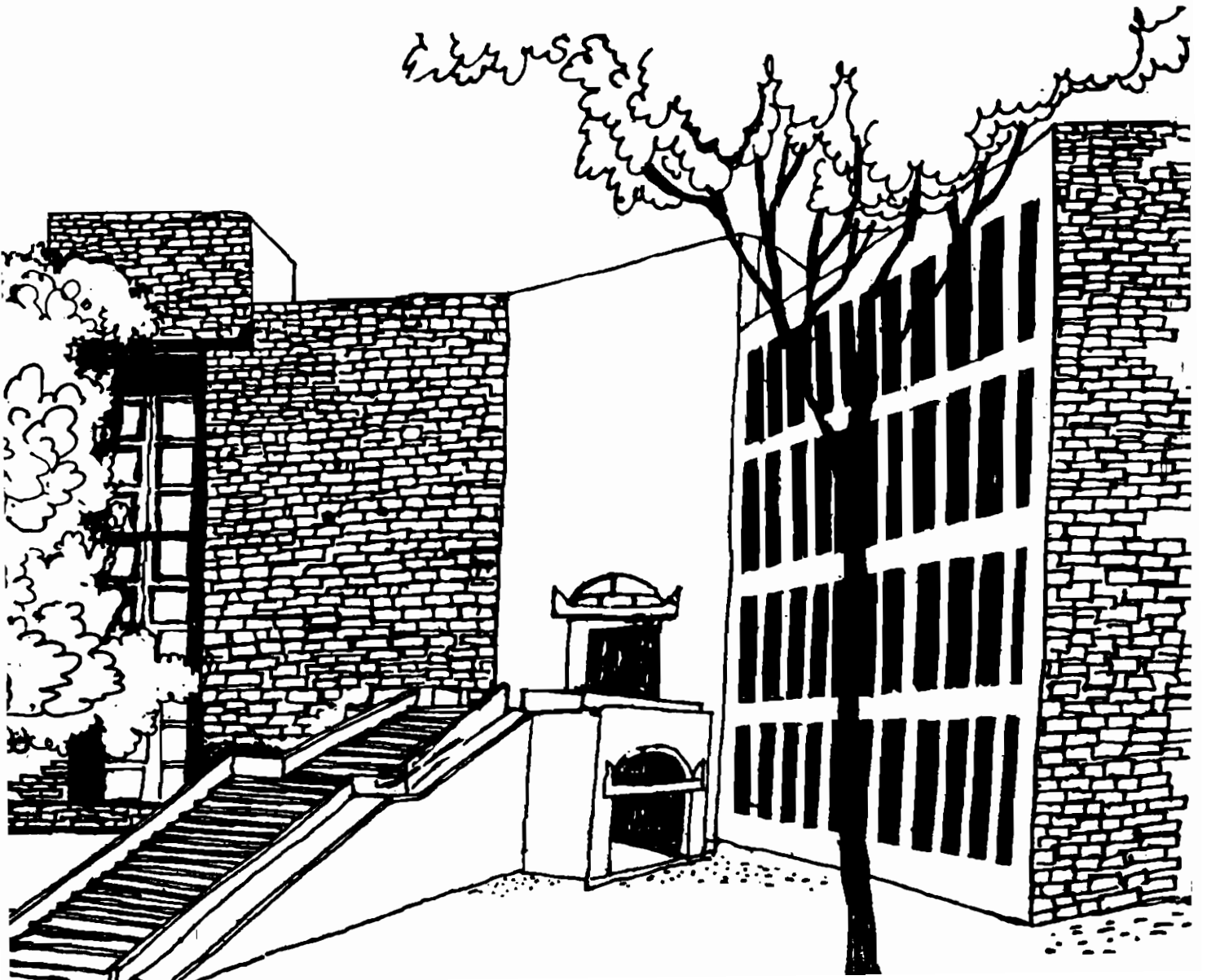




Working Paper



**Privatization of Ports -
Framework for Governmental
Action**

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ABSTRACT

Given the delays and congestions at ports, leading to extensive demurrage charges for ships, a lot of attention on improving port productivity through better management systems and infrastructure developments are being considered. Privatization of ports at various levels is being proposed as a structural solution. The Government of India as well as many of the coastal states in India are examining this issue rather seriously. The author has been involved in a study for a state with a large coastline having over forty notified ports, on this issue of privatization. The objectives of this study were to examine and recommend:

- (a) Which of the present ports should be privatized?
- (b) Possible locations for future privately owned ports based on traffic considerations.
- (c) Which of the port-related services should be privatized?
- (d) The terms and conditions for selecting the parties for private ownership and/or provision of services.
- (e) The process of smooth implementation of privatization.

As part of the methodology, the author also studied the experiences of a few countries abroad as well as nearly 10 major ports spread all over the country. This paper reports on this study and the development of a conceptual framework for governmental action for privatization of ports.

1. INTRODUCTION

This paper focuses on a framework for Governmental action regarding privatization of ports in the State of Gujarat in India. The results are based on a study of the ports and port related activities under the charge of an autonomous Government organization called Gujarat Maritime Board (GMB), which looks after all the minor and intermediate ports on the coastline of Gujarat.

The various ports on the Indian coastline are classified as major (eleven in number, autonomously managed and reporting to the Central Government) and intermediate and minor (161 in number, managed by the respective State Governments in which the ports are located). Out of the 161 minor and intermediate ports of the country, the GMB has 40 ports under its charge. The ports fall into four classifications: all weather direct berthing ports (seven), all weather lighterage ports (three), fair weather lighterage ports (seven) and ports handling sailing vessels only (twenty three). One of the major ports, namely Kandla, is located on the Gujarat coastline.

