# PROJECT GOVERNANCE: A NEED FOR PUBLIC SECTOR INFRASTRUCTURE PROJECTS IN PAKISTAN

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### ABSTRACT

Infrastructure projects in developing countries have been criticized for cost overrun, delay, substandard construction works, ineffectiveness and low efficiency. In this regard, project governance approach offers a structured mechanism to detect and address all these inherent risks in a timely manner. This study has tried to review the academic literature relating to the need of project governance on infrastructure projects in order to assess the potential causes of success and failure of projects. The review is further elaborated by discussing a case study, which represents an example of ill planning of infrastructural development projects in Northern region of Pakistan. This study suggests need for exploring potential applications of project governance practices in private and public sector of developing countries.

Keywords: Project governance, Infrastructure projects, stakeholders

#### INTRODUCTION

Project governance has become an important topic for debate in project literature since last few decades. Organizations have used the project governance approach to meet organizational goals

and objectives. Organizations initiate projects with the best of intentions to succeed, but due to the different challenges associated with governing and managing a project, many projects fail, and the reasons are often unclear. Traditionally, the outcomes of projects have been measured in terms of completing them within the constraints of scope, time, cost, and quality. But increasingly, assessments of projects are being expanded to governance, to include their ability to achieve sustained performance in meeting operating goals over considerable periods of time.

Failure of large capital projects have fueled the quest to explore and apply project governance (Flyvbjerg et al., 2003). Irrespective of an industry or sector, establishing a governance process is an important and ideally the first step in a project's development. Effective governance process ensures input from the essential stakeholders and "confers legitimacy" upon project decisions and outcomes. The developing countries should focus on extensive infrastructure provision to achieve/sustain economic growth and to meet standards of the developed economies (Jnr, 1996).

Governance structures and processes define and create subsystems for operating procedures and are devised to ensure the common direction of the distributed effort (Schroeder et al., 2012). Good governance has the aptness to navigate the projects through different uncertainties and unexpected events (Lessard et al., 2000). Garvin (2009) has stressed about the motivation of stakeholders for project goals towards achieving good governance.

In infrastructure projects, complexities and uncertainties are very common and the distinctiveness and individuality of infrastructure projects are due to their unique social and environmental requirements (Guo et al., 2014). Reconciliation of internal management and governance structure of the project to aligned with strategic objectives have been the organizational challenges (Too & Weaver, 2014). Miller and Hobbs, (2005) claimed that Project governance has become an important topic in the project management literature and community.

This study has reviewed the academic literatures relating to need of project governance on infrastructure projects in order to assess the potential causes of success and failure of projects. Review of the literature was carried out through, searches on infrastructure development projects and projects governance related documents and research articles on ProQuest, Google Scholar, publications in the international Journals and secondary data from reports of Planning & Development, Department, Govt. Of Gilgit-Baltistan, Pakistan.

### BACKGROUND

Project is defined as "a temporary endeavor undertaken to create a unique product or service" (PMBOK, 2013, p.170). Ali (2010) stated that having specific start and ending points, projects are distinctive in their output, temporary in nature and are carried out to organizational strategic objectives. Governance— "Deriving from the Greek verb kubernao, which means to steer, governance is defined as the "act of governing, or steering the policies, management, and activities of an organization at the highest level, with the authority, credibility, and responsibility to do so". Initially the policy research in political science has developed the governance theory (Friedmann,

1981; Krieger, 1971; Nachmias and Greer, 1982). In an international context, governance means the ways in which power is used to cope with the country's social and economic resources for development (Meso, et al., 2006). McGrath and Whitty, (2015) have defined governance as the system by which an entity is governed (directed and controlled).

McGrath and Whitty, (2015) have described project governance as "the system by which a project is governed (directed and controlled) (p.781)". Projects governance involves in management and governance functions for individual projects and their deliverables (Too & Weaver 2014). Bekker and Steynde (2009) identified that "Project governance is a set of management systems, rules, protocols, relationships, and structures that provide the framework within which decisions are made for project development and implementation to achieve the intended business or strategic motivation". So, the project governance can support a good operational environment and provide a guarantee for project success.

