The Social Risk Assessment of Transport Infrastructure Projects under CPEC

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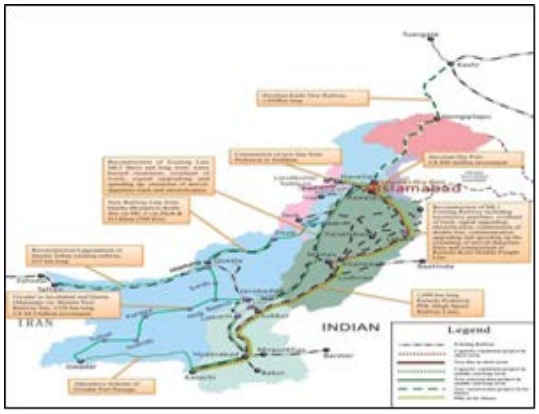
Abstract: "China-Pakistan economic corridor" is an important part of the "One Belt And One Road" strategic vision, and transport infrastructure project is the key to the investment of China-Pakistan economic corridor construction. Considering the traffic infrastructure construction involves different stakeholders, social risk assessment and risk response are beneath the attention. This article focuses on social risks of transport infrastructure project, analyzes the project risk assessment regulations and considers that social risk assessment conform to the requirements of local policy; Then, summarized the common social risks, in such aspects as legality, rationality, feasibility and stability , and discusses the risk prevention and response measures for investment subject. Finally, from the view of building the information communication mechanism, benefit balance mechanism and risk-sharing mechanism between the government, enterprises and the public, several suggestions are put forward.

Key Word: China-Pakistan economic corridor; transport infrastructure project; social risk; social risk assessment

1. Introduction: development and prospects of transport infrastructure in Pakistan

The development of transportation infrastructure has had it with hysteretic regime in Pakistan, major transportation projects, including roads, railways, not only covers limitedly, and upgrades slowly, which greatly restricts the process of its economic and social development. From the view of highway development, the total mileage of road is only more than 260000 kilometers in Pakistan by the end of 2014, including 6 expressways, 23 national highways, 3 strategic highways and some auxiliary road, the density of road network is only 0.32 km/square kilometers, which is far lower than that of India, Bangladesh and other south Asian neighbors. However, the transportation of Pakistan overly depends on the highway, which undertakes more than 90% of freight and passenger transport services. Imbalance of supply and demand on road infrastructure projects becomes evident gradually.

The limited capacity and unreasonable layout are the two main severe challenges for the development of railway in Pakistan. The railway mileage in Pakistan is 7,791 kilometers, of which the electrification operation mileage is only 293 kilometers, less than 3.8%. Transportation capacity for passengers is about 78 millions person-time, and for goods is about 6 million tons. Meanwhile, the main north-south railways in Pakistan are mainly distributed in the eastern economic developed regions, such as



Punjab and Sindh.

Fig.1*_ Highway Network of CPEC

Fig.2*_ Railway Network of CPEC

* Source: Ministry of Planning, Development & Reform, Pakistan.

To handle with the problems, a package of plans have been made by the government, including "the decade investment planning of highway ", "the vision 2030", etc., which are committed to guarantee the public funds for infrastructure construction, upgrade transportation network gradually, and improve traffic network coverage density and speed of the transportation, then facilitate connections between areas or departments. According to the "China-Pakistan economic corridor" construction planning, China is pouring nearly $10 billion into transport infrastructure of Pakistan (table 1). Therefore, the investment prospect in this field would be optimistic.

Table 1*_ CEPC-Transport Infrastructure Sector Project

NO.	Projects	Length (KM)	Estimated Cost (US $ M)
	Road Sector Projects		
1	KKH Phase II(Raikot-Islamabad Section)	440	3,500
2	Peshawar-Karachi Motorway(Multan-Sukkur Section)	392	2,600
	Rail Sector Projects		
1	Expansion and reconstruction of existing Line ML-1	1736	3,650
2	Havelian Dry port(450 M. Twenty-Foot Equivalent Units)		40
	TOTAL		**9,790**

*Source: Ministry of Planning, Development & Reform, Pakistan.

Driven by investment demand, many Chinese companies come into Pakistan market, and take participate in construction of transportation infrastructure. However, overseas investment faces with the local social and cultural environment which is different from domestic situation significantly. Once the social risks outbreak, not only brings direct economic losses to investment companies, and impacts on project normal benefit of social aspect, threatens the social stability of project location, also

failure project even affects international relation between China and Pakistan and deviates from the value idea of "China-Pakistan economic corridor". As a result, investment enterprises should be properly prepared assessment to avoid or to alleviate the loss of social risks.

2. Principles and contents: social risk assessment of transport infrastructure projects

Risk is commonly defined as an uncertain event or condition that, if it occurs, has either positive or negative effects on project objectives (Project Management Institute, 2008), including immigration resettlement, religious culture, community development, minority rights, and public service, public security, gender equality etc. The social risk assessment aims to strengthen the scientificalness of project decision-making, enhance the rationality of the project plan, ensure that the locals could share project benefits fairly and reasonably, promote the coordinated development of the local society and people's life.

The primary task of risk assessment is the identification and exploration of the types, intensities and likelihoods of the consequences related to risks (Renn and Sellke, 2011). Response package is further released to prevent, reduce and control the destructive consequences of risks that may occur before or during the project construction (Liu, Zhu, Wang and Huang, 2016). SRA has four categories of risk: I) low probability, high impact; II) low probability, low impact; III) high probability, high impact; and IV) high probability, low impact (Hossein Mahmoudi, et al, 2013).