Gujarat has always been a significant maritime state, due to its coastline, shape and location (Figure 1), enabling it to serve a vast hinterland. The coastline of Gujarat, which is 1600 kms and the longest in the country, forms nearly 30 per cent of the national coastline of 5,660 kms. Based on 1989-90 data, Gujarat contributes to over 16 per cent of the national port traffic. This traffic is both from Kandla and the GMB ports. The traffic share is less than the share of the coastline. Gujarat stands third, after Maharashtra and Tamilnadu.

Though Gujarat has only 25 per cent of the minor and intermediate ports of the country, the share of traffic of GMB ports as a proportion of total traffic in minor and intermediate ports was 61 per cent in 1989-90. The traffic in minor and intermediate ports in the country, as a proportion of total port traffic is 7 per cent, while for Gujarat, the same figure is 26 per cent. In the recent past, the significance of GMB port traffic, both as a proportion of the country's minor and intermediate port traffic, and total port traffic in Gujarat, has been going up. The current figures are over 70 per cent and 30 per cent respectively.

The total revenue of GMB for the year 1990-91 was Rs 360 million resulting in an operating surplus of over Rs 80 million. These results are from an investment of about Rs 1000 million at book value. The funding for the assets has been primarily through loans from the government, for which interest has been charged at lower than market rates. This raises the question of the financial viability of the port system as a whole. However, it is expected that the ports accounting for the major share of the traffic would be viable (It should be noted that nearly 80% of the traffic is accounted for by only six out of the forty ports).

Further, Gujarat has been industrializing at a rapid pace and is expected to continue to do so, especially in the current context of liberalization, generating significant additional traffic for the ports. Given the large number of port sites in Gujarat, their potential commercial viability and the current policy (both at the Centre and the State) of minimizing the role of the government, privatization of ports as a catalyst for growth gains importance as an area for study. In this context, the term privatization is used to connote private ownership (total or partial) and/or private management of port related services (some or all).

The scope of our study included an examination of:

- a) Current port operations.
- b) Traffic potential for GMB based on the industrial development in Gujarat and neighbouring hinterland states (Rajasthan and Madhya Pradesh), resulting in port traffic demand.
- c) Gaps in supply and demand.
- d) Experiences of privatization in major ports and ports in other countries.
- e) Rationale for privatization.
- f) Framework for privatization.

2. GMB PORT OPERATIONS - CURRENT SCENARIO

In this section we examine the current scenario of the overall port operations under GMB. The observations outlined below are based on the analysis of data obtained during visits and discussions.

For over 20 years between 1960-61 till 1981-82, the total traffic in the intermediate and minor ports has fluctuated between two and three million tons (Exhibit 1). From 1982-83 there has been a significant increase in traffic reaching an all time high of 10.6 million tons in 1992-93, at a annual growth rate of over 23 per cent. This achievement can be attributed primarily to the setting up of Gujarat Maritime Board as an autonomous body in 1982, as compared to the earlier management as a government department.

Even though there are 40 notified ports, nearly 80 per cent of the traffic was handled by just six ports in 1992-93 (Exhibit 2). Nearly nine per cent of the traffic by tonnage was accounted for by the shipbreaking industry at Alang. This industry in Gujarat is now the world's largest shipbreaking industry. Apart from the top six ports, there are at least three other ports where the traffic has been growing and the potential seems high.

In 1992-93, among the commodities being imported, just six accounted for over 80 per cent and 12 accounted for 98 per cent (Exhibit 3). Iron ore, which accounts for 27 per cent of imports, is required by just one organization. Fertilizers, accounting for 19 per cent of the imports is a result of governmental allocation. The shipbreaking industry accounts for nearly 16 per cent of the imports.

In exports, during 1992-93, 50 per cent was accounted for by a single commodity, namely oil cakes (Exhibit 3). The number of organizations dealing with this commodity are many. Clinker, which accounted for 16 per cent of the exports, was provided largely by one organization. Including these two commodities, the top five accounted for 80 per cent of the exports, while the top 13 accounted for 98 per cent of the exports.

The revenue income for GMB has been increasing between 1986-87 and 1990-91, except for a dip in 1987-88. This is also reflective of the traffic handled. Between 1987-88 and 1990-91 while the traffic doubled from 3.9 million tons to 7.5 million tons, the income more than doubled from Rs 149 million to Rs 329 million. Of course, the increase in revenue would also be due to inflation.

The overall revenue per ton during the five years between 1986-87 and 1990-91 was Rs 41, Rs 38, Rs 42, Rs 46 and Rs 44 respectively. The overall revenue expenditure per ton during the same five years has been Rs 40, Rs 45, Rs 41, Not Available and Rs 33 respectively. Thus, in every year the traffic handled has been such that the revenues were more than the costs, except in 1987-88. In fact, the recent trends are such that the increase in costs are less than in proportion to the increase in revenues, thereby increasing the profitability of GMB operations. However, as was pointed out earlier, it is still an open question as what would be the real return on investment, since the investment is difficult to value.

A detailed examination of the revenue, income and expenditure shows that landing fees (wharfage) contributes almost one-third of the revenues. Other significant contributors to the revenue are shipping fees (19 per cent), lighterage (15 per cent), and "other receipts" under ports and pilotage including overtime, surcharge etc. (14 per cent). Port dues which used to be significant at 7 per cent in the mid-eighties have dropped to under 2 per cent. Lighterage has also dropped from 21 per cent to 15 per cent. This reflects an increasing trend of lighterage operations being done by private parties, due to GMB's inability to cope with the requirements. This has been a blessing in disguise for privatization.