Single firm, multi-firm and large capital school are the three school of thoughts on project governance, firstly the *single-firm school* which is involved with governance principles related to internal organizational project and practice these principles at a technical level, secondly *the multi-firm school* which addresses the governance principles related to two or more than two organizations participating on a contractual basis on the same project which focus their governance efforts at technical and strategic level, thirdly the *large capital school* considers projects as temporary organizations which create their own entity and establishes governance principles at an institutional level (Bekker, 2014). Bekker (2014) also stated that the hierarchical positioning in the organization and the type of project determines the meaning of project governance.

There are three major types of project governance based on stakeholder involvement in the literature (Ruuska et al., 2011). The first type of project governance emphases on analyzing a single firm's governance scheme with its multiple projects, which is the final decision-making body and has control over policies, processes and activities of projects, the second type ponder multi-firm projects where different organizations involve in contractual agreements where the involved firms have their vested interests in the project and the main stress is to safeguard the intellectual property, third type deliberates the projects like hybrid or network structures which are involved in various interconnected actors depending on the existence of one topmost hierarchical authority, which is always the lead sponsor or underwriting firm (Ruuska et al., 2011).

Levitt et al. (2009) noted that previous research on the project governance has raised the question that who operate and own long-term infrastructure development projects. Comparing the efficiency and productivity of public and private organizations with respect to the infrastructure projects have also been a query (Levitt et al., 2009). Levitt et al. (2009) have further questioned that how public and private organizations can manage the governance challenges effectively which occur during different phase of project i.e. project shaping, execution and operation. Levitt et al. (2009) identified two different types of challenges which arise steadily during the project shaping, implementation and operation phases of infrastructure projects governance, which are "(1) opportunism in the presence of displaced agency – i.e., conflicts between the incentives of parties leading decision making in each of the successive and interdependent phases of design,

construction and operations that lead to sub-optimal investment and may lead them to pursue their self-interest with guile; and (2) political and regulatory risk -i.e., ex post political interventions in operational decisions".

Governance has become an important matter in investment and outcome of infrastructure projects (Sharma, 2012). Reside and Mendoza (2010) in their study have also acknowledged the governance issue as an important constituent for infrastructure development projects. As corruption is a sign of failed governance, and has negative effect on the returns of infrastructure investments, has made the issue of governance significant factor of infrastructure development projects (Kenny, 2007). Two features of infrastructural development projects which have made them ideal for the understanding of socio political governance; firstly, the infrastructure projects are produced by multiple counterparties through a complicated series of interlinked transactions, secondly the significance with respect to catalytic functions in the development process and nations security and comfort has made infrastructure development process politically salient (Levitt et al., 2009). Many organizations have recognized the importance of critical success factors (CSFs) and now it's been applied in a many organizations. Babatunde et al. (2016) stressed the need of identifying CSFs for public-private partnerships (PPPs) for the successful execution of PPP projects. Zhang (2005) termed identification of CSFs as an important step for the development of practical and proficient PPP protocol. Jefferies et al. (2002) stated that the phrase CSFs was initially used in the perspective of project management and information system. Rockart and Sloan School of Management developed the concept of CSFs (Jefferies et al., 2002). To achieve goals and organizational performance CSFs demands constant and vigilant attention from the management (Ram and Corkindale 2014). Babatunde et al. (2016) identified six principal factors for CSFs which includes "reliable concession arrangement with due diligence; serious commitment with adequate technical strength; favorable economic environment; government support with enabling legislation; bankable project with adequate stakeholder's involvement; and strong "political will" with committed private partners".

Enserink, and Koppenjan (2007) indicated that community participation can be a factor to collaborative governance, progressive development and efficient projects. Participation is a process through which stakeholders motivates and share control over priority setting, policy making, resource allocation and access to public goods and services (World Bank, 2016). According to Xie et al. (2014) in China, socio-economic and environmental conflicts in public infrastructure and construction (PIC) projects are handled through public participation. In developed counties public participation is normally used as an effective instrument to enhance the aftermaths of the decision making and implementation of PIC projects through collaborative governance (Enserink & Koppenjan, 2007). Almer and Koontz (2004) noted that since 1990s the developing countries are using public participation mechanism frequently to decrease the socio-economic and environmental conflicts in PIC projects.

