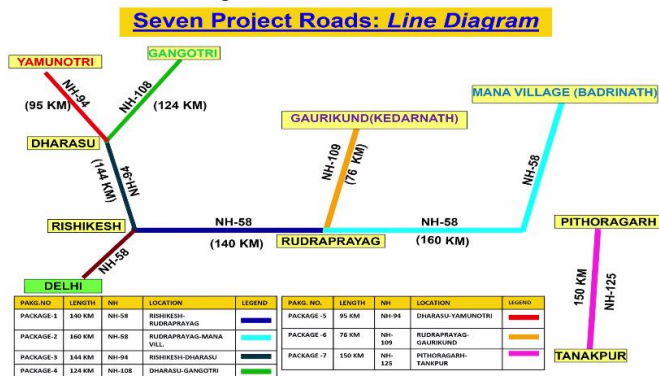
Roads are standards of development as roads lead to prosperity wealth and development in any area. With road construction, it does not take time to connect all other facilities. Road construction plays an important role in the development of infrastructure in any state. According to the geographical conditions of Uttarakhand, roads play an important role here. As tourism is a major source of income of Uttarakhand, the Char Dham Road Project was launched by Prime Minister Shri Narendra Modi on 27 September 2016 from Dehradun to bring tourists to the state throughout the year. Under this project, the four dhams of the state i.e. Badrinath, Kedarnath, Gangotri and Yamunotri will be connected to each other through construction of roads. This project also has strategic importance – Uttarkashi, Chamoli and Pithoragarh are adjacent to the China border and with the construction of all weather road, the way for movement of big vehicles to the China border will also be cleared.

Key Points of all Weather Roads of Char Dham National Highway Project:

- ✓ 900 kms of highway will be upgraded and widened at a cost of Rs 12000 crore. National highway shall be at least 10 meters wide.
- ✓ To make the journey easier, 25 big bridges. 13 by pass, 3 flyovers, two tunnels will be made on slopes.
- ✓ The mountain slopes will be strengthened to prevent landslides.
- ✓ 28 facility centres for pilgrims will be established.

✓ 154 bus stand- truck parking to be constructed on the highway.

The details of length of road being constructed and widened is below diagram:



Source: Ministry of Road Transport and Highway
Diagram 1

II. IMPORTANCE OF ALL WEATHER ROAD

The all weather road project being built to connect Char Dham in Uttarakhand is being called the lifeline of the mountains. After the completion of this project, not only will Char Dham Yatra be easy but it will also make it easier to reach the villages in the mountainous areas and will also encourage tourism activities. By making the roads of Char Dham 12 months worth travelling, the common people of this place are seeing the doors of employment for their future. After the target of completion of this project by the year 2021, there is immense potential for development in the area of pilgrimage and tourism, which will also increase the economy of the people residing in this area. The biggest problem of Uttarakhand is migration from the mountains for employment, health and education, this project will reduce migration. There will also be an increase in employment opportunities. Travelling from one place to another place will be more convenient and less time consuming.

Landslide prone areas under this project are being treated with geosynthetic technology leading to less closure of roads. The distance will also be reduced due to the construction of tunnels in many places, so that the merchant owners and local people engaged in the transport and trade industry will get a lot of help with the construction of this project.

III. ENVIRONMENTAL IMPACT OF THE PROJECT

A major source of Uttarakhand is Tourism, All weather Road is being built to bring tourists throughout the year, although many people are expressing concern over the neglect of the environment. This project is important for Uttarakhand as well as has national and strategic importance. The Char Dham Yatra will strengthen the economic condition of the local residents, 12 months of employment opportunities are being created, but the second aspect of the project is that how much harm is being done to nature and environment to build this all weather Road. The scene emerging from the plan to widen the motorways, 10-24 meters in the name of all weather

Road includes indiscriminate felling of trees on both sides of the Char Dham routes starting from Rishikesh and thousands of cedar trees in Gangotri. In addition to this, trees of Baanaj, Buransh, Tun, Seeras, Uttish, Pine and Peepal are also being cut. This new form of development in this part of central Himalayas is impacting the local ecology and life.

Road construction, Road widening, construction of large hydropower projects and tunnels are increasing the instability of the Himalayan region. The problems like landslides, soil erosion, floods and displacement etc. are also continuously increasing due to these big projects. For the widening of the roads, not only the trees are being cut but the explosives are being used for the blasting of the rocks. In view of the sensitive geological condition of the Himalayas, many experts are describing the felling of green trees in the name of all weather road and the use of heavy machines and tremendous use of dynamite as a threat to the future of these areas. Dangers of construction of all weather road are visible in 4 Dhams as we move from Rishikesh debris along the roadside, mountains are being cut vertically. Concrete walls are being built to prevent the mountains slip, although these walls are not so capable to prevent landslide. The region is the main centre of the Himalayas, this is where the Indian tectonic plate is going inside the European plate which makes it a very sensitive area.



