SUSTAINABLE & ENVIRONMENT FRIENDLY APPROACH FOR RURAL ROAD DEVELOPMENT

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Transport infrastructure improvements in rural sector provide greater opportunity to access economic, social & education facilities. This issue is very crucial since it covers fundamental aspects of rural revitalization. The lack of acceptable transport infrastructure has led to the isolation of rural areas. Roads that do not belong to the National & Provincial road network are the secondary & tertiary road links that provide main access to most rural population in the country.

Situation in the local government setup is different from the national setup. Even though over 70,000 km of roads belong to local government authorities, budgetary allocation for road works is very minimal. Most of these unclassified roads are low volume earth or gravel roads and carry less than 150 vehicles per day out of which more than 85% are light vehicles such as bicycles, motor bicycles or three wheelers.

Local government authorities tend to allocate available funding to upgrade few gravel or earth roads to paved condition or to rehabilitate dilapidated paved roads arbitrary. As no funding mechanism for regular road maintenance is available these low volume roads get deteriorated not due to vehicle loading but due to environmental conditions. This arbitrary upgrading strategy used by local government authorities result in waste of resources with not much benefit to rural communities.

This paper attempts to identify sustainable & environment friendly strategies to upgrade and maintain low volume local roads at a satisfactory condition for a longer period. Use of appropriate geometric standards, selection of cost effective construction standards that satisfy the access & mobility needs of rural population is discussed. Use of locally available material, labour and equipment that provides environment friendly solution are compared & presented.