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Planning and Market Response**

Anis Mukhopadhyay



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Glossary

AIMTC	- All India Motor Transport Congress
BDP	- Basic Development Plan (1966)
BGTA	- Bombay Goods Transport Association
BMTT	- Budge Budge Municipal Truck Terminal
CBD	- Central Business District
CGTA	- Calcutta Goods Transport Association
CGTAN	- CGTA Nagar (Serampore)
CMA	- Calcutta Metropolitan Area
CMC	- Calcutta Municipal Corporation
CMD	- Calcutta Metropolitan District (previous version of CMA)
CMDA	- Calcutta Metropolitan Planning Authority
CMPO	- Calcutta Metropolitan Planning Organisation
CMTTL	- Calcutta Mumbai Truck Terminal Limited
CUTP	- Calcutta Urban Transport Project
DTT	- Dhulagarh Truck Terminal
HMC	- Howrah Municipal Corporation
HUDCO	- Housing and Urban Development Corporation
ICICI	- Industrial Credit and Investment Corporation of India
IGIDR	- Indira Gandhi Institute of Development Research
IOC	- Indian Oil Corporation
ITS	- Integrated Transport System (1983)
KMA	- Kolkata Metropolitan Area (same as CMA)
KMC	- Kolkata Municipal Corporation (same as CMC)
KMDA	- Kolkata Metropolitan Development Authority (same as CMDA)
KTT	- Kona Truck Terminal
LUDCP	- Land Use and Development Control Plan
MSRDC	- Maharashtra State Road Development Corporation
NH	- National Highway
PPP	- Public-Private Partnership
UTES	- Rail India Technical and Economic Services
SH	- State Highway
TOAB	- Truck Owners' Association of Bengal
WBTIDC	- West Bengal Transport Infrastructure Development Corporation

TRUCK TERMINALS in KOLKATA METROPOLITAN AREA : MASTER PLANNING and MARKET RESPONSE

1. Infrastructure and Industrialisation

The level of infrastructural development in any country is a crucial factor determining the pace and diversity of economic development. Investment in roads, railways, waterways, airways and other forms of transportation, communication and information system, electricity, banking and credit institutions, public utilities and skill formation etc. facilitates and integrates economic development. Such investments produce social as well as private benefits and improves efficiency of resource allocation. A well-knit and coordinated system of transport is the lifeline of an urban agglomeration and it plays an important role in the sustained economic growth of the area. Therefore, availability of transport infrastructure and its optimum use determine, to a great extent, the quality of economic life in a metropolis. However, the strategy for infrastructure development may follow two alternative approaches :

First, the consensus of development economics in 1950s and 1960s was around the idea of public provision of infrastructural investment across the widest possible sectors. This approach relied upon the principle of capacity generation first and, therefore, it has been called 'development through excess capacity'. The underlying assumption of this strategy is that infrastructure provided will automatically create a demand for it. But, the viability of this conservative mode of infrastructure provision has been severely shaken by the experiences of developing countries both in terms of fiscal stringencies faced by governments and in terms of underutilization of capacity generated through plans. On the other hand, the assumption that most infrastructural sectors could be indefinitely run non-commercially has also damaged the long run prospects of infrastructure development in these countries.

The second option is known as 'development through shortages' which is a strategy for capacity generation in response to revealed shortages, i.e. infrastructure following upon urban or industrial growth. This strategy has certain advantages:

- (i) shortages are capable of revealing willingness to invest on the part of the private sector,
- (ii) suboptimal decisions emerging out of planning from above may be avoided,
- (iii) infrastructure that is created later, results in fuller utilization and probability of underutilization of capacity is avoided.

Workability of both the strategies depends on certain important performances of the government – as a provider, as a partner, or as a regulator.

The story of prioritizing infrastructure for Calcutta Metropolitan Area (KMA) since mid-1960s followed the first strategy and master planning for truck terminals during last four decades has met with acute implementation failure. Under the conditions of absolute shortage of such infrastructure the official strategy has now shifted to private sector participation in truck terminal projects.

Both the Disinvestment Commission and Rakesh Mohan Committee (1996) have set a priority for commercialisation of infrastructure, corporate public bodies, public-private partnership (PPP) in various forms, exploiting capital market potential and similar other policy guidelines in the transport sector. The reforms have now reached West Bengal and KMA in many sectoral projects, including truck terminals. The ongoing projects of truck terminal construction in KMA may be analysed in this perspective.

2. Truck Terminals for KMA

Kona Truck Terminal (KTT) has become a myth in the blueprints for Kolkata Metropolitan Area (KMA) nurtured by the urban planning authorities for an abnormally long period since 1960s. In terms of the initial concept of planners, the project may be viewed as a case of *planned relocation* of wholesale trading activities and at the same time as a case of provision of urban *transport infrastructure*. It is now going to be implemented when other truck terminals within KMA are also emerging with significant involvement of private capital. This paper highlights some of the issues related to the planning exercise in truck terminals for KMA from 1966 to 2001 as well as issues related to private sector investment in some of the emerging terminals. The experience may be useful for evaluating private sector participation in transport infrastructure, the

development of which, as a matter of strategy for the industrial estate of Kolkata metropolis, is at a crucial juncture today in view of the state government's commitment to a new industrialisation wave. Truck terminals are particularly important in this context; because according to the estimates of the Kolkata Metropolitan Development Authority (2001), 75 percent of goods movement to and from KMA is currently shared by road transport and such share of road transport has been projected to remain as high as 72 percent in 2025¹. Such a high relative share of road transport in total freight traffic of KMA is consistent with the studies and estimates made by the Planning Commission, the World Bank and Indira Gandhi Institute of Development Research about the trend modal split of transport in India from early 1980s to late 1990s. The small decline in the share of road transport in KMA (from 75 to 72 percent) over the period from 2001 to 2025 has been projected in terms of a rise in the share of railways from 14 to 20 percent, which is expected to be the effect of planned programmes like :

- (1) relocation of railway goods terminals from Shalimar to Sankrail and from Howrah station to Dankuni;
- (2) three new goods terminals to be built on the outer ring railway and near the truck terminal-cum-wholesale trading centers at Noapara adjoining NH-34, Rajarhat adjoining new town and Amtala adjoining Diamond Harbour Road.

During the same period, share of waterways in the total freight of KMA has been estimated to decline from 11 percent to about 8 percent.

Within this scenario, transport capacity generation has called for private investment in truck terminals in KMA because there is a gap between the master plans and their implementation.

