

Failure of Applying PFI in Colombo Katunayake Expressway Project

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Abstract

Currently the PFI infrastructure projects through out the world include toll roads, power stations, bridges, ports, water treatment plants etc and has accepted it as best suited for developing countries since infrastructure development is essential for the development of the developing countries, where the governments can not afford finance for such huge infrastructure projects. Even though there were eleven small scale power projects and one port development on Private Finance Initiative (PFI) basis, toll road projects with PFI procurement methods was a new concept to Sri Lanka. In 1995 government had proposed constructing the Colombo Katunayake Expressway (CKE) as the first PFI road project in Sri Lanka to reduce the traffic volume in existing Colombo Negombo A3 road. Fifteen well established foreign concession contractors bid for the project but PFI arrangement was terminated after several negotiation sessions. The study revealed that inflationary economic environment in the country, uncertainty on the coming government's political support, uncertainty on government's policy changes, public perception towards tolling, competition from existing A3 road, inaccuracy on traffic forecasting, inability of handling toll revenue by the politicians during the concession period, terrorist problem, inability of realizing concessionaires' long term plan to enter in to PFI agreements for irrigation and hydropower projects and inability of having duty waivers from the government for imports of concessionaire as main reasons for the failure of PFI in CKE. Two root causes were identified by analyzing the failure factors as unfavourable political situation in the country and the conservative society. Elimination of the identified Root Causes and failure factors will lead to have successful PFI agreements for the future road projects in PFI procurement system.

Keywords: Facilitators, Impediments, PFI, Road Projects, Root Causes, Sri Lanka

1. Private Finance Initiatives

Private Finance Initiatives (PFI) is an alternative method of procuring services for the public sector. The private sector will design, build and provide funding for the capital projects and operate facilities for the public benefit [3]. Private consortia will receive revenue from operating this service, hence make a profit. The PFI procurement methods could be identified through the

literature as Build Own Operate Transfer (BOOT), Build Own Operate (BOO), Build Operate Transfer (BOT), Build Operate and Renewal of Concession (BOR), Design Build Finance Operate (DBFO), Design Construct Manage and Finance (DCMF), Build Lease (or Rent) Transfer (BLT or BRT), Lease Renovate Operate Transfer (LROT), Build Transfer Operate (BTO), Rehabilitate Own and Operate (ROO), Rehabilitate Own and Transfer (ROT), Modernize Own/Operate and Transfer (MOT) and Build and Transfer (BT).

As mentioned by the Akintoye et al [1] there are many advantages of implementing PFI projects as they grant “value for money”, transfer of risk away from the public sector to the private sector and facilitate creative and innovative approaches, cap final service costs at pre-determined levels, reduce administration costs, reduce the amount of public money tied up in capital investment, reduce total project cost and improve the buildability and maintainability of projects, accelerate project development and avoid delays in project, give benefits to local economic development and transfer technological knowledge to local enterprises, solve the problem of public sector budget restraint and enhance government integrated solution capacity.

Success Factors for implement PFI projects from investor’s perspective can be identified according to the phases of a PFI project as follows:

Decision Making Phase: Appropriate project identification, available financial market, thorough and realistic cost benefit assessment, favourable legal framework, political support, sound economic policy, stable macro-economic environment and government involvement through providing guarantees

Preliminary Qualification Evaluation Phase: The capability of project promoter and experience with PFI project by promoter

Tendering Phase: Shared authority and responsibility, multi benefit objectives, competitive tendering system, transparency in the procurement process, technology solution advance, acceptable toll/tariff level and attractive financial package

Concession Award Phase: Multilateral investment guarantee agency insurance, special guarantees by the government, reasonable risk allocation, concrete and precise concession agreement

Construction Phase: Selection of suitable subcontractors, quality control and supervision, standardization of engineering contract, a multidisciplinary and multinational team and good relationship with government

Operation Phase: Management control, training local staff and sound environmental impact

