



ISSUE BRIEF  
INFRA.DIP #1

# TALKING INFRASTRUCTURE

## CONSTRAINTS AND POTENTIALS TO DEVELOPING INFRASTRUCTURE IN NEPAL

In partnership with



### Introduction

Investing in infrastructures such as roads, bridges, airports, schools, and hospitals can contribute positively towards a country's economic growth while helping uplift the quality of life of its citizens. But countries around the world face large infrastructure deficit, with some studies estimating the global investment need of around USD 5 trillion annually from 2015 to 2030 to overcome this gap. An additional USD 600-800 billion per annum will be further required to make these infrastructures sustainable. [1] As a country aspiring to attain middle-income status by 2030, Nepal also lacks many of the critical infrastructure necessary and will have to invest 10-15 percent of its GDP over the next decade to achieve its desired economic growth. [2] However, there are considerable challenges in realizing Nepal's infrastructure needs.

'Talking Infrastructure' is a discussion series initiated by the Society of Economic Journalists-Nepal (SEJON) and Policy Entrepreneurs Incorporated (PEI) aimed at increasing public awareness of the key challenges in closing Nepal's infrastructure deficit. This issue brief captures the salient issues raised during the inaugural event of this undertaking, where participating experts from various organizations, representing the bureaucracy, the private sector, and the media, discussed the constraints to developing infrastructure in Nepal and shared their thoughts on addressing them.

### Binding Constraints to Infrastructure Development

The participants identified three major types of constraints to developing infrastructure in Nepal.

#### 1) Institutional Constraints

**Bureaucratic red-tape:** Bureaucratic hassles are a major challenge to developing infrastructure in Nepal. "There are a number of factors such as the frequent transfer of officials, the ineffective regulating mechanism, the limited role of oversight agencies, and the frequent amendments of prevailing laws that can deter potential donors, investors, and developers to invest in the sector," says Mr. Rabi Singh, President of the Federation of Contractors' Association of Nepal. Mr. Min Man Shrestha, Chairperson of the Federation of Nepalese Chambers of Commerce and Industry -Urban Development Committee further adds, 'bureaucratic red-tape leads to delays in the work schedule, which can bloat the cost of the projects.'

**Corruption:** Nepal was ranked 117 out of 180 countries in Transparency International's Corruption Perception Index 2019 indicating the serious challenges in governance in the country. [3] This issue is corroborated by a US Department of State's report on Nepal's investment climate, which points to corruption as a key significant barrier. [4] Even the country's anti-graft body, the Commission for the Investigation of Abuse of Authority, paints a grim picture of Nepal's overall governance, as over 1,800 infrastructure projects worth Rs 118 billion were at stake due to project delays. [5] Such poor performance in governance discourages potential investors from investing in the country and can even diminish the faith of investors that are already committed.

[1] United Nations Conference on Trade and Development, 2014. World Investment Report. Investing in the SDGs: An Action Plan. United Nations

[2] World Bank. 2019. Nepal Infrastructure Sector Assessment. World Bank, Washington, DC. <https://bit.ly/3eBaSzR>

[3] Transparency International. 2020. Corruption Perception Index 2020.

[4] US Department of State. 2019 Investment Climate Statements: Nepal. <https://bit.ly/3gRW022>

[5] Kamat, R. 2019. Billions at stake as projects delayed. The Himalayan Times. <https://bit.ly/2TYPSxk>



*Political instability:* During its decade-long armed conflict, Nepal was unable to invest adequately in infrastructure, as the government diverted funds from development activities towards fighting the insurgency. [6] Furthermore, the war badly damaged or destroyed infrastructure worth around USD 130 million, in addition to the negative impact on the economy worth billions. [7] Although Nepal was successful in ending the conflict and transitioning peacefully into a new system of federalism, the continuing disputes between the political parties raise concerns of instability and signals that the country remains politically fragile, which can have a negative impact on investor confidence.

*Ad hoc planning:* Despite currently implementing its 15th periodic plan, Nepal still lacks a strategic approach to infrastructure planning. Poor planning has led many projects into multiple problems, including in designing, financing, environmental and social safeguards, and contract disputes, all contributing to severe project delays and costs overrun. The past controversies over the Arun III Hydropower Project and the Melamchi Drinking Water Project and current disputes over the Nijgadh International Airport and the Budhigandaki Hydropower Project are examples of how ad hoc decision making and poor planning have affected Nepal's long-term infrastructure development potential. "We need to develop a repository of priority infrastructure projects across various sectors, which are well-designed as per our needs and approved at the political level by all major stakeholders. Only then will the donors and investors be convinced to fund these projects," states former Secretary Krishna Gyawali.

*Weak monitoring:* The lack of continuous and rigorous monitoring of projects also impact the development of infrastructure in terms of quality, cost-efficiency, and time value. The government has developed guidelines for this purpose, such as the National Monitoring and Evaluation Guidelines prepared by National Planning Commission, but these are not effectively implemented. According to former Secretary Gyawali, this is because of, among many other things, the frequent transfer of government officials, which discourages them from fully committing to the monitoring process and making the project accountable for any lapses in the guidelines.