3. Relocation plan at Kona (Howrah)

Concentration of wholesale trading activities and the transport operators' offices and godowns within the Central Business District (CBD) of Kolkata have emerged through a historical process. Such localisation is due to specific agglomeration economies : *localisation economies* – benefits derived by firms locating close to each other, as well as *urbanisation economies* – benefits derived from proximity to many different economic actors and urban services. In the present case, wholesale traders and

transport operators have reinforced each other's activities in a particular zone of the city and specific location of the railway passenger and goods termini as well as godowns have added a special dimension to such localisation. In the trader-transporter co-existence, some other key players – involved into the network with diverse interests in it – are the truck owners, transport agents (or freight brokers), godown owners and a large army of headload labourers. Not only has such localisation taken place within a small area of the CBD covering whole or parts of twenty densely populated municipal wards of the Kolkata Municipal Corporation, more than 88 percent of trucking companies are located within a still smaller pocket where all sorts of commercial activities take place most intensively. Clustering of a particular sectoral activity within the city centre did initially save on resources, business and financial services, market information and so on. But the resultant congestion, caused mainly by unwanted truck traffic, as well as environmental degradation and lack of redevelopment have become the source of huge social cost to the economy of KMA. Thus arose the question of relocation of the wholesale trading zone without distorting the retail distribution system of the metropolis. But the relocation strategy of the Metropolitan Planning Authority was primarily concerned with elimination of heavy truck movement from the traffic flow of the CBD of Kolkata. **Kona** in Howrah on the west bank of river Hoogly and outside the metrocore was initially chosen as the target area for implementing the relocation plan 1966. It is worthwhile to note here that both Kolkata Metropolitan Development Authority (KMDA) in 2001 and Rail India Technical and Economic Services (RITES) in 1998 have arrived at almost similar estimates that approximately 40 to 90 percent of effective carriageways are blocked by truck parking in the wholesale trading zone within the CBD of Kolkata; because KMA does not have a outer-city truck terminal. RITES has also estimated (2000) that more than 66 percent of trucks passing through the metrocore on the west bank (which is a part of the Howrah Municipal Corporation) have their origin or destination on the east bank of Hoogly. Therefore, truck trips to and from Kolkata create traffic congestion in both the cities – Kolkata and Howrah.

The wholesale trading region of the CBD is a place where transactions cover a very wide range of commodities – “from pin to elephant” – to quote dialogue from a Satyajit Ray film. Commodity specific priority for relocation was adopted in two phases.

The relocation criteria in 1970s was first concerned with selected 'natural wholes' i.e. bulky commodities in which the trucker – wholesaler relationship causes more traffic congestion and create problems like :

- (i) overcrowding and related pollution,
- (ii) overspilling of wholesale activities into adjoining streets,
- (iii) huge solid waste accumulation,
- (iv) dilapidated and insanitary space used for storage and marketing operations – deterioration of work environment,
- (v) blockage of urban renewal,
- (vi) conversion of many heritage buildings into truckers' godowns.

Therefore, a truck terminal-*cum*-wholesale trading centre at Kona was considered to be the real solution.

4. The Relocation Episode

The first official concern over the congestion in CBD of Kolkata was expressed in 1962, a comprehensive traffic and transportation plan for Calcutta Metropolitan District (CMD) was prepared in 1965 with the assistance from Wilber Smith and Associates, a foreign consultant firm, and the first comprehensive development plan for CMD – Basic Development Plan – was published in 1966. Master Planning exercise with Kona Truck Terminal started since then, and emphasis on this project continued to be laid and relaid – as a matter of recurring reprint – all through the metropolitan planning documents like 'Truck Terminal Systems Plan' (1976), Calcutta Urban Transport Project (1978), Integrated Transport System for Calcutta Metropolitan District (1983), A Perspective Plan for Calcutta 2011 prepared by the West Bengal State Planning Board (1990), 300 Years of Calcutta : Plan for Metropolitan Development 1990 – 2015 , Calcutta Megacity Programme (1993), Urban Development Strategy for West Bengal (1994), Master Plan for Traffic and Transportation in Calcutta Metropolitan area (1994) and a new Master Plan for Traffic and Transportation for Calcutta Metropolitan Area (July 2001).

A few special aspects of the above mentioned relocation episode is noteworthy:

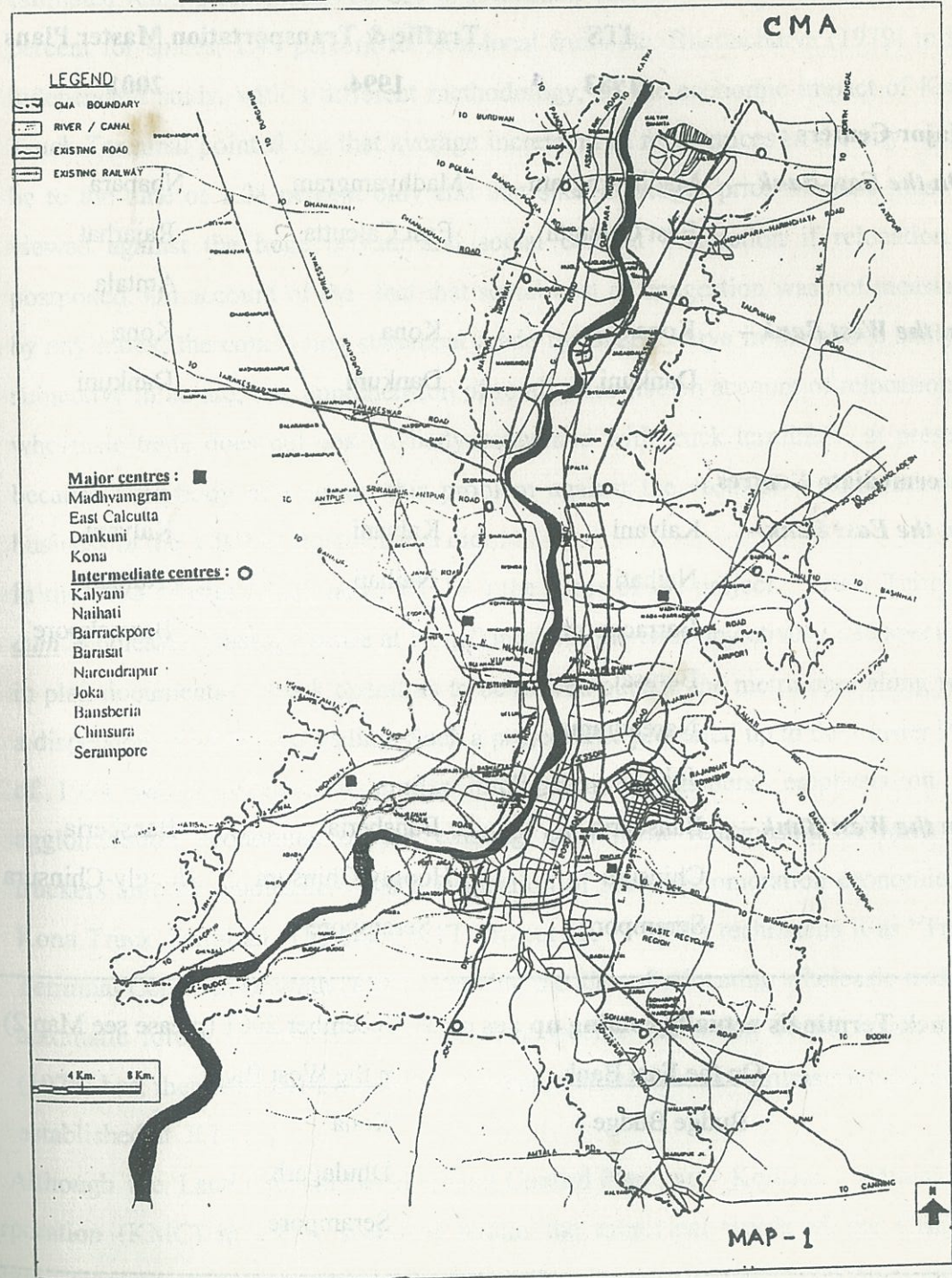
- (1) In 1978, KTT was projected as a part of Calcutta Urban Transport Project (CUTP) to be implemented jointly by KMDA and Calcutta State Transport Corporation and

financed by the World Bank, – Phase I of the project (on 100.15 acres) was scheduled for 1978-81 out of a total area = 317.62 acres (including 47.12 acres for future expansion). There were three strategic function levels of KTT 1978 – wholesale trading facilities, parking lot facilities and truckers' godown / office facilities. For this project, detailed planning was made, techno-economic feasibility was studied and okayed, socio-economic study was conducted at the suggestion of the World Bank visiting team, fundability of the scheme was considered to be satisfactory, and repayment of loan was calculated to be possible by 1995; but still KTT project did not materialise for reasons unknown.