Transfer Phase: Technology transfer and operation in good condition

In considering the opportunities presented by the PFI market, the contractors have identified a number of barriers to entry in to PFI market which were hindering their involvement as Lack of appropriate skills, high participation costs, high project values, lack of credibility and contacts, demands on management time and high risk. PFI risk can be identified as traffic revenue risk, land acquisition delay, demand risk, delay in financial closure, completion risk, cost overruns, debt servicing risk, political risks, financial risks, State-rooted risks such as prolonged negotiation period prior to project initiation, unfavourable economy in the host country, import or export restrictions, rate of return restrictions. Concessionaire-rooted risks can be identified as lack of creditworthiness, inability of debt service, bankruptcy, unfavourable economy of the country of the main stakeholders, high bidding costs, high design costs, high construction costs, errors in forecasting the demand, wrong estimate of cost trade-offs between different phases in the project's life cycle, risks regarding pricing the product, complex financial structure of the PFI projects, lack of co-operation in case of new initiatives, insufficient performance during operation, lack of guarantees, financing risk. There are Market-rooted risks as loan risks, fall of demand, taxation risks, fluctuation of the inflation rate and currency risks.

The scale and structure of huge infrastructure requirement, shortage of public sector financing, growing debt crisis and reduction of their external borrowing capacity have compelled many developing countries to shift their focus towards PFI in infrastructure projects [2]. Sri Lankan government is actively encouraging private sector investment in infrastructure on the PFI basis mainly for telecommunication sector as well as power generation sector due to their less risky nature. Five telecommunication projects, eleven power projects and one port development were implemented under PFI in Sri Lanka.

2. Background of the CKE Project

Even though in other countries PFI is successfully used in massive road development projects giving much more benefits to the government, it was not realized in Sri Lanka. The Government of Sri Lanka (GOSL) had initially considered PFI procurement methods for procuring the Colombo Katunayake Expressway (CKE) to minimize the government funding but received no proposal bids. Consequently the project was awarded in Design Build and Turnkey (DBT) procurement method. However, the DBT Contract was mutually terminated when overall construction work progress was 35%. This led to a further engagement to undertake study and prepare documentation with several negotiation sessions with foreign concession contractors for completion of the project under PFI arrangement, but ultimately it was also failed. Therefore, the government is now conducting negotiations to implement this project with Engineering Procurement and Construction (EPC) Turnkey basis. As a result of all these, there is a question "Why the application of PFI was failed in CKE project?" which is also the question of this research.

3. Methodology

Single Case Study Design was selected with In-Depth Study with Multiple Source Evidence to represent this critical case in application of a well established PFI theory.

Since, case study research generates a huge amount of data the multiple sources of evidence were collected and stored methodically and systematically in formats that can be referenced and sorted. The most important source of information was semi structured interviews which revealed the failure of applying PFI in CKE. Interviewees at different levels of the organization were targeted. Initially this was to ensure that any findings were not based on data coming from “one side” only. As it turned out, the different views that appeared through this multi-level focus became a major point in the findings from the study. To gain further information regarding the case and background details, documentation and the web data facilitated a great deal and it was capable of offering to double-check other information. The data collection also included a wide range of written material: annual reports, web sites and negotiation reports so on.

Snowball technique was used to recognize and select the interviewees. Snow ball technique involves concentrating groups of ideas pertaining to the same problem. In its simplest formulation snowball sampling consists of identifying respondents who are then used to refer researchers on to other respondents. But in most cases one person in a particular organization recommend people with same opinions. Therefore, for collecting multiple source information, different group of people were interviewed in the same organization with different opinions.

The questions for a semi-structured interview were ideally constructed some time before the interview and were sent to the expert so he/she can start to prepare responses. Printed or electronic list of questions were distributed to predetermined selection of interviewees prior to interview including questions such as; what are the PFI facilitators which were presented and not presented in the CKE project, what are the reasons for the absence of those facilitators, what are reasons for inability to make available those facilitators for the project, what are the PFI impediments which were presented in the CKE project, what are the reasons for existence of identified impediments in CKE project and what are the reasons for inability to eliminate identified impediments.

There were eleven interviews with the professionals such as Project Engineers and Project Directors from the PFI bidders and related government authorities for the project who were acted as the government’s representatives. For an interview lasting 2 -3 hour, around 10-15 questions were asked. This allowed time in between the prepared questions to ask supplementary questions to clarified points and asked for more detail where necessary. Direct questions were also asked for respondents to answer “yes” or “no.” when the answer is “yes” it became an open ended discussion. As well as, respondents had to give reasons when the answer was “no.” The answers of one respondent showed to the other to get his opinion on other’s answers. An important aspect of the technique is that the interview was recorded and later transcribed providing a protocol for detailed analysis.