To sum up, although the social risk has many characteristics, such as various types, wide coverage, and multiple subjects, it still could be divided into four main dimensions, which are the key principles and main contents to identify and assess the social risk.

Legitimacy

Legitimacy refers to whether the decision or construction of project has no confliction with the local policies, laws and industry standard, whether it has sufficient legal and policy basis, whether it is in line with the regulatory program. Combining with the actual situation of transport infrastructure projects, investors should pay more attention to the legitimacy on project decision-making, privilege Take-Grant, land acquisition and other key issues and procedure.

Rationality

Compared with the various complicated practical activities, laws tend to have certain hysteresis, which results in that the requirement of the legitimacy of the project couldn’t satisfy the rationality, thus amplify and accumulate the possibility of outbreak of social risk. So the attention should be paid to the social risk factors that between legal and reasonable, to respect and guarantee the reasonable demands of relevant interest groups as far as possible.

Feasibility

The feasibility means that, before the decision-making and implementation, the project should ensure that whether takes advice from local people, whether considers constraints such as space, time and culture synthetically, whether makes the action plans and solution measures according to the possible impacts etc., so as to avoid risk factors that might interrupt the implementation of projects.

Security

Security means controllability in some sense, refers to the social tolerance and controllable safety degree of project. Although there is much positive earning of large transportation infrastructure projects, it also could cause damage for minorities' interests, such as loss of land, jobs, public service, etc. It would likely interweave with poverty, minority, gender and other sensitive issues and intensify contradictions, promote local people oppose the project construction in the form of collective action, even the possibility of translating into violent action.

3. Particularity and distinction: social risk of transport infrastructure in Pakistan

The transport infrastructure covers wide content and various types, including railways, highways, airports, ports, subway etc. and related facilities. Any kind of transport infrastructure project has its particular impact area, influence people, pivotal item, so it needs to analyze the potential positive, neutral, negative influence of the social risk factors for specific types. The main social risk of transport infrastructure in Pakistan, has a certain intercommunity. This section mainly discusses the special and important social risk factors which are different from China.

Regionalism

Disparity in regional development exists in Pakistan for a long time, which leads to the spread of regionalism. Baluchistan is relatively poor and backward compared with eastern Punjab. It induces deprivation in district government and people. The local engineering projects almost be controlled by the federal government, provincial government lack of decision-making authority on the project. Therefore, especially for the cross-regional transportation infrastructure projects, it could be affected with rejection and opposition of local government and people, even threatened by violent menace.

Religious belief

Islam has a broad folk basis in Pakistan, more than 90% of the population are Muslim. It might meet the relocation places of worship, cultural relics and other sensitive issues when making selection and plan of projects. In additionally, it should be handled with more care when hiring local labor, and need to pay more attention to respect and protect Muslim religious practices, such as places of prayer, worship customs, eating habits, etc.

Land acquisition and immigration resettlement

Land acquisition and immigration resettlement is a complex systemic project for any project. Compared with the mature related resettlement policy of World Bank and Asian Development Bank, the legal structure of Pakistan has been set up, but far from perfect. Its core content is "The Land Acquisition Act" which promulgated in 1894. The government could replace company in process of land acquisition, and come to a conclusion about compensation through the consultation with the land lord or other stakeholders. Therefore, there is high possibility in intensifying social contradictions produced by the land acquisition and resettlement.

4. Conclusion: preventive measures for social risk of transport infrastructure in Pakistan

Ultimately, the social risk assessment of transport infrastructure is to reflect the people-oriented concept of development by the means of risk assessment, prevent and solve the risk, make it fairer for the people to benefit from construction achievement, realize the harmonious development of society between each component. Through the analysis of the basic situation of Pakistan, the society problem is complicated, and the potential social risk of transportation infrastructure is rather outstanding. In order to reduce risk in the largest extent, it needs positive attention to social risk from the policy level and execution level, to ensure that the transport infrastructure in the process of China-Pakistan economic corridor construction plays a good demonstrative effect.

At the policy level, Chinese enterprises should enhance the consciousness of social risk assessment, take participate in in the operation of social risk identification - assessment - response positively with the actual requirements of project; Strictly follow with local relevant laws and regulations of Pakistan, and use more advanced international standards and industry standards consciously in the legal blind area; Prevent the crisis of program, and make it become an indispensable component before project construction; Focus on the principles and directions, legitimacy, rationality, feasibility and controllability, of the transportation infrastructure projects, make it be combined with corporate responsibility and performance evaluation.

At the execution level, Chinese enterprises should build and improve the information communication mechanism, benefit balance mechanism and risk warning mechanism, and take the information exchange and resources coordination between government agencies, private organizations, experts, community, ensure that flexibility, accuracy, timeliness and completeness become basic characteristics of social risk assessment; At the same time, scoping identifies the concerns and issues to be addressed for a particular project (Paliwal, 2006), and more attention should be paid on the transboundary issue, land acquisition, reemployment support, immigration resettlement, protecting the rights of vulnerable groups and other sensitive issues,

evaluate the scope and degree of impact accurately, formulate feasible and effective response plan, and ensure the effect of social risk assessment.

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