- (2) Delay in the execution of one part of the Traffic and Transportation Master Plan jeopardizes other parts of the same plan. Since Vidyasagar Setu took more than twentyfive years to be completed and Kona Expressway became fully operational only in 1998, 1978 was too early for the realisation of KTT. All efforts and resources were not concentrated to realise the trans-river crossing first, so that the west bank potential (including the KTT) could be fully exploited. A few other missing links for the strategic location of KTT till date are: (i) West Howrah Township Project which was supposed to provide many auxiliary services to KTT as per the initial plan; (ii) Development of Sankrail-Abada as a Railway goods terminal; (iii) Construction of a railway station near Kona on Andul-Dankuni chord line. Although a revised Project Plan for KTT Stage I (on a smaller scale than 1978 plan) was scheduled to be completed during 1999 – 2002, initially with HUDCO loan and then substituted by Megecity Funds, progress in project- implementation has been unsatisfactory excepting land development done before 1999.
- (3) Meanwhile in 1983, *Concept of Integrated Transport System (ITS)* was drafted which became the primary basis for all future Traffic and Transportation Master Plans for KMA. It suggested four *major* truck terminals and nine *intermediate* wholesale trading centers of which Kona received top priority. Along the same line, the 1994 Master Plan recommended four major centers and five intermediate centers while in 2001 the Master Plan revised the recommendation to five major and five intermediate centers. (For an idea of the planners' vision Please see Map-1 and Chart I below). However, none of these termini has been realised and the role of the



ITS : 1983 : Truck Terminals & Wholesale Trading Centres



state over last thirtysix years has been confined to dreams and wastage of resources for drawing them rosly.

**CHART - I: COMPARATIVE LOCATION OF TRUCK TERMINALS
IN THE MASTER PLANS for KMA**

	ITS Traffic & Transportation Master Plans		
	1983	1994	2001
Major Centers :			
<i>On the East Bank -</i>	Madhyamgram East Calcutta	Madhyamgram East Calcutta	Noapara Rajarhat Amtala
<i>On the West Bank -</i>	Kona Dankuni	Kona Dankuni	Kona Dankuni
Intermediate Centres :			
<i>On the East Bank -</i>	Kalyani Naihati Barrackpore Barasat Narendrapur Joka	Kalyani Naihati	Kalyani Naihati Barrackpore
<i>On the West Bank -</i>	Bansberia Chinsura Serampore	Bansberia Hoogly-Chinsura Serampore	Bansberia Hoogly-Chinsura

Truck Terminals actually coming up : as on 31 December 2001 (please see Map 2)

On the East Bank

Budge Budge

On the West Bank

Kona

Dhulagarh

Serampore

(4) During 1960s and 1970s there was an apprehension in the official circle that relocation of the wholesale trade would cause an overall increase in retail prices in the city. Calcutta Metropolitan Development Authority in 1978 through its own economic survey realised that such an apprehension is unfounded, since the estimated retail price escalation due to relocation was 0.42 percent for potato, 0.03 percent for spices, 1.43 percent for non-local fruits etc. Bhattacharya (1979) in his independent study, with a different methodology, on the economic impact of Kona Truck Terminal pointed out that average increment in retail prices in the city would be to the tune of 1.08 percent only and that such a meager price increase must be viewed against the huge private and social cost of congestion if relocation is postponed. On account of the fact that social cost of congestion was not measured by any index, the concluding statement made by Bhattacharya in the above study is subjective in nature; but, apprehension of retail price rise on account of relocation of wholesale trade does not vex anybody concerned with truck terminals at present, because everybody now views this problem against the costs of concentration of business in the CBD as Bhattacharya did.

(5) In the 1978 Master Plan (under CUTP) the name of the project "Truck Terminal *cum* Wholesale Trading Centre at Kona" implied the twin objectives (also specified in plan documents) – truck operators to be moved outside the metro core along with a dispersion of wholesale trading. Such a project-title prevailed up to the Master Plan of 1994 which reflected a similar implication of planners' emphasis on the agglomeration economies of the existing convenient relationship between the truckers and the wholesalers and a replication of such agglomeration economies at Kona Truck Terminal. The latest KTT Project (1999-2002) rechristens it as "Truck Terminal Centre at Howrah (Kona)" leaving the idea of relocating wholesale trade to automatic forces of market; – commodity specific relocation of wholesale trade (1978) has, therefore, been a redundant concept in the 'transport infrastructure' being established at KTT.

Although the Land Use and Development Control Plan of Kolkata Municipal Corporation (KMC) in 1990s specified within the municipal wards of the CBD of Kolkata, increments in transport company operations, wholesale trading, godowns etc. as

'non-conforming use' of land; and an attempt was also made to have statutory provisions that 'non-conforming' commercial use of land be converted to 'conforming' use within a stipulated period of time, the municipal authorities were not in a position to enforce such a regulatory measure on account of a lack of alternative arrangement. On the business front, existing storage space in the CBD of Kolkata has become absolutely inadequate for accommodating the present volume of wholesale trade; and road congestion has been responsible for a large increase in 'truck parking time'. This factor increases the cost of hiring a truck by the transport operator and ultimately increases transport cost in wholesale trade.

Therefore, a market for Truck Terminal Centres on the fringe areas of KMA has developed. The simultaneous ideological shift in government's attitude to truck terminals has been spelt out in the Traffic and Transportation Master Plan 2001 – 2025 (Draft : July 2001). This Master Plan has proposed ten truck terminals in addition to one private sector truck terminal coming up at Dhulagarh on the west bank. However, in the same Master Plan, the *strategy for action* has spelt out : "*It is expected that such truck terminals would be developed in future by the private sector or by joint venture and the godowns and wholesale trading activities from the central areas of Calcutta and Howrah would be shifted to such locations*"ⁱⁱⁱ Such a strategy for private participation in truck terminal projects is nothing but a reflection of what is currently happening in the outskirts of Kolkata Metropolitan Area (KMA). Therefore, portrayal of 'Future Goods Transportation Plan' in terms of the ten proposed truck terminals in the Master Plan 2001 is nothing but planners' conception. Given the experiences so far, effectiveness of the instruments of regulation is not dependable for ensuring that market determined locational choice (or the scale of infrastructure) obeys the Master Plan.