On the expenditure side, lighterage accounts for 34 per cent of the costs, while port management accounts for 32 per cent of the costs. Shipping maintenance operations and workshops together account for 17 per cent of the costs. Dredging and surveying account for 9 per cent of the costs. Under each of these heads, the largest item is salaries and allowances, which taken together would account for over 42 per cent of the costs. The relative proportion of all these costs have more or less remained steady over the five year period of 1986-87 to 1990-91.

As we analyze the portwise total tonnage together with, the revenue and revenue expenditure for 1992-93, certain interesting points emerge (Exhibit 4). Bedi and Sikka together handled 3.2 million tons traffic bringing in a revenue of Rs 162 million. The second highest revenue was for the Bhavnagar group of ports at Rs 144 million. The significant contribution here is due to the ship breaking industry at Alang. Porbandar, handling 0.83 million tons of traffic, brought in revenues of Rs 51 million. Magdalla, which is next on the revenue list at Rs 48 million, actually handled 2.8 million tons of traffic. This reduced revenue is primarily due to reduced wharfage and lighterage charges offered to the major port users who own their own jetties and do their own lighterage operations. For that matter, the revenue per ton earned at Bedi is lower than what it is at Navlakhi and Veraval, because lighterage operations are performed by private parties. At Porbandar and Okha, lighterage does not have to be performed for most of the traffic since these are generally used as direct berthing ports. The situation is even more dramatic at Jafrabad which earns far less revenue than Okha, Navlakhi or Veraval, even though handling significantly more traffic, again due to the fact that there is no requirement of lighterage. The non-requirement of lighterage and low costs of landing are also reflected in the revenue expenditure at Magdalla and Jafrabad. At Magdalla, the landing is handled by private parties, while at Jafrabad the operations are automated.

If we examine a key measure of port productivity from the customers' perspective, i.e. the average tonnage handled per ship turn round day, the overall figure for GMB ports is 979

tons (Exhibit 5). This figure has been arrived at by obtaining a random sample of 117 ships that visited GMB ports. The data is spread over seven ports and obtained from files relating to 1991-92 and 1992-93. The average tonnage per turn-round day varies from a low of 654 tons to a high of 2,614 tons. The ports having more than 2000 tons average are all direct berthing ports, even if they are only for small ocean going vessels. The figure of 2000 plus tons is quite comparable with major ports in India which have a similar average of 2350 tons.

From the above, we can summarize that the traffic based achievements of Gujarat Maritime Board have been quite commendable in the past decade, especially in the later half. However, most of the traffic has come to GMB ports out of sheer industrial compulsions rather than a proactive thrust from GMB. Further, most of the traffic increases are in bulk commodities, from few specific organizations who have invested in handling equipment and even jetties, with a substantial coastal shipping component.

During the visits, as we spoke to the port users, it was also clear that the scope for improving productivity and thereby increasing traffic levels was substantial. Many problems due to mismanagement of port operations surfaced. The examples range from insufficient efforts on dredging, poor maintenance of essential port craft, non-availability of pilotage, bureaucratic delays in solving operational problems etc. The overall impression was that the management systems at GMB were far from desirable, thereby resulting in less than desirable service levels to the port users and shipping companies. An increase in average tonnage per ship day from 1000 tons to 1500 tons could reduce the time spent by a ship carrying 30,000 tons from 30 days to 20 days resulting in a saving of about US \$100,000 per trip (@\$10,000 per day) i.e. Rs 3 million per trip. At a current annual revenue of over Rs 500 million, it would just take 170 voyages to wipe out the benefit from the revenue as far as the nation is concerned (to account for 10 million tons of annual traffic of GMB, it would take 330 voyages of 30,000 DWT). Thus, GMB ports have to gear up to reduce the turn-round time of ships.

3. TRAFFIC POTENTIAL FOR GMB PORTS

Gujarat ports attract traffic from a vast hinterland consisting of Gujarat, Madhya Pradesh and Rajasthan. The primary commodities that the GMB ports have attracted are oil extractions (export), iron ore (import), fertilizer and raw material for fertilizer (import), clinker (both export and import), foodgrain (import), cement (export), coal (import) and bauxite (export). Apart from this, shipbreaking has become a significant industry in Gujarat and being the largest in the world, provides for a lot of scrap iron and steel. So far, except in the case of shipbreaking, there has never been a proactive and planned thrust of examining the traffic potential for the GMB ports.

The traffic in GMB ports has doubled in the past five years and is set to grow at more than an annual rate of 10 per cent (Exhibit 1). However, the potential is far more (say 20 to 30 per cent), given the industrial investments that are to take place in Gujarat and the neighbouring hinterland states of Madhya Pradesh and Rajasthan. To attract this traffic, a strategic service and development orientation is essential, with a perspective on competition from other ports.

As per December 1993 data published by the Centre for Monitoring Indian Economy, the total investments envisaged then in Gujarat, Madhya Pradesh and Rajasthan were Rs 640 billion, Rs 500 billion and Rs 180 billion respectively. This accounted for 21 per cent of the country's investment anticipated at Rs 6,350 billion. In Gujarat, the largest investments were to be in the five coastal districts. Nearly 50 per cent of the investment is in the petroleum and related organic chemicals and plastics sector. Chemicals, textiles and engineering account for about Rs 50 billion each. Mineral based industries account for nearly Rs 15 billion, while food processing is worth over Rs 10 billion.

For such investment levels, transport infrastructure would be a critical requirement. Given the nature of investments on bulk commodity based industries and the significant congestion on the Indian roads, the other modes of transportation, namely rail and water, have to take a major share of the traffic. The sectors in which most of the investments are being made either require significant raw material import (oil, coal and fertilizer) or have a significant export component (cement, textiles, other mineral based industries and food processing). Further, with the liberalization of import duties and incentives for exports, the whole import-export scenario would become very vibrant.

