



**INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI**  
**SHORT ABSTRACT OF THESIS**

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**SHORT ABSTRACT**

Public-private partnerships (PPPs) have become one of the preferred procurement routes for governments to develop infrastructure, in view of the budgetary constraints faced by them and the efficiency gains provided by the private sector. Since the private sector is driven by profit-generation motives to enter into a PPP arrangement, there are criticisms against PPPs for focusing on economic goals and financial targets while giving less emphasis to attainment of social objectives. Another criticism is that sustainability has not been a key focus in PPPs as sustainable development principles are largely absent from the theory and frameworks that underpin and direct PPP action. As a result, infrastructure development through PPP will fail to promote sustainable development goals. One of the ways to overcome these criticisms is to modify the existing PPP procurement process in order to attain the sustainable infrastructure development goals. The basic aim of this research is, therefore, to develop a framework highlighting the strategies for integrating sustainability principles in the procurement process of PPP projects.

The study has used a qualitative research approach to develop the framework of strategies, which are classified with respect to various shortfalls of PPP process. The framework of strategies developed in this study is based on findings from the secondary data source of literature review and corroboration with the primary data source of 18 Indian stakeholders. The resulting framework defined the enhancement of PPP procurement with respect to eleven categories, representing the shortfalls in PPP process relating to environmental impact assessment, value for money analysis, stakeholders' participation, skill and knowledge of sustainability concepts, incentives to private sector, bid preparation and evaluation, user charges for infrastructure services, risk allocation and mitigation in model concession agreement, bidding and transaction cost, transparency and accountability during bidding, and relationship of public and private sector. Further, the inter-relationships between formulated strategies and shortfalls of PPP procurement process have been defined through qualitative system dynamics model using causal loop diagrams. The study concludes through the system dynamics modeling that the inclusions of these strategies under the respective shortfalls have improved the system behavior with key deliverables of PPP process with development of positive/reinforced feedback loops. On the basis of qualitative inputs from experts, the strategies could be recommended for integration into the respective shortfalls of PPP procurement process in order to accomplish the sustainable infrastructure development goals.

The proposition of this study through the framework of strategies could be an effective tool for policy maker and transaction advisors of PPPs in restructuring of the PPP procurement process so as to accomplish the goals of sustainable infrastructure development. The framework developed in this study has focused mainly on PPP procurement practices in the context of infrastructure development in India. The feasibility of including these strategies in another contextual environment of other countries using PPP as the preferred mode of infrastructure development needs to be studied. Further study in another context would increase the usefulness and enhance the applicability from practitioners' perspective.