5. Multiple locations : Alternative Paradigms

In fact, the process of 'development via shortages' and accompanying market pressure for creating transport infrastructure go beyond the Master Plans and determine both scale of investment and locational choice regarding truck terminals in KMA. Therefore, in addition to the ongoing Kona project (KTT), three more truck terminals are

coming up in KMA – two on the west bank and one on the east bank. (*Please see Map 2 for the locations*). A brief introduction to these terminals has been presented below.

(1) Truck Terminal Centre at Kona (KTT) : *State as the Promoter*

The project is located on Kona Expressway near its junction with NH-6.

The new project plan for KTT-1999 has a target area of 177.02 acres to be realised in three stages; – Phase I (44.22 acres) has actually been taken up by KMDA for execution after some minor modifications of the 1999 lay out; and news paper advertisement inviting applications for allotment of different types of plots appeared on 17 February 2001ⁱⁱⁱ. This truck terminal to be implemented in the public sector, would actually be operated by private parties in whose favour developed plots have been allotted (sold); therefore, for the creation of project infrastructure, KMDA has toed the role of a private developer after four decades of involvement of the state.

In 1999 KMDA proposed that Howrah Municipal Corporation (HMC) be given the responsibility of maintaining the common facilities at the truck terminal centre because the project site is located within the administrative jurisdiction of HMC. But, the incapable HMC has opted to confine its role only to

- (i) sanction of construction plans on the allotted plots in conformity with Land Use and Development Control Plan for HMC 2000;
- (ii) provision of water supply connection; and
- (iii) solid waste disposal from the scheduled vats.

Therefore, contribution to a 'Maintenance Fund' by the plot owners has been made compulsory before the transfer of property in addition to the value of plots^{iv}.

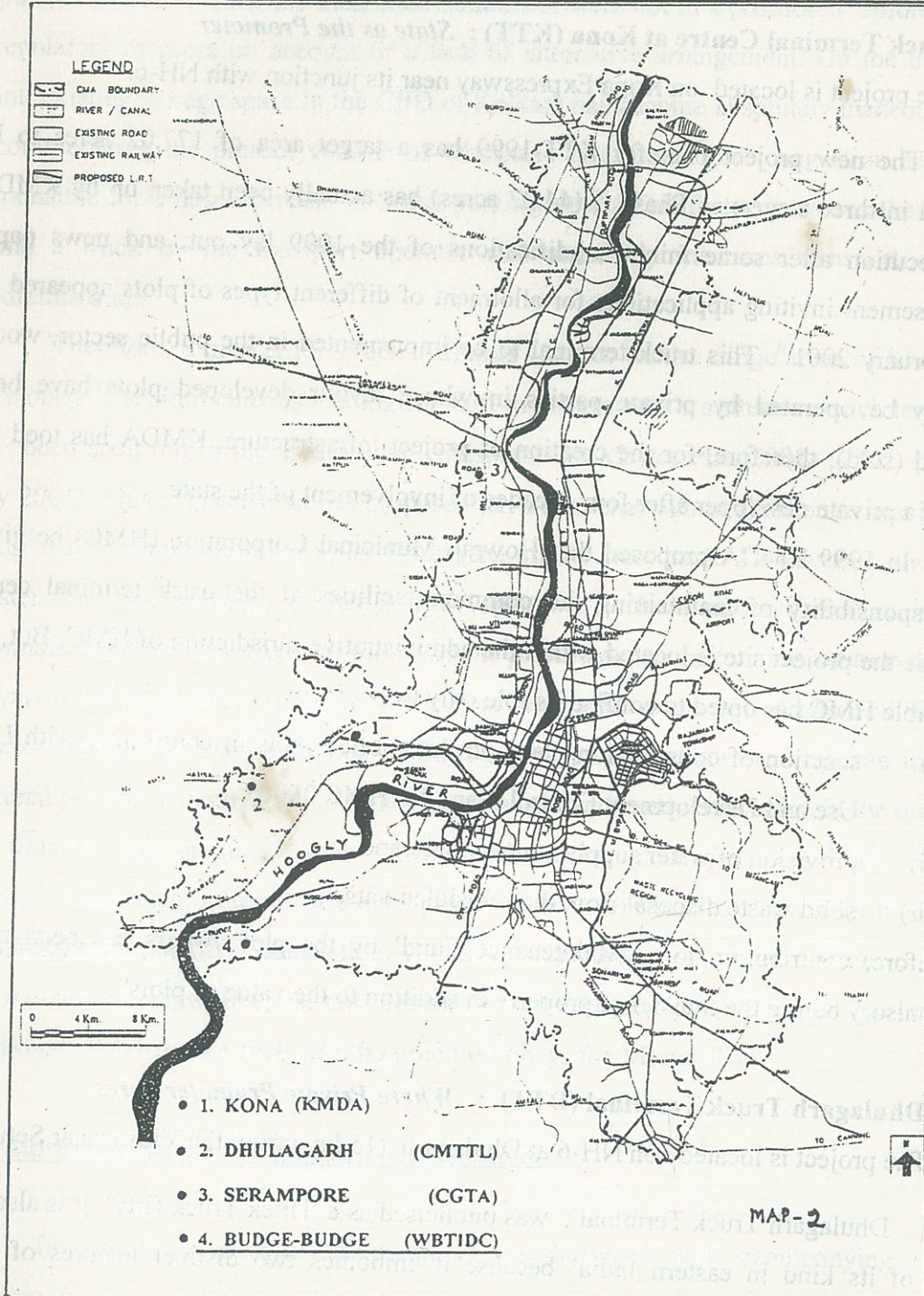
(2) Dhulagarh Truck Terminal (DTT) : *Where Private Promoter dares*

The project is located on NH-6 at Dhulagarh (15 kms from the Vidyasagar Setu).

Dhulagarh Truck Terminal , was publicised as a 'Hitek Truck City'. It is also 'the first of its kind in eastern India' because it embodies two distinct features of truck terminals visualised by state planners in 1960s –1980s :

- (i) an integration of wholesale trade with truck terminal; and

LOCATION of TRUCK TERMINALS COMING UP in KMA :
(December, 2001)



- (ii) its locational proximity (2 km) to the proposed South Eastern Railway goods terminal at Sankrail – Abada ; much of the strategic locational features of KTT are enjoyed by DTT.

Such strategic importance of the location will further be accentuated by the construction of a proposed Expressway (joint venture with Malayasian / Japaneese collaboration) from Dhulagarh point on NH-6 to Haldia via Uluberia.

Initially, *vide* 1998 MoU, it was a *joint venture project* between Calcutta Mumbai Truck Terminal Ltd. (CMTTL) and West Bengal Transport Infrastructure Development Corporation (WBTIDC) with quity participation in the ratio 89:11. At the foundation-stone laying ceremony of DTT (24 December 2000) the Transport Minister of West Bengal preferred to rely on the 'private terminal' because the state govt. project remains incomplete for decades; the case of DTT is, therefore, a case of private sector developer venturing into filling in the gap in transport infrastructure.

The Project Lay-out and commercial viability of the project have been determined by a safe estimate of traffic flow through NH-6 and the commodity composition in such truck load. This truck terminal in its first phase has been designed on 33 acres of land⁷ to 'centralise transport and related business activity at a single point'.