Looking at the major port in Gujarat, namely Kandla as a competitor, the main commodity handled there is POL (petroleum, oil and lubricants) followed by other liquids, iron and steel, and foodgrains. The marked growth is in POL, and iron and steel, trends which are likely to continue. In terms of growth, fertilizer (finished and raw material) is also significant. If we examine the traffic capacity of all the major ports planned for 1997, there is significant excess capacity for POL, iron ore and coal. For fertilizer, the capacity is significantly less than the expected traffic. For all the other cargo, the capacity seems just sufficient for the expected cargo.

This suggests that GMB could play a significant role in attracting *fertilizer* (finished and raw material) traffic as also *cement* and *coal*. To attract these commodities, commodity-specific jetties can be constructed with specialized handling equipment. The jetties should also be considered for captive infrastructure to specific organizations.

Apart from this, other captive jetties are possible for industries manufacturing *engineering products* for which again there is experience in GMB. It appears that while petroleum may not come to GMB ports since Kandla may develop capacity for handling it, *liquid chemicals* can be considered another target area.

Containerized cargo would also be available from *food processing*, and the *drugs and pharmaceuticals* industries.

Another kind of cargo that GMB would get is the *project materials and machinery* required for putting up new industries. Of course, the already established strengths in *oil extractions* and *shipbreaking* must be further developed.

Another factor in favour of traffic coming to GMB ports is the vast growth in coastal shipping. The total traffic carried by coastal shipping has almost quadrupled over the last decade, with over 30 million tons being the current figure. While general cargo is primarily carried by road and rail (partly because of the procedural problems due to customs etc.),

bulk cargo like clinker and cement, oil, coal and iron ore has started using coastal shipping. This trend is expected to continue.

We can thus summarize that the traffic potential is very high for the GMB ports. A proactive attempt on the following dimensions is bound to yield high returns:

- a) *Cargo type* : Fertilizer (finished and raw material), cement/clinker, coal, liquid chemical, iron ore, steel/engineering products, oil extractions, project materials and containerized cargo - especially processed food, and drugs and pharmaceuticals. We also add ship breaking, which provides scrap as a commodity.
- b) *Type of port use* : Primarily for captive commodity use with specialized handling equipment. Could also be captive to specific organizations.
- c) *Type of traffic* : Coastal and import/export.
- d) *Appropriate location and support infrastructure*: Since ports/jetties would be captive to commodities and/or organizations, site location to serve the appropriate hinterland/client would be very important. Apart from this, wherever the hinterland is targeted, broadgauge rail link would be crucial. Communication technology for ship to shore communication is also essential at the ports.
- e) *Reduction in ship turn-round time*: We have seen in Exhibit 5 that the average tonnage per ship turn round day in GMB ports is nearly 1000 tons. The highest being achieved is over 2600 tons (at Jafrabad), primarily due to direct berthing of small ocean going vessels and specialized handling equipment. These two attributes of the ports must be developed - i.e. increased draft wherever possible to enable direct berthing of at least small to medium ocean going vessels and commoditywise specialized handling equipment. For coastal shipping and coordination with rail, a full rake (about 2500 tons) can be considered for filling up one small ocean going vessel. This will minimize delays at port, and has implications on vessel size, draft requirements etc.

4. EXPERIENCES OF PRIVATIZATION OF MAJOR PORTS AND PORTS IN OTHER COUNTRIES

There are 11 major ports in India, six on the west coast and five on the east coast. The major ports are Bombay, Calcutta, Cochin, Jawaharlal Nehru (Bombay), Kandla, Madras, Mormugao, New Mangalore, Paradip, Tuticorin and Visakhapatnam. The total traffic handled by these 11 ports was 164 million tons in 1992-93. This excludes transshipment traffic which was to the extent of 3 million tons in 1992-93. This level of traffic meant a 97.4 per cent utilization of capacity. The Bombay Port Trust handled the highest traffic at 28.7 million tons and Jawaharlal Nehru Port Trust handled the least traffic at 2.98 million tons. Bombay, Kandla, Madras, Mormugao and Tuticorin handled more than their stated capacity.

Such a high capacity utilization takes its toll on the turn round time of ships. India has one of the highest turn round times as per international standards. In 1992-93, Calcutta had the

highest turn round time of 10.36 days while Cochin had the least turn round time of 5.5 days. Apart from capacity utilization, turn round is affected by handling rates at ports, access and maneuverability between port entrance and berths, mix of cargo, and scheduling of berths - especially special purpose berths. Considering the ships' point of view, during 1992-93, the overall tonnage handled per ship turn round day in the major ports was 2,352 tons. The highest ship productivity was achieved by Paradip at 3,559 tons per ship day, while the least was Tuticorin at 1,499 tons per ship day.

The productivity at port for Indian ports is low compared to foreign ports. A comparison between the major ports and regional foreign ports shows that only Visakhapatnam and Kandla had done better than some of the nearby foreign ports, though they are still worse than Singapore for break-bulk cargo. For containerized cargo, the productivity figures range from 59 to 307 TEUs per berth per day while for the foreign ports, they range from 600 to 3,400 TEUs per day. Singapore port, at 3,400 TEUs per day is among the best internationally.

In terms of income and expenditure, all the major ports are left with a surplus, which adds up to over Rs 5000 million for 1992-93. While this figure indicates a healthy cash flow situation, investments have often been made using subsidized capital grants and land procured at almost no cost. However, in the future, investments will have to be made from internal resources and/or borrowings and possibly by attracting private investment. To attract private investment, the profitability of port operations has to be viewed in relation to the required investments which would no longer come with subsidies. To examine return on investment for the current port operations, information on asset value in ports are not clearly discernible.