Manual code based content analysis was selected as the methodology for analysing the collected data to identify PFI facilitators which were not presented, PFI impediments which were presented and their Root Causes.

4. Research findings

When analyzing the case of CKE it was obvious that both GOSL and concessionaires have agreed to enter in to a build agreement and the main disagreements within the government and also the within the concessionaires were rooted on the operation of the toll road by the selected concessionaire, because of the operation responsibility is with the concessionaire, it has to recover the total project cost plus profit from the toll revenue.

4.1 Impediments Present

Identified impediments of the CKE on PFI basis can be recognized as political risk, traffic revenue risk, financial risk, disagreement among upper level politicians and other unfavourable conditions in the country.

4.1.1 Political risk

The risk on the continuous political support and policy changes were identified by the respondents as the most important political risk factors which impeded concessionaires from taking the operation responsibility of the CKE. There was an uncertainty among the foreign contractors on the actions of the coming governments, such as terminating the concession or imposing taxes or regulations on the project that severely damage its value to investors; not allowing the private partner to charge and collect tolls as specified under the concession agreement; preventing investors from transferring earnings out of the country; or not allowing for contract disputes to be settled fairly under neutral jurisdiction.

It was obvious the importance of having a firm legal framework for the PFI projects in Sri Lanka to avoid such uncertainties that can arise from the government changes and policy changes. From the foreign contractors' point of view, it is essential to get the support from multilateral or bilateral financial institutions by the GOSL to mitigate political risks.

4.1.2 Traffic revenue risk

CKE is being the first Sri Lankan toll road project, foreign concessionaires had uncertainty on the user's willingness to pay tolls which is mainly affected by user's wealth, their attitude and value they assign for time saving. According to the government authorities' point of view, to change the people's attitude, people should be educated on the real meaning and the benefits of the PFI arrangements, difference between the privatization and PFI and on the importance of having a foreign concessionaires' involvement for the infrastructure development of the country.

Concessionaire also had a doubt on their ability to draw traffic from existing Colombo Negombo A3 road to generate new traffic. Further, foreign concessionaires have requested a minimum traffic revenue guarantee an extension of the concession term or cash compensation

when the traffic volume falls below the minimum expected traffic levels from the GOSL in negotiation sessions as a treatment for the traffic revenue risk.

Concessionaires also had distrust on the accuracy of the traffic forecasting by the GOSL. Arguments were carried out on the factors such as land use and population growth along the route, public acceptance and use of the expressway, and various economic indicators used in traffic models with inherent uncertainties, which affect the traffic forecast. Some respondents suggested using refining methodologies and empirical equations for improving the long term accuracy of traffic volume estimates. But they have mentioned the importance of cross-checking of forecasted traffic volume by at least one independent consultant.

Possible toll rate issues were also discussed such as limitations of increasing toll rates with the inflationary economic environment in Sri Lanka, which is quite a sensitive issue, both politically and socially. Another issue was whether toll rate adjustments should be left to discretion of GOSL or be based on a formula that is usually linked to changes in some price index. Therefore, the respondents suggested establishing a straightforward, transparent, fair, and binding Toll Adjustment Mechanism by the GOSL and private concessionaire.

4.1.3 Financial risk

As mentioned by the relevant government authorities, for the CKE project GOSL highly expected the contribution of foreign financial institutions and sponsors for the project financing and conversely foreign concessionaires also expected a high financial security from the GOSL. The main impediments which discouraged foreign concessionaire for financing of CKE project was their uncertainty in the import export policies of the GOSL. They were in doubt whether the GOSL restrict their repatriation of profit by imposing taxes. Another main negative feeling was the unexpected increases in the construction cost due to the inflationary economic environment which will seriously affect the economic plan of the concessionaire.

Introducing a firm legal framework for the PFI arrangement of CKE project to avoid influences for the project from the government policy changes was the main solution which was proposed to encourage foreign investors to finance for the CKE project. Respondents also suggested expanding the concession operation period or compensating the concessionaire by GOSL to cover the increases in the construction cost due to inflation.