Means of financing Project Cost (Phase I) has been revised in 2001, because WBTIDC has withdrawn from its commitment of equity participation. The pattern of such revision has been depicted in the table -1 below:

Table - 1 : Financing of Dhulagarh Truck Terminal Project

		Initial Estimate as in December 2000	Revised Estimate as in December 2001
Total Cost	=	Rs.30.00 crores	Rs.38.59 crores
Means of Finance		as % of total cost	as % of total cost
Promoter's equity	=	17.80	24.49
WBTIDC equity	=	2.20	NIL
Term Loan	=	50.00	48.99
Sale of Space & Lease Premium	=	30.00	26.52
		100.00	100.00

Therefore, Dhulagarh Truck Terminal ceases to be a meaningful joint-venture project.

Attempts are being made to cover up unsecured portion of term loan by short term borrowing which will affect the cash flow analysis of the project, but the company is confident of its repayment capacity. On the other hand, target has satisfactorily been fulfilled in respect of sale of space^{vi}, additional cost on account of project expansion would also be met from sale of space.

(3) CGTA Nagar (CGTAN) : *Own your own Terminal*

The project is located on Delhi Road (erstwhile NH-2) near Serampore – Chatra. The scale of the project in terms of area is 150 acres; and all land has already been procured through CGTA's own arrangement of *direct purchase*.

The Calcutta Goods Transport Association (CGTA) is the major organisation of the large transport companies (average turnover per annum Rs.15-20crores) operating in the CBD of Kolkata. It has taken the initiative to launch this project in 1993-94 in the context of non-issuance of trade license and an agreement with the state government in August 1993 that trade licenses would be issued on the merit of an undertaking that the members of CGTA would make alternative arrangements, within a period of two to three years, for loading / unloading instead of the practice of doing the same on Kolkata Corporation Roads. The idea of 'CGTA- Nagar' as a truck terminal was inspired by the initiative of Bombay Goods Transport Association (BGTA) and the chronology reveals that CGTA had two compulsions behind this venture :

- (i) statutory regulations , legislative measures and diseconomies in terms of truck parking time combined with extra legal activities of the Police and others, of which they complained to the state government;
- (ii) frustration due to prolonged state failure in the provision of appropriate infrastructure.

The uniqueness of CGTA- Nagar is that it is meant exclusively for the Association members ; no separate company would be launched for its execution; and membership of CGTA has gone up on account of this project. Plots of land (of varying sizes) would be allotted to intending members against payment by instalments for land, common area development, road construction, drainage system including effluent treatment plant, water supply, electrical installation and stand-by captive power plant (diesel generator). Capital

cost of common facilities and escort services like petrol pump, weigh scales, repairing shops etc. would be recovered from the allottees for such specific purposes.

Maintenance of common services would be managed and conducted by CGTA which will provide quarters for the staff required for this purpose. When in operation, CGTA-Nagar will also provide parking slots, dormitory and other necessary facilities to non-members on payment basis. Initially, the project was slated for completion in 2003; but the project has now been stuck at its first phase, i.e. land acquisition (completed) – boundary wall (completed) – common area land development. Main problem of project implementation is funding of investment. Since it depends exclusively on members' contribution, which locks up business capital of transport operators, financial constraint is the only delaying factor. To overcome this constraint, CGTA has taken an initiative for negotiation with the domestic financial institutions as well as Asian Development Bank. Augmentation of fund has also been planned through commercial use of excess land.

(4) Budge Budge Municipal Truck Terminal (BMTT) : *State as the provider*

The project is located near the trenching ground of Budge Budge Municipality.

Budge Budge is an extension of the Kolkata Dock System for handling liquid cargo. Oil Depots here are utilised for storage of both petroleum oil and non-petroleum oil; and huge number of oil tankers enter and leave Budge Budge town every day, which create congestion and accidents. Budge Budge Municipality (BBM) felt that traffic discipline is impossible without a truck terminal; the municipal government approached the Transport Department, Govt. of WB, and the Project Report was finalised in 1998 by a consultant firm appointed by WBTIDC.

The project has been launched as a joint venture between the BBM and WBTIDC. BBM has provided only the land for the project and has 26.98 per cent share in the project by virtue of land value. It is a small scale terminal on 4.0 acres of land. The project has been found commercially viable. The sources of fund are as in table -2 below.

Table - 2 : Financing of Budge Budge Municipal Truck Terminal

Sources	% of project cost provided
BBMunicipality (land value only)	26.98
HUDCO (term loan)	70.00
WBTIDC, Dist. Planning Fund, & MPLAD Fund	3.02
Total =	100.00

Therefore, Budge Budge Municipal Truck Terminal (BMTT) is based on the old paradigm of infrastructure provision by the public sector with institutional finance from within. Special features to be added to such public sector provision are :

- (a) all facilities in this terminal would be leased out to service franchisees,
- (b) a local government accepts the challenge of infrastructure, provides it through joint venture with a public sector company and operates it through joint management with the same company.

The project is in full control of the joint venture partner WBTIDC until it is handed over to Budge Budge Municipality after repayment of the term loan i.e. after fifteen years. But the project is trailing behind the schedule by almost three years and the main bottleneck has been *unauthorised occupancy* of municipal land.

A replica of the special purpose truck terminal for oil tankers at Budge Budge was separately planned by the **Indian Oil Corporation (IOC)** in early 1990s at **Mourigram**, Howrah, to the east of their existing Oil Depot on approximately 41 acres of land including some areas vested with the government. IOC fully placed funds for land acquisition and more than 16 acres of acquisitioned land was handed over to IOC. But, land acquisition process was stopped after a few years on the basis of District Collector's report that the area is thickly populated and hence land acquisition can not be carried out further. The future of this fifth emerging truck terminal is, therefore, absolutely uncertain.

6. A Review of Truck Terminals in KMA

(a) **Master Planning** : The change in attitude of the government depicted in the above sections poses some serious questions regarding the process of Master Planning by Kolkata Metropolitan Development Authority (KMDA) itself. The initial hypothesis behind 'relocation strategy' was "If wholesale trade moves out, truckers will stay out". Now that KMDA has targetted the transport operators who are considered to be the most dynamic and powerful group among the concerned players and have the capability of shaping the market, the revised hypothesis behind the current 'transport infrastructure strategy' is "If truckers stay out, wholesale trade will move out". According to press reports, the state government is going to implement shortly stricter regulation regarding truck entry into the city to compel them to park at Kona. Neither of the above hypotheses have been tested and the only private sector truck terminal, going to be completed at Dhulagarh, has actually been planned as "a truck terminal – cum – wholesale trading centre" – the planners' dream of 1970s.

Excepting Truck Terminal Systems Plan 1976, all the Master Plans put priority to Kona; but there has been an overall bias in favour of the east bank of KMA as is evident from table – 3 below. Such a bias is quite surprising in view of the estimated flow of truck traffic through the major highway routes to / from Kolkata. The fact that rest of India lies to the west of KMA and that the recent experience of market determined locational choice has favoured the west bank, undoubtedly testifies such east-bank bias to be undue and arbitrary. It may be remembered in this connection that Bhattacharya (1979) in his study using official data of Calcutta Metropolitan Planning Organisation (1976) pointed out that Kona terminal has a clear cost-advantage over the east-bank terminal in respect of retail commodity distribution system among the city markets.