The major ports in India have been experimenting with privatization and/or have traditionally been doing certain activities like stevedoring, jetties for captive use etc. through private parties. A classification of the kinds of activities that are attempted to be privatized in major ports shows the entire gamut of port activities. The activities include infrastructure provision and its operation (jetties, handling equipment, port craft and ship repair including dry dock), port operations (stevedoring, shoreside handling, in-port haulage, pilotage, storage, security and ship services), maintenance (civil, mechanical and electrical, dredging, spillage and cleaning) and other services (transport service for employees, operation and maintenance of sewage treatment, distribution of treated water etc.). Currently, private investments of over Rs 10 billion are in the pipeline in the major ports. Enquiries to the tune of Rs 120 billion have also been floated.

Privatization of ports has proved itself as a fact of life for many countries in the 1990s and privatized ports offer firm evidence of enhanced performance. On the other hand, Singapore and Colombo are examples of highly successful public sector undertakings and at Rotterdam and Hong Kong, which can be counted amongst the most private oriented of ports, the government sector is wondering whether too much has not been left to market forces.

Malaysia has under taken the most comprehensive port privatization in Asia. Prior to privatization in 1985, the Klang Container Terminal handled 244,120 TEUs compared to

275,700 TEUs in 1987, an increase of 12 per cent. The average turn-around time also improved from 13.4 hours in 1985 to 11.3 hours in 1987.

5. CENTRAL GOVERNMENT VIEW ON PRIVATIZATION

We examine three recent committee viewpoints:

Major Ports Reforms Committee (1986): The Major Ports Reforms Committee examined the issue of induction of private capital for port development. This committee made a few suggestions on privatization in the ports, which consist of the following:

- a) Complete privatization, which is meant provision by private entrepreneur of all the facility of the port, in fact, creating a new port together with all the equipment needed and its operation and management left entirely to the entrepreneur.
- b) The entrepreneur would be left free to develop a berth in an existing port and provide equipment for user therein. In this type, civil works namely berths and back up space would be provided by the ports and other infrastructure like handling equipment etc. would be provided by the private parties.

Inter Ministerial Group (1989): The Central Government appointed an Inter Ministerial Group to go into the issues of private participation in the port sector and give its recommendations. Some of the recommendations of this group are as under:

- a) An illustrative list of services and facility which could be opened up for private parties is:
 - i) Container terminal development, operation and maintenance.
 - ii) Container and break-bulk cargo handling, warehousing and stevedoring services.
 - iii) Liquid bulk cargo handling and storage.
 - iv) Provision of tugs, pilotage and crange services to vessels.
 - v) Maintenance services, including estate maintenance.
 - vi) Dredging operations and pilotage.
- b) Privatization of new berths/captive facilities to be decided on case to case basis.
- c) Public sector organizations and reputed private sector organizations to be permitted for developing captive facilities in the major ports.
- d) Port Chairmen to be delegated with authority to enter into contracts with public sector and private sector organizations.
- e) To avoid labour unrest, government may consider introduction of private sector in green field situation.

The above group further recommended that lease of the port services should be made for a longer period, say 25 to 30 years, in view of the long gestation period of developing a

port project. Also, the terms and conditions for agreement should be worked out in conformity with the overall guidelines issued by the Central Government in other sectors and it should be framed by professionals in the subject. The group also recommended that the Port Chairmen may be clothed with adequate authority to induct public or private sector companies, alone or jointly in clearly demarcated functional areas, exclusively or in conjunction with the port and to the extent considered necessary.

Ministry of Surface Transport (1993): The Central Government Ministry of Surface Transport issued guidelines in 1993, to be followed by the Port Trusts while preparing schemes inviting private sector participation in the ports. Relevant excerpts are given below:

1. In the context of vast changing technologies in transport sector, the Indian ports require massive modernization in order to cater to the over increasing international trade especially in the context of the international shipping as a whole. In view of the limited resources available with the Indian ports for such a large scale modernization, this cannot be taken care by the ports solely from their own resources. In this context, the participation of the private sector in providing financial, technological, managerial inputs in the Indian ports sector are inevitable. In the circumstances, the ports may be required to go in for private participation in various activities currently being performed in-house. In this context it would be helpful to lay down broad guidelines for involving the private sector. The Ministry have considered the various issues involved and have attempted to lay down broad guidelines for the ports to enable them to decide about the private participation in conformity with the various objectives relevant to their areas of functioning.

2. While considering the proposal for private participation, the port should aim at:

- a) Improvement of efficiency and customer's satisfaction;
- b) Revenue generation and augmentation of financial viability; and
- c) New enterprise culture.

3. The main objective for the ports should be to move towards the concept of becoming a land lord port. Ownership of the port should be with the port but its functions like development of port facilities, provision of services and labour management should be gradually transferred to the private sector.

4. The options in respect of obtaining private participation in various port activities may be categorized as given below:

- a) Lease of assets and equipment.
- b) Management contract for running a port facility or providing a specific service.
- c) Leasing certain well defined activities or specific services.
- d) Privatization, i.e. through transfer of ownership to private parties.

5. The method of obtaining private participation should be on the basis of open competitive bidding in which the domestic as well as the foreign parties should be treated on equal footing. The purpose of leasing of port facilities/services to private

parties should be spelt out while inviting bids and salient points regarding the terms and conditions should be spelt out in clear terms at the initial stage. So far as the privatization, i.e. on a transfer of ownership of the port property to the private party is concerned, it can take several forms:

a) Full privatization:

- i) By sale of assets by competitive tenders.
- ii) Negotiate sale.

b) Partial privatization:

- i) BOT (built, operate and transfer).
- ii) Through joint venture, by constituting a separate company to transfer the ownership of the assets to that company in which the port should have major equity participation.