Picture 1

The report of the National Institute for Disaster Management also found that the process of road construction is increasing the vulnerability to natural disaster leading to risk of landslides and decrease in depth of riverbed due to falling mud which further increases the possibility of flooding. About 373 hectares of forest land has been taken up for the project and about 30,000 trees have been cut so far but no one knows about the number of trees that fell due to landslide and road cutting debris over the river is causing millions of trees and plants to die (as shown in pic.1). The report of the Geological Survey of India (GSI) in 2013 also confirmed the ecological disaster in the hills of Uttarakhand by road construction. GSI report found that the road construction is dangerous as it obstructs the lower part of the natural slope of the mountain, increasing the risk of landslides. This project is imposed by the government ignoring environmental concerns, there is no problem with the road being built, but this work should be done properly. Considering the impact on the environment, cautious approach should be followed otherwise it will not be wrong to say that Uttarakhand is standing at the mouth of a big tragedy.

In many places there are questions on how to cut the mountains for the widening of the roads. The mountains are not cut at an angle of 80 or 90 degrees, it is cut in slopes so that the chances of landslides are much less. But in all the four

Dhams, the mountains are cut off at a 90° angle leading to increased risk of landslides during the monsoon season. Dumping policy is also being questioned. Dumping of debris of mountains is being done at turns. There are diversion in many places where the rainy waterfall comes down the drain, no way has been given for them. During the rains, the debris is going directly in to the river, which is also blocking the river route. The road from Rudraprayag to Gaurikund is being widened for the widening of the all weather road, while the area is very sensitive from the environmental point of view. According to the scientists, even after the 2013 tragedy, no lessons were learned. Many committees were formed after the disaster but their recommendation were not yet implemented and have been put on hold.

In sensitive areas like Uttarakhand, the question always arises that how development and environmental protection can be harmonized. If attention is given, development and environmental protection can be done simultaneously but ongoing construction works in the Himalayas state like construction of big dams, Road widening, all weather road, grand building construction, rail project etc., have opened the doors of destruction in the name of development (as shown in pic.2). These giant constructions are making the earth more vulnerable to natural outbreaks. Development of land with upheaval can lead to massive natural disaster in the coming times. The trees and plants being harvested under all weather road project, which were environmental protectors of the region for years, which had created a balance in nature as well as the maintained beauty of the markets & towns, have been razed today. Huge trees falling on the Rishikesh, Gangotri, Yamunotri, Kedarnath and Badrinath Yatra route e.g. peepal, banyan, rosewood, cedar etc., which for many years were shelters for the people and animals, are also being cut for road construction. It does not seem that development and environmental protection are going together. The ecology of a place and the organization of various kinds of wild animals. Kites and microbes makes ecology. It takes thousands of years to form. It means to say that even if you cut a hundred trees for construction from one place and plant 500 trees at another places, even then the ecology of that new place cannot be created like that of place with 100 trees.



Picture 2

There have been developments in many mountainous countries the best techniques of road construction are available in these foreign countries, are they being used? It is not seen anywhere in all weather road widening. If digging the mountainous regions of Uttarakhand in this way is not an unrestrained tampering with nature, then what else! There is already slippage & movement in the tectonic plates inside the earth and by widening the road in this way, we are inviting earthquakes and other natural disaster in this very sensitive

area, because many trees are being cut for the construction of the all weather road, which were preserving nature in these areas for many years, also which were protecting travelers from heat and habitat of animals. Due to which the imbalance in this area is gradually seen. If road construction and other development works are done with neglect of environment then its effect will be unforeseen.

IV. SUGGESTION FOR SOLVING THE PROBLEMS OF CHAR DHAM PROJECT

Debris of construction work in the mountains is causing disaster. Debris can populate the barren land on which the road can be saved from breaking by planting trees. According to the rules published in 2004 by the ministry of road transport and highways, dumping zones should be created instead of dumping debris directly in to the river. Parking, plantation of fruits bearing trees and cultivable land should be developed by dumping debris in the dumping Zone. Road construction techniques should be changed in hilly areas. Both the environment and development should be taken care of simultaneously, the following suggestions should be taken care of so that the blind race of development does not threaten the environment.

- ✓ At present, 2 vehicles can easily ply on the roads to Gangotri, Yamunotri, Badrinath and Kedarnath. So the width of road should 8 meters to save the trees like burans, cedar etc.
- ✓ Glaciers in the high Himalayan region are continuously melting or moving several metres backward due to global warming. Cutting of trees have to be avoided for cooling of the atmosphere. The cutting of cedar trees in these areas will also speed up the melting of glacier and existence of the river will also be affected.
- ✓ Roads should be constructed using Greek technology.
- ✓ Separate design should be made for the construction of roads in the mountains.
- ✓ Pavements should also be constructed alongside the bridges of roads and there should be a system of drainage of water.
- ✓ Landslide zones which were already on the motorway & which were under control for many years, has been revived due to construction of char Dham road project at present time. Geological survey should be done to treat landslide areas with modern technology.
- ✓ The old footpaths of the ancient pilgrimage to Devbhoomi be developed in a planned manner and once again the pilgrims are encouraged to travel on the old track.
- ✓ Construction of road on char Dham yatra route should not be the only objective of the government, modern amenities should also be provided on the route. Hundreds of 125 years old Dharamshala made for poor pilgrims, should be renovated by organizing a meeting of their managers and other industrialists and institutions of the country should also be invited for renovation and new construction related works. This will also maintain the natural and cultural harmony of the state.

- ✓ To conclude it can be said that, though the Tourism and Pilgrimage is very vital for Uttarakhand's economy, the concerns of environmental harm cannot be ignored.

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