This conclusion can be generalised in view of the recent (1999) observation by the KMDA that (i) proportion of truck trips to and from Kolkata through NH-34 has almost been halved to 10 percent during the two preceeding decades, and that (ii) such goods traffic flows through NH-2 and NH-6 are about 50 percent and 40 percent respectively^{vii}.

Table - 3 : Comparative location of Truck Terminals in the Master Plans
(Please see Map - 1 and CHART - I under section 4 also)

	Parts of the metropolis (KMA)	Integrated Transport System 1983	Traffic & Transportation Master Plan 1994	Traffic & Transportation Master Plan 2001 *
Major Centres	East Bank of Hoogly	2	2	3
	West Bank of Hoogly	2	2	2
Intermediate Centres	East Bank of Hoogly	6	2	3
	West Bank of Hoogly	3	3	2

* (N.B. Locations in the T & T Master Plan 2001 exclude Dhulagarh and Serampore)

Delay in the execution of one part of the Traffic and transportation Master Plan jeopardizes other parts of the same plan. Full exploitation of the west bank potential for truck terminal at Kona was depended on

- (1) Early realization of the trans-river crossing,
- (2) Completion of the Kona Expressway,
- (3) West Howrah township development, from which some of the auxiliary services of Kona Truck Terminal were initially planned to be met,
- (4) Development of Sankrail - Abada Railway Goods Terminal,
- (5) Construction of a railway station near KTT on Andul - Dankuni chord line.

All these missing links have significantly reduced the viability and operational efficiency of Kona Truck Terminal.

(b) **Comparison of physical plans :** A comparison of physical lay out plans for the truck terminals has been considered in table - 4 below. Such a comparison between Kona (KTT) and Dhulagarh (DTT) reveals that :
KTT is oriented for transport operators (use of allotted plots for godowns or offices or otherwise is their own choice) while DTT has multiple functional dimensions. Apart from the physical lay out plans of the truck terminals, it is important to take care of the apprehended congestion on account of secondary commercial growth around them, particularly because, statutory provisions for construction are different at KTT and DTT.

Table - 4 : Comparative Lay out of Truck Terminals

1	2	3	4	5	6	7	8	9
Terminal	Total Area (Acres)	For Transport Operators	Ware-Houses & Wholesale	Commercial	Circulation	Parking	Other Services	Open Space
		%	%	%	%	%	%	%
Kona (public sector)	44.22	20.42	...	7.15	35.91	10.52	11.62	14.37
Dhulagarh (private sector)	33.00	6.62 (Loading Area)	11.22	5.27	35.20	27.12	7.29	5.25

N.B. Total of col. nos 3 to 9 for any terminal may be below 100; because some areas like boundary wall has not been shown in the computation, and / or some other relevant data is not available Physical Lay outs for CGTA Nagar and Budge Budge Municipal Truck Terminal have not been available and have, therefore, been excluded from this table.

A study of the existing land use pattern and the predicted pattern of land use as a result of infrastructural development are essential for any master planning exercise. Therefore, a regulatory mechanism of Howrah Municipal Corporation and Howrah Zilla Parishad as well as LUDCP for HMC and for the West Bank of KMA excluding HMC must be prepared to contain negative consequences of all the secondary commercial / urban growth expected around the truck terminals.

(c) **Comparison of land price :**

The uncompetitive land price at Kona Truck Terminal is evidenced in the table - 5 below.

Table - 5 : Land Cost in Truck Terminals^{viii}

Truck Terminals	Estimated cost of Developed land per katha (Rs. lakhs)	Sale price of Developed land per katha (Rs. lakhs)
KTT, Kona	...	3.60 (revised lowest 2.40)
DTT, Dhulagarh	1.6073	...
CGTAN, Serampore	0.6591	...
BMTT, BudgeBudge	2.3767 including cost of approach road construction	...



It is significant to indicate at this point that Truck Owners' Association of Bengal appealed to KMDA, after the first advertisement in 2001, for allotment of 3 acres of land at a reduced rate within the KTT project on which they would construct their own parking lot, rest house and a petrol pump; but KMDA turned down the proposal. It has been observed in the local transport industry that truck owners constantly struggle for a just or reasonable freight rate; because as a group, their bargaining position is absolutely weak^{ix}. Certain concealed discrimination against the local truck owners also reduce their market power significantly. Therefore, high land price has rendered KTT unattractive to powerful players of the system and unaffordable to weak players who seek protection of the public sector. But the public authorities are confused between the roles of a promoter and that of a protector.

(d) The Labour Sector :

KTT specifies 'predominant use' of transport operator's plot as godowns and offices and does not bother about the living space for staff and labourers. DTT offers small and medium size apartments for residential use of the staff, traders, shop keepers and other persons engaged in the terminal. Degree of mechanisation has been promised to be higher in DTT and all labourer for operating the truck terminal would be employed on contract basis through labour-contractors; therefore, dwelling units for labourers is not their headache. CGTA expects that local supply of labour will be adequate to meet the demand at their truck terminal, and it would provide staff quarters for white collar employees only. Excepting in BMTT where staff/labour requirement is extremely low and where such employees are easily available from the surrounding municipal areas, the labour sector has been systematically excluded from all the plans for truck terminals. But, the Socio-economic Survey (CMDA 1978) revealed that 24 thousand headload workers, organised in gangs, serve the CBD traders and transporters and they live within the CBD in subhuman living conditions; 95 percent of the headload labourers are migrants from Orissa and Bihar and 90 percent of them stay here leaving behind their families in native villages. The general pattern and composition of this large army of essential labourers have not changed substantially over the decades; in the event of dispersal of wholesale trade and transshipment of cargo at truck terminals it is likely that a major part of such

migrated labour force will settle in the periphery of new truck terminals; and the apprehension of a growth of new shanties / slums is not unfounded.

In our opinion, it might be the concern of the state to provide shelter to this army of labourers; and dormitories constructed and managed on franchise basis is not an impossible proposition. However, marginalisation of the labour sector is a pointer to the fact that land use planning should be complemented by a socio-economic study the absence of which may reduce a master plan to a mere architectural blue print. It is ironical to note in this context that the Traffic and Transportation Master Plan for KMA 2001 – 2025 has identified economically weaker sections and low income groups as 'the target group' of urban development; "...metropolitan development would be meaningless, if they are kept outside the purview of the programme".^x

(e) Other Land related problems :

The experience of Kona Truck Terminal may be an important case study to analyse the institutional capability of the official land acquisition system. While the private sector terminals made direct procurement of land within almost one year, out of a total target project area of 317.62 acres in KTT (1978) government has been able to acquire only 71.20 acres up to the end of 2001; 8.37 acres of excess land from Kona Expressway is also available.

Another land related problem is unauthorised occupancy of public land. In 1978, in addition to Kona Truck Terminal, plan for another truck terminal on the east bank at Dakshineswar (in the northern fringe of Kolkata) was chalked out – as a part of the same Calcutta Urban Transport Project – on 41 acres. In spite of World Bank clearance, the first phase of this "Truck Parking and Allied Facilities at Dakshineswar" project could not be implemented because unauthorised occupants on government land could not be rehabilitated. Similarly, the present Budge Budge project (BMTT) has been stalled for the same reason. The master planning exercise with truck terminals is, therefore, a pointer to the need for reforms in the acquisition system so that land for urban / transport infrastructure projects is available at right places and at right time.