6. It needs to be emphasized that in case of proposal to transfer the ownership instead of going in for full privatization, partial privatization should be preferable.

7. The various areas which may be provided for private participation are:

- a) Various cargo handling terminals, e.g. container terminal, bulk terminal etc.
- b) Warehousing and storage facilities.
- c) General cargo berth/berths.
- d) Tugs, pilotage, cranes services.
- e) Dry dock facilities, ship repairing, water supply etc.

These areas appear relatively easier to privatize and also at the same time they are likely to attract a reasonable response from the private sector.

8. The Port Trusts should make detailed booklets about their ports giving all relevant information like the equipment at the port, the draught conditions as well as the type of cargo which are available and potential traffic projections. In addition, if the private entrepreneurs require any detailed help regarding preparation of projects, the port should help in preparing detailed project reports etc. which could be sold to the private investors. To promote these activities the port may constitute an Investment Promotion Cell which could monitor and provide a single window cell to the interested parties and report the progress made in this regard on a half yearly basis to this Ministry.

9. Eventually, the port should aim at providing a broad regulatory framework which ensures that services are efficiently performed by the private sector and there is competitiveness in the services provided by the port. Performance standards for operations by the private sector should be laid down.

10. In certain cases foreign private investors could show interest in investing in port facilities/services. In such cases, clearance from Department of Industrial Development and Ministry of Finance could have to be obtained. Norms regarding debt equity ratio for joint venture companies to be quoted in this regard by the ports

are to be in accordance with the existing guidelines issued by the Government from time to time.

6. STRATEGIES FOR PRIVATIZATION IN GMB

The GMB has already experimented with different forms of privatisation. Be it stevedoring, or lighterage, or equipment provision on a jetty, or a complete investment in a jetty with equipment, or even a complete port, the whole range of privatisation efforts are available under GMB. In an earlier section we have examined the traffic potential for GMB and concluded that the potential is very good provided it is strategically sought. It is also clear that the thrust is towards privatisation, as seen in the experiences of major ports in India and abroad and in the perspectives of the Central Government.

In this context, it is useful to laydown as a framework, the criteria, a strategies and implementation process including the pricing for privatisation.

The important criteria for considering any form of privatization in GMB should be:

- a) Development of new infrastructure.
- b) Reduced detention to mother vessels.
- c) Implications on GMB employees.
- d) Implications on national security.
- e) A reasonable level of competition (as perceived by users), to keep prices low and service quality high.

Towards this, the following strategies emerge:

- a) **Debottlenecking activities associated with the handling of a mother ship to reduce the total detention time.** This could also involve privatization in areas like lighterage, port craft, handling equipment, and storage area and facilities. In the area of pilotage, while complete pilotage privatization may not be possible, a larger pool of pilots with better incentives could be considered.
- b) **Improvement of essential support infrastructure in a few selected existing ports by GMB to attract general goods.** Such improvements are essential in dredging for draft requirements, direct berthing facilities, proper storage and handling facilities, broad gauge rail connections, and communication facilities (satellite based systems, electronic data interchange). It is important that on a few key parameters, like draft, channel width, night navigation requirements etc., strict norms should be laid out and maintained by GMB as its commitment to the port customers, barring unanticipated effects of major natural phenomena.
- c) **Development of new jetties or specialized equipment on jetties in existing GMB ports by private parties, both for general and captive use.** While it is expected that the parties would generally come forth only for captive and/or specialized use, such investment for general use must also be encouraged, with pricing freedom. GMB however would collect its rent and appropriate charges.

- d) **Development of new ports by private parties, with overall regulation by GMB.** This could again be for captive use or general use. In this case, the private party would have to maintain the entire port infrastructure, including the channel, navigation facilities, etc. Pricing freedom should be provided. We visualize that most parties would consider such investment as in-house infrastructure in a large transport intensive industry, with occasional provision of services to other similar industries. Only a few of the organizations maybe willing to view "port services" as a business in itself (It would be quite surprising even if say three or more ports were taken up for total development by private parties along the Gujarat coastline for general use, during the initial years).

To catalyze the strategies mentioned above, GMB will have to consider *appropriate charges*. In the case of infrastructure development by private parties which could be done on long term lease basis, the corresponding charges have to be waived by GMB. In the case of the privatized operations, time based contracts should be considered, with a fee payable to GMB. Pricing freedom should be provided for private parties in their various activities. This will not be dysfunctional since users have enough time to make a considered decision on choice of ports which would be available in reasonable numbers (say - every 200 kms).

Evaluation of private parties for infrastructure development and port operations will be crucial. For investment in infrastructure, large professionally managed organizations with sufficient experience, technical expertise and significant interest in captive commodity should only be considered. For port operations, the parties' experience and expertise would be important.

For improvement in infrastructure by GMB as per (b) above, given the resource constraints from the government, *funds from the capital market* should be considered, by focussing development on a few selected existing ports which would be viable for public use. However, some budgetary support from the government would be essential in the initial years. This is justifiable since the benefits of a port extend to the whole state.

While going about privatization, the *implications on GMB employees* needs to be handled sensitively. At every stage, GMB employees should be taken into confidence. While job security *per se* would be a concern, most skilled employees would be required even if a certain activity is privatized. In any case, a large level of privatization would come only through greenfield sites. While this would not have a direct impact on employment, in the long run it would affect some of the current GMB port traffic, thereby reducing the need for manpower. It is also useful to keep in view the age profile of GMB staff based on data supplied by five ports. Out of nearly 1,400 employees in these ports, over 50 per cent are due to retire in under 20 years. Among those in the younger category, over two-thirds are skilled and should have a good reemployment value. Effectively, the problem of disgruntled staff may be restricted to a small percentage, for whom special efforts of retraining, skill imparting etc. would have to be considered.