According to Bult-Spiering and Dewulf (2008) nature of PPP projects in infrastructure are generally long term and complex. Mahalingam (2010) observed that number of PPP projects run into problems at later stages which were termed successful at the closure phase of the project. To cope with possible uncertainties which might happen during the project life cycle, projects needs

a flexible, equitable, contractual provisions and intrinsic governance structure (Mahalingam, 2010). Akintoye and Liyanage (2011) emphasized the need of PPP for better economic growth, infrastructure delivery and good governance. Sharma (2012) has indicated that countries having better governance have lesser PPP arrangements in infrastructure which indicates that when the public sector performance is efficient in a country, the participation of private sector is comparatively less and the government chooses to build and maintain infrastructure projects by the public sector. Flexibility is the latest paradigm for responding to the changing environment in the governance mechanism can easily change and add capacities in a shorter time to meet the rapidly changing needs of the inhabitants. According to Shi and Daniels (2003) through flexibility organization can hedge themselves from uncertainty and fast changing environment. Flexibility helps to improve performance and competiveness (Sharma and Jain, 2010).

### NEED FOR PROJECT GOVERNANCE

Governance incorporates different stakeholders from NGOs, business and government to work together to attain common goals (Kazancigil, 1998; Stoker, 1998). According to Meso et al. (2009) the concept of governance raises the issues related to economic and social responsibilities and collective actions for power dependence among related institutions and getting the things done not depending upon the governmental machinery.

Infrastructural needs are huge for every country. Effective governance of the infrastructure development projects has become a need and significant challenge which defines the success of these projects. Infrastructure projects are involved with projects related to transportation, access to water and sanitation which are directly related to the societal lives (Santosh Kumar Delhi et al., 2012). Guo et al. (2014) have done a comparative analysis which depicts that project governance offers a structured mechanism to detect and address the risks when they occur. Garland (2009) stated that project governance is a process for decision making and established framework, models and structure for their enablement. Project governance is considered as critical success factor in project execution (Garland, 2009). Weaver (2007) claimed that eradication of project failure by executing the projects right again and again is the major focus of effective project governance. Project governance should incorporate project quality management system, project and company strategy with regards to project selection. (Burcar & Dunovic, 2010). According to Zhai, et al. (2009) key features of mega infrastructure projects are; longer life cycle, uncertainty, complications, large number of stakeholders as well as their effect on the economy, community, technological development and the environment. Jonny Klakegg (2009) has argued that presence of governmental stakeholder may create further political uncertainties for the project. Project Governance prerequisite is to explore how resources and risks are to be assigned among stakeholders to define control measures for achieving targeted objectives, which is defined by legal and regulatory mechanisms with the aim of ensuring better utilization of public funds (Klakegg, Williams, and Magnussen, 2007). Project governance provides framework and structure to articulate and attain the objectives which is a way of monitoring the performance (Turner, 2009). Patel, (2007) noted that project governance classifies the space for daily project activities. Guo et

al. (2014) noted that common objective of governance systems is elimination of project failure and possible repetition of these systems in future public projects. The rapid pace of transformation has created an enormous market for the infrastructural development projects in Pakistan over the last decades. Infrastructure development projects in Pakistan have been criticized for substandard construction works, delay and cost overrun with low efficiency and effectiveness. The projects can be delayed or disrupted if there are inability to cope with the uncertainties (Pitsis, et al., 2003). Construction industry in Pakistan is not performing well but still it is an important sector and significant to the economic development of the country. (Azhar et al., 2008). Figure 1 shows the project appraisal and its governance process in public sector organization of Pakistan.



Figure 1: Project selection and governance flowchart

# Case Study of Infrastructure Projects in Northern Pakistan (Gilgit-Baltistan)

The researcher gained the access to the 'Planning & Development Department, Gilgit-Baltistan" the apex approving authority of all major infrastructure projects across the province. Three member staff of Planning & Development Department, Gilgit-Baltistan (Haider, Karim, & Nazeem, 2014) conducted a monitoring report of 43 infrastructure projects of Diamer District, worth Rs. 2247.090 million. Theoretically monitoring means to check and assess the implementation status of a project implementation, the system of monitoring the progress of a project in implementation besides being an important link in the project life cycle helps in identification/analysis and removal of bottlenecks and expediting actions where projects are stalled or fallen behind the schedule (Haider et al., 2014).