Another major impediment pointed out by the respondents was the currency risk, because if Rupees are not convertible at the expected exchange rate, it will not be able to pay the return on investor's foreign currency for his capital. Therefore, the foreign concessionaires always assumed the exchange rate risk and inconvertibility risk, in the negotiation sessions even though the political risk insurance covers the inconvertibility. The main cause for the exchange rate risk is the inflationary economic environment in Sri Lanka and interviewers' proposal was to mitigate exchange rate risk by indexing the toll rates to local inflation rate or to the exchange rate of the investor's foreign currency. They recommended to use consumer price index as the

inflation index and adjustments to be made according to a fixed schedule. Disagreements among upper level politicians

When considering the responses of the interviewers it was obvious that there were disagreements among the upper level politicians regarding the foreign concessionaire's operation of the CKE for the concession period. There had been several reasons behind the upper level objection. Under the PFI arrangement, toll revenue handling is completely with the foreign concessionaire for the agreed period usually more than ten years and during concession period politicians have no control over the toll revenue. The politicians had also thought that foreign operation of CKE would make a bad public impression of the government similar to privatization, and it would have adverse affect during elections. Respondents also believed when the top level decision makers' impression is bad towards the foreign contractor's operation, the lower level educated people also have to agree on their decisions even their own opinion is not the same. Therefore, it is essential to educate politicians on the benefits of having a PFI arrangement for realizing the CKE project.

4.1.4 Other unfavourable conditions

According to respondents, CKE bidders expected to involve in irrigation and hydropower sectors for concession contracts while staying in Sri Lanka by operating the toll road. But in negotiation sessions they understood that they will not be able to realize their long term plans due to public resistance to pay tariff for infrastructure facilities. On the other hand foreign concessionaires did not prefer to stay for a long operation period in Sri Lanka due to the terrorist problem. Respondents also pointed out that the foreign concessionaires do not like to live in such an uncertain environment for a long period even though it is possible to have an insurance cover.

4.2 Facilitators Not Present

The PFI facilitators, which were not presented in CKE project and the way of implementing those facilitators for a successful PFI agreement, are discussed next.

4.2.1 Unavailability of local financial market

As mentioned by the respondents, local financial market is not strong to finance for the whole project, due to high project cost and long payback period, although they will receive annual interest payments. Therefore, the project has to be financed by the foreign investors. So as mentioned under the financial risk, if there are local financial sources to invest for CKE project it will facilitate to reduce the effect of the currency risk.

4.2.2 Less supportive legal and policy frameworks

The respondents pointed out the main difficulty of developing a proper PFI agreement for the CKE project as inadequate assurance from the country's legal system to investors, which avoid

obtaining an objective settlement of contract disputes. According to the respondents, political support for the CKE project negotiations was not much flexible. Concessionaires requested Minimum Traffic Revenue Guarantees, exchange rate guarantees, Toll Adjustment Mechanism and a firm taxation procedure from the government to draw the political support for a successful PFI arrangement. It is essential to have a comprehensive legal frame work for PFI projects including the operation of the project which is not available in Sri Lanka.

4.2.3 Unavailability of Sound macroeconomic environment

According to the respondents, a favourable country and concession environment is crucial for attracting finance and limiting the need for government undertaking of risk for the project. But in Sri Lanka there is a high inflationary economic environment which discourages financing sources to invest in CKE project as well as caused for the impediments such as revenue risk, currency risk and financial risk due to construction cost increases.

4.2.4 Lack of Government involvement: providing guarantees

Concessionaires supposed a variety of mechanisms to support their financings. They were discussed on the Equity Guarantees, Debt Guarantees, Exchange rate Guarantees, Grants, Subordinated Loans, Minimum Traffic Revenue Guarantees, Shadow Tolls, Revenue Enhancements and Concession Extensions. If the government provided guarantees for the PFI concessionaries, most of the impediments such as political risk, traffic revenue risk and financial risks could be minimized.

Impediments, which were not presented in the CKE, project to implement PFI procurement system could be identified as Lack of Appropriate skills, high project costs and lack of credibility, prolong negotiation period and completion risk.

PFI facilitators presented in the CKE project were the proper project identification, thorough and realistic cost benefit assessment, capacity of the project promoter, attractive financial package, acceptable toll or tariff levels, technology solution advantage and transparency in procurement process and reasonable risk allocation.