Regarding issues of *national security*, discussions were held both with the Coast Guard and Customs authorities. While the Coast Guard authorities thought that privatization had both advantages and disadvantages, they were more concerned about how their own vessels would be treated in private ports. A priority treatment to them may need to be specifically

stated in any contract terms with private ports/jetties. The customs authorities did not see any special problems due to privatization. During our discussions, they spoke of recent clearances they had given to private parties and also referred to earlier such clearances, on account of which they had no special problems.

The *new role of GMB* would include the following:

- a) A regulator and a conservator of the coastline of Gujarat.
- b) A landlord in which tenants have sufficient economic freedom to invest in and efficiently use port infrastructure.
- c) A catalyst for port development by playing a proactive market oriented role in attracting traffic.
- d) A nodal agency and government interface role to facilitate processes and procedures in port development.

While the GMB (and in some sense, the Gujarat Government) show a lot of "innovativeness" in their approach to development, *sustainable management systems* for efficiency are lacking. This needs to be corrected. An openness to consider different forms of privatization backed with proper rules and systems to enable the private parties to "play the game" well is a must. This will help port development and consequently the industrial advancement of Gujarat.

In light of the above, it is imperative to improve the overall *managerial capabilities* of GMB to make it a forward looking and proactive organization. Corporatization of GMB should be considered for increased autonomy. The middle, senior and top management should be professionalized, with appropriate direct recruitment, salary benefits and managerial training.

7. CRITERIA FOR SELECTION OF PARTIES AND FRAMEWORK FOR CHARGES

7.1 Criteria for Selection of Parties

We examine this under two heads, namely infrastructure development and port operations.

Infrastructure Development: For investment in infrastructure, we propose the following set of six criteria for evaluation of parties and their organizations making proposals:

- a) Size of the organization: They should already be a medium to large sized organization.
- b) Management quality: The company should be professionally run with proper systems in place.
- c) Experience with ports: The organization should have sufficient experience with ports, either as a user or being involved in port operations in a significant manner.

- d) **Relevant expertise:** The company should have sufficient technological manpower and demonstrated expertise in port infrastructure requirements.
- e) **Financial viability:** The company should be financially viable with sufficient cash for investment as well as a proper financing plan for their scheme.
- f) **Interest in captive commodity:** The organization should be in a position to provide a significant share of the traffic either through commitments of a sister industrial organization or through organizations with whom they have been dealing quite consistently.

Port Operations: For evaluating private parties making proposals for port operations, we propose the following set of three criteria:

- a) **Experience with ports:** The organization must have sufficient understanding and experience with ports.
- b) **Relevant expertise:** The organization must have sufficient technological and managerial manpower and knowledge of port operations.
- c) **Infrastructure support:** The organization must have the necessary infrastructure support that would enable them to provide the required port related service. This would imply having the skilled manpower, port craft, handling equipment etc. as needed.

7.2 Framework for Charges

The current structure of charges levied by GMB varies on different factors, either due to use of private jetties or private services. The most striking of the charges is the wharfage charge, whose rate varies depending upon use of private jetties. The lighterage charge also varies quite significantly, depending upon whether the ship has berthed directly or not.

Based on a comparison of net container handling charges at various ports in India and the nearby Asian region, it is quite clear that the productivity achieved in foreign ports gives them a strong price advantage over Indian Ports, even though it is often claimed that labour is cheaper in India. For example, the container handling costs at Singapore could be as low as \$281 per TEU, while in India, at Bombay, the costs could run as high as \$530 per TEU. The total charges applicable in GMB is a little under \$140 per TEU. This is quite a competitive price and reflects the price advantage that GMB can enjoy.

Thus the framework of charges should be such that GMB can retain its overall price advantage that it can offer to customers. Under privatization, whatever rents/royalties are levied should keep in mind the cost addition to the private parties, who would now be needing this essential competitive advantage. Of course, the profitability of GMB and consequent contribution to the State Government's revenues should also be a consideration.

We examine the framework of charges under two heads, namely infrastructure development and port operations.

Infrastructure Development: In the case of infrastructure development, the party should be willing to pay a minimum periodic (say annual) rent/royalty for the following rights:

- a) Access to water front
- b) Equipment installation

This royalty is payable to the Gujarat Maritime Board. Apart from this, a per ton rate is leviable on the traffic handled.

Apart from the criteria listed above for evaluating parties, they should be asked to make a bid in which the royalty amount and the per ton rate should be specified by the party. Everything else being equal, the parties bringing in the highest expected revenue should be considered.

Since infrastructure investments would run close to Rs 1000 million, the party must be given rights for at least fifty years, to enable them to think long term.

Port Operations: Here we consider two kinds of port operations:

- a) Those in which the GMB is directly responsible to customer, but gets the job done through private parties.
- b) Those in which the private parties are directly responsible to the customer, but are given rights of port operations by GMB.

In the first instance, which include essential activities like dredging (maintenance of right of way), pilotage, maintenance of port infrastructure etc., charges levied by GMB from port users in one form or the other should pay for "private contractors" who could do the above mentioned tasks. Such contractors must be selected for the lowest bids made for a given service level, which should be monitored by the GMB. Such contracts can be given out on a periodic basis, say annually, or on a target achievement basis.