The quality of the development projects carried out in the district Diamer is not satisfactory than other districts of the Northern Pakiatn (Gilgit-Baltistan). Diamer district is the typical example of misdirected public investments in infrastructure development projects. Haider et al.(2014) stated in their report that the projects in district Diamer were hit by complications and huge cost overrun because of a host of tribal/political, financial, managerial and governance shortcoming. Out of 43 projects, more than 30 projects are problematic and slow moving/sick, the project costs in some case have increased by more than 200 percent. Those projects have missed their implementation schedule and completion deadline because of design problems, wrong site selection, land acquisition issues, abandoning of work for unknown reason by contractors. In sum, the sluggish developmental activity is due to the cost overruns, project delays, waste of public money and missed benefits. It was also observed that these infrastructural development projects were not properly supervised by the executing departments which badly effect the quality and pace of work.

Due to lack of proper supervision the contractors do not bother to maintain engineering specification. These problems can be addressed through appropriate mechanism of project governance. There are several cases where big infrastructure projects provide common examples of cost overruns due to unique site conditions (Kean, 2011), delays and hidden costs (Sha, 2011), conflicts among the groups (Ogunlana, 2010).

The situation has put a question mark on executing agencies capabilities of governing, planning, implementation and supervision for development projects. The above case study represents an example of ill planning thus, there a need of project governance which should manage the network of stakeholders. It is pertinent to develop a good relationship with the relevant authorities for accomplishing construction works and smoothing approval process simultaneously with improving the competitiveness with advanced management techniques. Effective governance and success of these projects have becomes a significant challenge for the executing agencies. Case study has an implication for the organization and management of major infrastructure projects, in situations of high-risk, complications and high performance requirements.

Mir and Pinnington (2014) have described that Project Success is in contrast to Project Failure of not meeting stated objectives. Traditional project management methods and studies have measured the degree of project success based on the relationship of scope, budget, and schedule (Cuellar,

2010). Pinto, (2014) argued about the governance of projects which provides structure to execute projects, resulting increase the probability of project success. Guo et al. (2014) stated that "Whichever financial models used, whether the project can generate viable economic return or longer-term benefits for local development has been a major concern among project stakeholders" (p.818).

Three basic elements i.e. control, flexibility and trust can be incorporated in project governance to eliminate complications and uncertainty in organizational and environmental context (De Man and Roijakkers, 2009; Osipova and Eriksson, 2013). (Miller et al., 2000) stated that there is high level of ambiguity and unpredictability during the project life cycle of PPPs infrastructure development projects. These ambiguities and instabilities can be observable as numerous governance issues in the form of political and legal issues on projects (Santosh Kumar Delhi et al., 2012). Santosh Kumar Delhi et al. (2012) further claimed that delays in construction, time-wasting, closure of the projects and huge impact on the cost are due to the governance issues.

# DISCUSSION

The foremost recommendation from this study is that infrastructure development project should invest and adopt project governance framework to achieve goals and success. Bekker, (2014) suggested further research on development of "project governance frameworks for projects spanning across national companies, across country borders and incorporating different value systems, legal systems, corporate governance guidelines, religions and business practices". Corporate governance aligned with standard project governance will remain active for future research (Bekker, 2014). Project governance and corporate governance are the merged concept of project governance, so there is a need develop coalition team to ensure and safeguard cross-pollination of these two areas (Bekker, 2014). Guo et al. (2014) suggested empirical studies of management systems in large infrastructure projects to design appropriate forms of governance for managing risks to better understand 'what worked well?', and 'under what circumstances?'

Aubry, (2011) suggested further research "to link project monitoring and control functions to project governance". "This more extensive research project might be based on quantitative approach, and attempt to deepen the understanding of these control process within project-oriented organizations" (Aubry,2011, p.452).

This review has opened many venues for further research which are to explore the project governance practices in the public sector of any other less developing countries. Researchers may probe the project governance practices in the private sector of a less developing countries to have an insight of the management practices.

## CONCLUSION

Project governance sets vision, projects priorities, provide structure for planning, decision-making and defines the roles and responsibilities of all the stakeholders. It builds organizational structure to support planning, development, oversight, and fiscal management. Maximum utilization of the resources and streamlines of the processes can also be don through project governance. The mechanism of project governance is helpful in resolving the conflicts, monitoring and evaluation of the projects. It provides the representation of minority as well as majority viewpoints of the stakeholders. Project governance confers legitimacy on decisions related to the projects. Without proper governance mechanism only the loudest voices get heard and possibility of crises and project failure is also higher.

A more pragmatic research is envisioned to encompass other large projects whose governance framework can differ from infrastructure projects due to different legal, institutional, organizational and financial conditions with the purpose of creating a common governance framework for these projects.

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