(f) Private Capital for Truck Terminals :

Truck terminals in KMA offer many lessons regarding private capital for public use. First, the extent of private funding (direct or indirect) in the four projects taken

together is significant, – approximately 67 percent of total investment at 1999 estimates, as depicted in the following table – 6. It is to be noted that all public funding goes to land acquisition and land development. Table – 6, however, shows that excepting the uncertainty element in CGTA project, about 65 crores of rupees will be invested within 3-4 years in a specific transport infrastructure which is a new venture in KMA.

Table – 6 : Funding Pattern in Truck Terminals for KMA

Truck Terminals at (& implementing organisation)	Institutional Funding (Rs.crores)	Public Funding (Rs.crores)	Private Funding (Rs.crores)
Kona (KMDA)	6.72	<i>Public expenditure on land acquisition has been made prior to 1999 plan and therefore excluded</i>	22.40 <i>total cost to be fully covered by sale of plots</i>
Dhulagarh (CMTTL)	18.90 <i>not fully secured</i>	...	19.68
Serampore (CGTA)	<i>uncertain</i>	...	22.78
BudgeBudge (WBTIDC)	3.45	2.30	...
<i>Totals</i> =	29.07	2.30	64.86 = 67.40% of total

Secondly, the case of CGTAN and the extent of unsecured loan in DTT clearly show that domestic financial institutions are shy in financing infrastructure or providing venture capital. The CGTA project is also an eye-opener to the fact that, given the nature of infrastructural investment, one way of arousing private sector interest in infrastructure projects is the availability of soft term loan. At present, CGTA Nagar is a distant dream without institutional funding. It is in this context that we may analyse the nature of partnership in DTT and the scope for capital market involvement; because, one way of compensating for the fiscal incapacities of the state in infrastructure projects is resource mobilisation through the capital market.

(g) Partnership without a partner :

Rakesh Mohan Committee (1996) suggested that in Infrastructure Projects, the Private Promoter should be required to bring in at least 15 percent of the project cost as their equity to hedge against possibilities of abandonment^{xi}. In the case of DTT an opposite story has come up. According to the initial MoU in 1998, West Bengal Transport

Infrastructure Development Corporation (WBTIDC) was committed to provide 11 percent of the equity (approximately 2.2 percent of project cost); but it is the public partner who has shrugged off all financial responsibilities without assigning any reason. Amidst such lack of transparency, DTT has virtually become a private project with the marketable public collaboration brand 'WBTIDC' which is now supposed to look after the technical aspects of the project only. The operation and control of the entire terminal would also be an exclusive business of Calcutta Mumbai Truck Terminal Limited (CMTTL).

While WBTIDC is unwilling to exercise its right to raise funds by capital market participation, CMTTL raises fund only through *private distribution and placement* of shares. Thus the promoters providing 24.5 percent of the total venture capital would enjoy 100 percent of the dividend and they expect, in terms of financial flows, to break even within three to four years. This is possible because,

- (1) more than 26 percent of the project cost would be recovered within the second year by way of sale of space and lease premium on facilities provided; and
- (2) net profit ratio and average Debt Service Coverage Ratio is satisfactory.

CMTTL has studied the project viability at commercial rate of return with a long term perspective of thirty years, has taken a safe assumption of full capacity utilisation on the seventh year and is expecting net profit ratio to touch thirty percent in the eighth year. It is, therefore, surprising that WBTIDC has backed out.

Another fund raising and disbursing agency in the state for infrastructure projects is West Bengal Infrastructure Development Finance Corporation (a wholly owned subsidiary of the Government of West Bengal); but its performance as a nodal agency for infrastructural finance in metropolitan planning is extremely poor and lacks in transparency as per the report of the Comptroller and Auditor General of India for the year ending 31 March 2001.

(h) **Viable Options :** The case of DTT could have been a small case for WBTIDC to test the latent potential of capital / debt market with an eye to corporatisation of transport infrastructure in Kolkata Metropolitan Area; but the above paragraphs reveal a miserable story how the state has given a 'walk over' in favour of the monopolist promoter. Without going into a theoretical debate on the effectiveness of public-private-

partnership (PPP) we may cite two references to represent the viable options overlooked by the state government :

- (1) Recommendations of the Rakesh Mohan Committee (1996) and other experts,
- (2) The experience of Maharashtra in a specific transport sector project.

The lessons might be useful.

As against the traditional perception of privatisation and a mistrusting relationship between the government and the private sector, Rakesh Mohan Committee favoured PPP so that "leverage would be obtained in the use of Government funds for infrastructure investment"^{xii}. For meaningful commercialisation of infrastructure projects, the committee recommended that the government must –

- (i) ensure that project risks are clearly demarcated and allocated to different stake holders,
- (ii) set up a transparent regulatory framework so that Build-Operate-Transfer (BOT) type projects are easier to negotiate and implement,
- (iii) take significant equity positions in projects to crowd in commercial equity and debt, and once the project becomes viable, disinvest and reinvest in new projects in the nature of a venture capitalist.^{xiii}

In DTT the state has followed none of the above recommendations and in KTT the state has taken the simple position of a private developer. BMTT will be run on a commercial basis and its commercial rate of return is satisfactory; but equity participation of WBTIDC is absolutely weak here; major dependence on HUDCO and absence of any private partner makes this project uncomparable to DTT. WBTIDC is going to implement the first BOT project in the transport sector of the state, viz. the Vivekananda Road Flyover in Kolkata. Therefore, significant involvement in DTT and the partnership management experience in this project would have enabled the government to identify the risks in contract management and to design better development franchise agreement in future. The opportunity has not been availed of and the viability of joint sector participation in infrastructure can not be tested in Dhulagarh Truck Terminal.

Given the expansion of Indian capital market since 1980s, Rakesh Mohan Committee estimated that required resource mobilisation through it between 2000-01 to

2005-6 amounts to about 40 percent of total infrastructure investments^{xiv}. Apart from the institutional options for financing infrastructure development, the committee as well as other individual economists have suggested effective measures for the growth of both primary and secondary stock / debt markets through appropriate instruments. In the case of Dhulagarh Truck Terminal the direct private placement of shares of the promoter company CMTTL is an inefficient mode of resource mobilisation because, –

- (i) it encourages monopolistic power of the promoter;^{xv}
- (ii) it fails to assert the market response / potential for larger future projects.

The central issue is not merely adequacy of funds; more important is the institutional mechanism that brings together the savers and the ultimate borrowers in the infrastructure sector.

Consortium of private developer companies is another option. The present author in his personal investigation in Howrah has found that small / medium developers, – of annual turn over between 2 to 6 crores of rupees, – are willing to handle state controlled projects through their own consortiums either on PPP basis or on franchise basis. Any move in this direction would enable the government to mitigate partnership risks and to guide the private venturists more effectively.

