## **Green Highways: An Initiative Towards Sustainable Development**

For Highway projects to be environmentally sustainable, it is necessary that the natural resources lost in the process of Highway construction are restored in one way or the other. This requires that ecological needs are taken into consideration from the stage of project planning and designing to its execution. The Highways developed as green corridors not only sustain biodiversity and regenerate natural habitat but also benefit all stakeholders, from road users to local communities and spur eco-friendly economic growth and development.

The NDA Government has given a deep thought to this aspect and the Ministry of Road Transport & Highways has framed Green Highways (Plantation, Transplantation, Beautification & Maintenance) Policy-2015. The vision is to develop ecofriendly National Highways with participation of the community, farmers, NGOs, private sector, institutions, government agencies and the Forest Department.

India has a total 46.99 lakh kms of road length and out of which over 96214 kms are National Highways, accounting 2% of total road length. The Highways carry about 40% of the traffic load. The Ministry has decided to develop all of existing National Highways and 40,000 kms of additional roads in the next few years as Green Highways.

The objective is to reduce the impacts of air pollution and dust as trees and shrubs along the Highways act as natural sink for air pollutants and arrest soil erosion at the embankment slopes. Plants along highway median strips and along the edges reduce the glare of oncoming vehicles which sometimes become cause of accidents. The community involvement in tree plantation directly benefits local people by generating employment. The Panchayats, NGOs and other Self Help Groups (SHGs) will be involved in the process of planting and maintenance. The plant species selected will be region specific depending on local conditions such as rainfall, climate type of soil etc. For example at some places soil conditions may suit for plantation of Jamun or mango trees while at other places plants and grasses can be grown to derive biomass. Wherever possible, transplantation of existing trees will be given preference while widening the roads.

The policy aims at changing the whole process for the avenue plantation and landscape improvement. Earlier, the land needed for these activities was not considered during the Detailed Project report (DPR) stage. Now the new policy has recommended that the requirement of land for tree plantation should be included in the Land Acquisition Plans prepared by the DPR consultants. This move will help in pre-planning of the plantation activities and the space required for the same, so that there is a systematic plan before the construction of National Highways. One percent of the civil cost of the road projects will be for developing green corridors.

In the new policy, the provisions about the responsibilities attached have also been clearly defined. Now it will be the responsibility of the planting agency to ensure that the condition of the

site is good enough for the successful establishment of grasses. The planting agency is required to supervise all field operations like preparation of surface, sowing of seeds or saplings and quality of planting material used.

The monitoring of the plantation status has been included as an integral part of the policy. TheMonitoring Agency will monitor progress of planting and status of plantations on continuous basis. This agency shall carry out the site visit for field verification in respect of survival, growth and size of plantation and maintenance of the same. The monitoring Agency will conduct performance audit of executing agencies for various projects on an Annual basis and award of new contracts to the agencies will be decided based on their past performance.

The plantations and its maintenance may be taken up through outsourcing following bidding process as per standard protocol of procurement of Ministry of Road Transport & Highways (MoRTH) and its agencies for the stretch/ROW not declared as protected forest under Forest Conservation (Act) 1980. The MoRTH/NHAI will appoint the authorised agency for empanelment of Plantation Agencies. Only empaneled agencies will be allowed to bid for planting work on the National Highways.

The new policy has given a new insight to the process of development. It gives answer to the question whether the development process is putting our environment and natural resources into danger. Such initiatives taken by the Government indicate that the process of development is not exclusive of environment protection. The development can be sustainable when systematic and conscious decisions are taken.

The policy when implemented in letter and spirit will result into India being a "Nation with Natural Highways". It will address the issues that lie in the "road of development" and pave "a journey towards sustainable development".

It is the onus of the communities involved in the path of development that they also participate in the process of protection of nature. The Government can frame policies, provide standards, but success of projects depends on strong monitoring which is not possible without active community participation and community ownership.

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\*The feature is based on the write-up provided by the Ministry of Road Transport & Highways