4.3 Root Causes

When the existing impediments and missing facilitators are scrutinized, it becomes obvious that some impediments have occurred due to lack of several facilitators and some missing facilitators have caused for presenting several impediments. Further, making available of some missing facilitators is the identified methods of eliminating certain impediments.

According to the analysis of the previous section it can be recognized key failure factors of PFI in CKE project as Inflationary economic environment in the country, Uncertainty on the coming government's political support, Uncertainty on government's policy changes, Public perception towards tolling, Competition from existing A3 road, Inaccuracy on traffic forecasting, Inability

of handling toll revenue by the politicians within the concession period, Terrorist problem, Inability of realizing concessionaires' long term plan to enter in to PFI agreements for irrigation and hydropower projects and Inability of having duty free waves from the GOSL for imports of concessionaire

Further analysing of failure factors illustrates two Root Causes for the existence of all failure factors as Unfavourable Political Situation in the country and Conservative Society which are explained below.

4.3.1 Unfavourable Political Situation in the country

Failure factors which have occurred owing to the Unfavourable Political Situation in the Country can be recognized as Uncertainty on Political Support and Policy Changes, Inflationary economic environment, Inability to handling toll by politicians, Terrorist Problem and Inability of having duty waivers.

1. Uncertainty on Political Support and Policy Changes

Construction in Sri Lanka, as in many other developing countries, affects mainly by the national plan of each political group who is in power. When a new government comes in to power, previous government's working procedures and policies are changed, which has become a common scenario today. Governments can change government expenditure and taxation by imposing fiscal policies and money supply to the economy and interest rates can change by applying monetary policies. Further governments can change grants and subsidies, productive enhance measures, tax concessions and financial incentives by imposing supply policies. It can be expected several government changes within the concession period of the CKE project which can be defectively affected to the concessionaire by means of less supportive political plans and policy changes.

2. Inflationary economic environment

Normally inflation of an economy is occurred due to demand pull and cost push situations. In demand pull situation the demand for the goods and services is increased but the supply is not increased to fulfil the increased demand. In the cost push situation input prices of the producers are increased. In both situations, the prices of the goods and services are increased. Political decisions are also caused for the inflation as getting huge loans from developed countries as well as starting massive development projects with government funds. Therefore, to regulate the inflation of the economy the government of the country should be able to apply demand side policies as well as supply side policies at the correct time. But in Sri Lanka government seems not to be applied correct policies and if not change the country's unfavourable political situation, current inflationary economic conditions will prevail for the concession period of the CKE project.

3. Inability to handling toll by politicians

As mentioned by the respondents of government authorities, in Sri Lanka there is no standard procedure to handle public money by the politicians and therefore, more corruptions are occurred. Thus, most of the beneficiaries in superior levels have disagreed to allow concessionaires to handle toll revenue for the concession period, which takes generally more than ten years.

4. Terrorist Problem

Terrorist problem in the country also caused to keep away concessionaires from staying in the country for longer period for the operation of the toll road. As mentioned by the respondents, two main political parties in the country have two different responses towards the terrorist as peace talks and war. Therefore, it is very difficult to have a firm solution for the terrorist movement in the country.

5. Inability of having duty waivers for the concessionaire

Further the foreign concessionaires supposed to have duty free waves for their imports during the concession period. But the government refused to provide such facilities and did not respond favourably to accomplish a successful PFI agreement. Therefore, it is needed to educate politicians on the importance of having flexible procedures as well as collaboration between both government and concessionaire to form a proper PFI agreement.

4.3.2 Conservative society

Public perception towards tolling, Competition from existing A3 road , Inability to realizing long term plans by the concessionaire and Inaccuracy on traffic forecasting can be discussed as results from Conservative Society.

1. Public perception towards tolling and Competition from existing A3 road

Sri Lankan people used to get the infrastructure services free of charge from the government. Therefore, it will be really difficult to change their attitudes towards paying money for the free services that they have received earlier. Further, due to financial problems, there is an uncertainty whether the people will get use to pay money for tolls or will use the existing A3 road.