The success story of Maharashtra State Road Development Corporation (MSRDC) may be of great interest as a case study where privatisation has been done with a significant participation of the state^{xvi}. In 1994 Maharashtra Govt. decided on the construction of a 10-lane Mumbai – Pune Expressway (Rs.1600 crores project), but through tender procedure it realised that response of the private companies was inadequate and the lone bid was too high. The institutional creation of MSRDC (1997) was a bold attempt to meet this challenge by carving out a part of the state PWD Department, coordinating it with other involved departments and agencies through a high powered steering committee and, of course, expeditiously raising capital for organising timely construction of the project. MSRDC capital was raised from direct placement to financial institutions like ICICI and commercial banks and through tax-free infrastructure bonds. The last item (bonds) can be viewed as a wide-scale public support either for the project or for the financial instrument guaranteed by the state government. On the whole,

there has been an upgradation of construction skill, technology and capacity in the state through the way MSRDC operated.

WBTIDC was born almost on the same date; but it has failed to earn the confidence of the public through participation in the bond market, it has not been able to regulate the functioning of the private partner nor has it been able to enhance the efficiency of the partner. An absolute lack of co-ordination between WBTIDC and Kolkata Metropolitan Development Authority is also unfortunate.

7. Summary and Conclusions

A few decades ago, prompted by the question of relocating wholesale trade from the CBD of Kolkata to the fringe areas of KMA, the state government started planning Truck Terminals. After a long futile exercise in Master Planning, KMDA has now concentrated its action plan to a reduced scale of truck terminal infrastructure while the basic question of relocation has been left to market forces. Meanwhile, diverse organisations of truck terminals are emerging at different locations of KMA rendering competition possible. But the outcome is still uncertain in various respects, because success of private sector involvement in truck terminal projects is constrained by :

- (i) lack of adequate and unambiguous public interest in public-private partnership;
- (ii) neglect of governance issues in private participation;
- (iii) paradigm shift by the metropolitan authority unsupported by institutional reforms and exploration of capital market potential;
- (iv) shyness of financial institutions for assisting ventures in transport infrastructure, although road transport has been granted 'industry status' by the Government of India in 2000.

It is, therefore, time for realisation that (a) Master Planning without capabilities for implementation may be useless, but at the same time, (b) public-private partnership (PPP) may not be a panacea for all inabilities of the government. Even if development through shortages is the accepted route and private capital is increasingly involved in the infrastructure sector, the state has always a complementary role to play. Feasibility studies, identification of eligible projects, modes of PPP – its contracts and concessions,

the guarantee framework, dissemination of information, regulatory set up, financial and fiscal incentives etc are the areas where the state may perform in a meaningful way. The experience with truck terminals for KMA has projected a 'state failure' in this respect.

As regards PPP in infrastructure, capabilities of the private sector must also be subjected to proper assessment. There is no reason for assuming that the private sector has the necessary motivation and expertise to handle cases of social overheads. On the other hand, all guidelines and international experiences on PPP suggest that ill-governed participation of private capital in infrastructure is potentially more risky than no participation at all. Governance issues for commercialisation are more important than commercialisation itself; institutions are to be created for an efficient functioning of the market forces. Given the colossal wastage of money, time and human resources in empty planning, it is high time that more attention is put to formulation of a strategy for encouraging and, at the same time, governing private capital in infrastructure. The lessons from deliverance of truck terminals are : Either (a) the government reaffirms its confidence in Master Planning and finds out appropriate solution to fiscal constraints, or (b) the govt. encourages controlled expansion of private capital in infrastructure, so that growth of monopoly is avoided. In both the cases, public participation in the capital / debt market is essential. It is, therefore, our humble submission that instead of a non-transparent mobilisation of private capital in transport sector projects, a public corporation like WBTIDC having overall responsibility of project management should share the experiences of similar organisations in other parts of the country and it should function in close collaboration with the Metropolitan Planning Authority. Whatever be the connotations of the term 'privatisation', it not only implies an increased role for the private sector, but also consistently refers to a change in responsibility to be borne by the public sector.

Notes and References

ⁱ CMDA (2001), Master Plan for Traffic and Transportation in Calcutta Metropolitan Area 2001-2025, Executive Summary, p.47.

ⁱⁱ *Ibid*; Executive Summary Sec. 8.7, p.53; Full text, Sec. 8.8, p.233

ⁱⁱⁱ To compensate for inadequate response to the initial advertisement, KMDA, in its second advertisement dated 23rd May 2002, reduced the reserved price of some categories of plots by about 33 percent, regrouped some of the plots and waived certain eligibility criteria for the allottees.

^{iv} In the midst of weak institutional environment for taking care of infrastructure and facilities at the truck terminal centre, only allotted plots of developed land along with some circulation roads within the site, constitute the Kona Truck Terminal inaugurated on the 20th June 2003. The real hub is still a remote possibility, while a 'logistics terminal' with foreign consultancy is the name of new dream at KTT.

^v Phase I of Dhulagarh Truck Terminal was initially planned on an area of 33 acres with the ultimate target scale of 100 acres; in the process of implementing the first phase plan, additional areas of land have been acquired and included into this plan which has been modified for such expansion. Area under possession of CMTTL at the end of 2002 is about 50 acres and the first phase of this truck terminal is going to be opened on an area of more than 33 acres and actual construction is in the process of continuous expansion. Our analysis has been based on the original plan-estimates, and the basic conclusions of this study remain unaffected by the expansion of project area.

^{vi} According to WBTIDC sources, more than 82 percent of target was fulfilled within six months from the date of the first advertisement on 07 June 2001.

^{vii} NH-2, NH-6 and NH-34 are the three arterial highways through which Kolkata Metropolitan Area (KMA) is connected with rest of the country; traffic flows through these arteries determine the demand for transport infrastructure within KMA.

^{viii} *Total cost of developed land* (1) has been derived by taking into account costs of land acquisition, land development, boundary walls, road construction, electricity, drainage and all other pre-operative contingencies; *Gross area for allotment* (2) has been derived by excluding from the project area all land under circulation, parking, other common areas and open space. *Cost of developed land per area unit* = (1) divided by (2).

Physical Layout Plans for CGTAN and BMTT have not been available; hence KTT norms have been applied to these terminals for land price determination.

^{ix} The last occasion Transport Department, Government of West Bengal constituted a committee for "determination of reasonable freight rates for goods transport vehicles" is in November 1999. The committee made its recommendations within six weeks, but the fixation of freight rate was kept in abeyance. In May 2000, in view of a hike in diesel price, the Transport Department notified a minimum freight rate, which was lower than the rate recommended by the expert committee in December 1999. The current rate is subject to market forces.

The bargaining power of truck owners is also affected by factors like: (1) majority of single truck owners, (2) unfavourable banking practice, (3) downward pressure on freight rate exerted by trucks from other states entering Kolkata, (4) truck owners becoming the victim of extra legal extortions.

^x Master Plan for Traffic & Transportation for KMA 2001-2025; *Executive Summary*, op. cit., p19.

^{xi} The India Infrastructure Report (Recommendations of Rakesh Mohan Committee), New Delhi 1996, p.368.

^{xiii} *Ibid*, p.6

^{xiii} *Ibid*, p.6

^{xiv} *Ibid*, p.9

^{xv} This may be dangerous if the past track records of the promoter are not properly scrutinized. A separation between project selection and promoter selection is also extremely important in this context.

^{xvi} For details of the story, Dandekar and Mahajan (2001), "MSRDC and Mumbai-Pune Expressway", *Economic and Political Weekly*, Vol. XXXVI, No.7.

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