

Integrated Development of Bagmati Civilization, Nepal

Niki Budhathoki (Nepal)

Key words: Engineering survey; Hydrography; Informal settlements; Conservation, Bagmati River

SUMMARY

The Bagmati River is the largest river in the capital city of Kathmandu Valley which comprises 57 rivers and rivulets as its tributaries. Bagmati a holi river of the Hindus and a major source of water for the Kathmandu Valley, has been polluted due to human activities such as settlement along the river side, unplanned urbanization in river, basin and disposal of untreated sewage and solid waste disposal into the river system. In addition, extractions of sand from river bed, construction of public infrastructure in river space, and illegal settlements of squatters along the bank have deteriorated the river environment and the water security in the citizen. It is important to make Bagmati a pollution free river.

In order to address the key issues and improve the natural environment along the river, The main objective included to set the foundation for improvement of the natural environment along the rivers in the Kathmandu Valley and wellbeing of urban residents in the capital city with giving high priority to restoration and preservation of rich cultural heritage. Furthermore, it included Construction of sewer lines along the river bank, River Training Works and Road and Green belt along river bank.

The outcomes of this study include reincarnate the Bagmati River and its tributaries with an increased access to better urban services. Various works related to roads, river protection, sewage, river bank beautification and river environment improvement in Bagmati, Dhobikhola, Bishnumati and other tributaries of the Bagmati river in the valley have also been identified.

From this study, it can be concluded that the existing practices are quite satisfactory. But for improvement in existing practices and for effective operation of works at different chainage, presence of slum and personal land should be solved prior to work start. And for the construction of

river training works at different chainage, some obstacles like proper land acquisition problems, public issue should be resolved on time.

Integrated Development of Bagmati Civilization, Nepal (12022)
Niki Budhathoki (Nepal)

FIG Working Week 2023
Protecting Our World, Conquering New Frontiers
Orlando, Florida, USA, 28 May–1 June 2023