

# **Role of financing institutions in the time and cost performance management of road infrastructure construction in Nepal**

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## **Abstract**

At present, road project financing in Nepal is arranged through government funding, multilateral funding, and bilateral funding. Sources of multilateral funding are ADB and World Bank, and the bilateral funding sources are primarily China, India and Japan. Multilateral funding institutions not only provide financial resources but also planning and resource management. They use well-defined procedures in every stage of project management, from the project conception to the project handover, and government regulations are often superseded by the regulations of multilateral funding institutions, which makes it easier to take prompt action when implementation issues arise. On the other hand, under bilateral funding, there is no planning and resource management support like multilateral financing. Bilateral funding only provides financial support with complicated contractual provisions for implementation. In some instances, those provisions are difficult to implement and negatively affect the time and cost performance relative to projects financed by the multilateral institutions or the government of Nepal. However, government-funded are not free of issues, as those projects tend to experience clashing activities during the preparation stage, as well as face resource constraints because of the simultaneous implementation of multiple projects. These conditions occur mainly due to political pressure, which interfere with proper planning and create time-consuming activities during the project preparation stage. Those misleading activities ultimately affect the project performance once it enters the implementation stage.

The main objective of this research is to explore the role financing institutions play in managing the time and cost performance of road infrastructure development projects in Nepal. Data were collected from ongoing and completed contracts under the Department of Roads and the effect of financing institution on the time and cost overrun was analyzed. The Kruskal-Wallis test was first applied to find the differences in project performance between projects with different financing institutions. The Mann-Whitney U test was then applied to examine the contribution of institutions in mitigating the risk of time and cost overrun.

The research found that the three types of financing institutions have different management approaches and guidelines for the implementation of road projects. The basic difference exists between government funding and multilateral funding in planning and resource management aspects. However, government funded projects have better performance than bilateral-funded projects because bilateral funding provides nothing more than financial support in the context of resource management and planning of projects. As a result, these are more prone to time and cost overrun than government-funded projects due to the tough financing provisions. Finally, multilaterally funded projects were more supportive for improving the project performance.

**Keywords:** *Financing institutions; Resource management; Kruskal – Wallis method; Mann-Whitney U Test; Road projects.*