2. Inability to realizing long term plans by the concessionaire

CKE bidders expected to involve in irrigation and hydropower sectors for concession contracts while staying in Sri Lanka by operating the toll road. But, Sri Lankan people have used infrastructure as a free facility, specially in irrigation sector. Therefore it will not easy to get agree farmers to pay money for water.

3. Inaccuracy on traffic forecasting

Main component of the traffic forecasting is the public acceptance. Therefore due to the conventional society it is a risk to forecast public acceptance of paying tolls or tariffs for infrastructure facilities.

Further educational programmes are needed to educate both public and politicians on the benefits of having PFI arrangement for the infrastructure development of the country.

5. Conclusions

When studying the procurement history of the long waited Colombo Katunayake Expressway (CKE) project, it was apparent that there have been four attempts of project, but initial three attempts had been failures. The specialty was with the second bidding effort, which was the first Sri Lankan PFI procurement process in road sector.

This study revealed five main impediments to implement the project on PFI basis as political risk, traffic revenue risk, financial risk, disagreements among upper level politicians and other unfavourable conditions.

Uncertainty on the coming government's political support and government policy changes were the main causes for political risk and it was proposed to mitigate those unfavourable factors by forming a comprehensive legal framework and getting support of multilateral or bilateral financial institutions. Another significant obstruction for PFI was the traffic revenue risk, which had formed because of public perception, competition on existing A3 road, increase of tolls and accuracy level of the traffic forecasting. It was suggested to educate people on the benefits of PFI to make a better public impression. Inflationary economic environment was the reason for the increase of tolls and proposed to implement straight forward, transparent, fair and binding toll adjustment mechanism to reduce the affect on concessionaires from inflation. It was also advised to use refining methodologies, empirical studies and cross checking by independent consultants to improve the accuracy of the traffic forecasting. Grounds for the financial risk were the currency risk, uncertainty in policy changes and increase in construction cost. Currency risk was occurred due to inflationary economic environment. Index toll rates to local inflation rates, index toll rates to exchange rate of the foreign currency and involve local funding sources were the major currency risk reducing proposals. It was suggested to form a comprehensive legal framework to reduce the uncertainty on government policy changes. Inflationary economic environment caused for the construction cost increases and as mitigation, it was proposed to compensate the concessionaire or expansion of concession period. Fear of negative public impression, which can influence for elections and inability of handling toll revenue until the end of the concession period were the main sources for the disagreement among the upper level politicians on concessionaire's operation of CKE. As a remedying measure, it was proposed to educate politicians on the benefits of PFI. Other unfavourable conditions were the concessionaires' objection on staying longer period by operating the toll road due to terrorist problem and inability of realizing long term plans such as concession

contracts for irrigation and power sector projects. Inability of having duty free waves from the GOSL for the imports of the concessionaire also was a negative factor.

Some of the main facilitators, which were discussed in the literature for a successful PFI road projects, were not present in the CKE project. Key facilitators found to be absent were; unavailability of local financial market due to high project cost and long payback period; less supportive legal and policy frameworks which can be eliminated by providing flexible government actions as minimum traffic revenue guarantee, exchange rate guarantee, toll adjustment mechanisms and firm taxation policies; unavailability of Sound macroeconomic environment due to inflationary economic conditions which can be reduced by providing sound economic policy to compensate concessionaire in highly inflationary situations; and lack of government involvement through providing guarantees.

The bidders for the CKE project were well established foreign concession contractors. Therefore, they were well equipped with appropriate skills and consisted with in house capacity. Hence, the impediments mentioned in the literature as lack of appropriate skills and high project costs, lack of credibility and contacts were not presented in the CKE project. Conducted negotiations were not too lengthy and completion risk was not with the contractor because the government had already settled all public interferences against the project, environmental clearances, government approvals and land acquisition at the first attempt of the CKE project.

When comparing with the facilitators identified in the literature, proper project identification, thorough and realistic cost benefit assessment, high capacity of the concession contractor, attractive financial package, acceptable toll level, technology solution advantage, transparency in procurement process and reasonable risk allocation were present in the CKE project.

Through the analysis, Two Root Causes were able to identify for the existence of the PFI failure factors as Unfavourable Political Situation in the country and Conservative Society. Therefore it is needed to educate both public and politicians on the benefits of having PFI arrangement for the infrastructure development of the country to eliminate the effect from the Root Causes for the CKE project.

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