*Problems in procurement:* The government has enacted public procurement laws to promote greater transparency and value-for-money in all its procurements. However, the regulation has gone through multiple revisions resulting in a process that is complicated and cumbersome. As a result, projects are often unable to procure necessary goods and services as needed and on time, leading to under-spending of the allocated funds. Furthermore, according to Mr. Singh of FCAN, this issue is exacerbated by the "unhealthy competition among contractors, which has undermined the public procurement process through under-bidding, poor quality of delivery, and unnecessary delay in project completion."

*Lack of rehabilitation and maintenance of existing infrastructure:* While Nepal is investing in new infrastructure, it is not investing adequately in maintaining its existing ones. A 2019 study by the World Bank states that, as of Fiscal Year (FY) 2018/19, about 77 percent of Nepal's national highways and 82 percent of its feeder roads were in bad condition. [8] Similarly, the funding allocated to maintain its strategic road network was about 60 percent short of the annual requirement. [9]

[6] Asian Development Bank. 2009. Country Diagnostics Studies: Nepal. <https://bit.ly/3q7OnlQ>

[7] Asian Development Bank 2009.

[8] World Bank. 2019.

[9] World Bank. 2019.



## 2) Financial Constraints

*Underspending of budget:* While the government is ramping up the budget for capital expenditure to finance infrastructure projects, the lack of improvement in fund mobilization means significant underspending every year. For example, in FY 2020/21, the government managed to spend only 23.9 percent of the total budget allocated for capital expenditure. Poor absorption and inefficient use of the budget undermine the efforts to draw in more investments in infrastructure.

*Additional financial liabilities and delays in payments:* The government has promoted multi-year contracts to expedite project implementation, but oftentimes this is done without adequately reviewing the annual disbursement plans. These contracts create additional financial liabilities for the government, which it has failed to accommodate within its budget allocations. This particularly impacts the construction industry that has had to suffer delays in receiving payment for work rendered under such contracts.

## 3) Technical Gaps

*Lack of appropriate technology:* The adoption of appropriate technology can help ensure quality infrastructure while also making the project economical through savings in both time and cost. A number of projects in Nepal have suffered for failing to do so. For example, the Melamchi Drinking Water Project, which initially adopted the traditional tunneling technology, ran into significant hurdles due to challenging geology. It was only after the project procured a tunnel boring machine that the construction progressed efficiently.

*Limited technical capacity:* The limited availability of a capable workforce—from consultants, contractors, to other skilled manpower—is a major challenge to developing infrastructure in Nepal. For example, the lack of adequate technical capacity to identify and address problems related to soil quality resulted in a repeated collapse of a section of the main segment of the Sikta irrigation project. [10] Infrastructure experts believe local contractors and consultants hired for the infrastructure projects lack sufficient capacity and technical skills, which often leads to such incidents.

## Recommendations

The participants offered many insightful recommendations on how to overcome the constraints to developing infrastructure in Nepal that are listed in the section above. These recommendations ranged from investing in building capacity of those responsible for infrastructure development, establishing criteria-based appointment of bureaucrats and minimizing their transfers to ensure a steady work environment, reinforcing coordination between the various agencies, and ensuring adequate oversight during project development. Likewise, there were also recommendations on streamlining the procurement process by bringing in the necessary expertise and making sure that the established spending targets are adhered to. Beyond these, the participants also put forth recommendations such as the use of alternative financing and the strengthening of federalism to ensure greater and more grounded development of infrastructure in Nepal.

[10] Shrestha, P.M. 2018. "Probe questions consultants' Role in Sikta Canal Collapse". The Kathmandu Post.





*Consider alternative financing:* Nepal should consider alternative sources to meet its infrastructure financing needs. One option is green financing, which is gaining popularity as a means to increase financial flows from the public and private sectors towards sustainable development initiatives. This mode of financing includes different types of loans, debt, and other investment mechanisms to facilitate the development of green ventures. [11] A strong partnership between all of the financial sector actors such as banks, insurance companies, investors, and the public sector is vital for the successful implementation of green financing. Another option is the hybrid annuity model used in India to promote private sector investment in road infrastructure. In this financing arrangement, the Indian government provides the developer with 40 percent of the project cost as construction support during the construction period and the remaining 60 percent as annuity payments over the operations period along with applicable interest. [12] This option can also encourage Nepal's private sector to invest in the country's infrastructure, which up until now has been fairly limited

*Federalize infrastructure planning:* With Nepal now in the early stages of implementing federalism, the future of infrastructure planning should also reflect that new reality. This would mean moving away from the traditional Kathmandu-centric approach and having more involvement of both the provincial and local governments in identifying the projects in their respective jurisdictions. To build the capacity of the subnational bodies to lead this process, investment promotion agencies at the federal level, such as the Investment Board of Nepal, can also be given a larger role. A successful transition in this regard can help increase the local ownership of the projects, leading to smoother implementation especially during the early stages of community mobilization and overcoming the challenge in acquiring the necessary land. This can also result in better monitoring initiatives that are led by local stakeholders, which could further improve the accountability and governance of these projects.

[11] World Economic Forum. 2020. What is Green Finance and Why is it important? <https://bit.ly/3vSf0mE>

[12] Government of India, Ministry of Road Transport and Highways. Press Information Bureau. 2019. Hybrid Annuity Model for National Highways. <https://bit.ly/3wZJMv6>



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