In the second instance, which include activities specific to each port user's requirements like loading-unloading operations, storage and warehousing, water provision and chandlery, bunkering, ship repair and dry docking etc., different parties can be authorized to perform these tasks for a charge which they can directly levy from the port users. However, if the service is to be privatized, more than one service provider must be ensured so that competition can control prices. A fixed royalty and a proportion of the earnings could be made payable to GMB. The license to such parties can be given for a period like one year, renewable if the party is providing the service to the port users' satisfaction.

Figure : 1

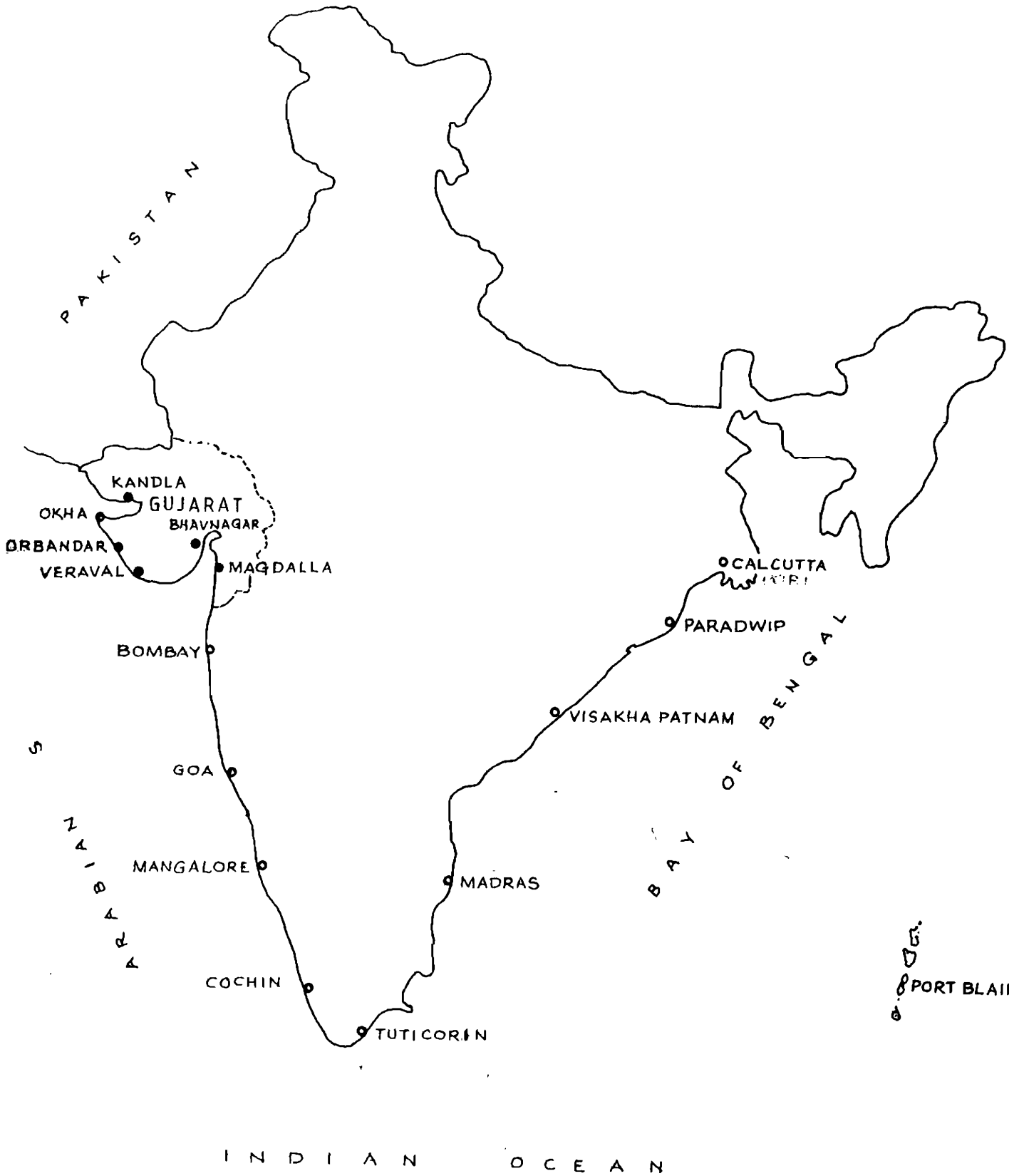


Exhibit 1				
Yearwise Total Traffic of All the GMB Ports (^{'000} Tonnes)				
S.No.	Year	Import	Export	Total
1	1960-61	750	1,595	2,345
2	1961-62	889	1,578	2,467
3	1962-63	1,206	1,821	3,027
4	1963-64	1,191	1,953	3,144
5	1964-65	1,404	1,789	3,193
6	1965-66	1,602	1,660	3,262
7	1966-67	1,746	1,823	3,569
8	1967-68	1,707	1,923	3,630
9	1968-69	1,382	2,316	3,698
10	1969-70	1,221	2,059	3,280
11	1970-71	704	1,961	2,665
12	1971-72	866	2,109	2,975
13	1972-73	944	2,050	2,994
14	1973-74	1,047	1,774	2,821
15	1974-75	1,247	1,779	3,026
16	1975-76	1,219	1,883	3,102
17	1976-77	624	2,203	2,827
18	1978-79	580	1,465	2,045
19	1979-80	762	1,314	2,076
20	1980-81	1,040	1,420	2,460
21	1981-82	1,711	1,277	2,988
22	1982-83	1,450	1,731	3,181
23	1983-84	2,694	1,520	4,214
24	1984-85	3,034	1,773	4,807
25	1985-86	3,416	1,711	5,127
26	1986-87	2,933	1,899	4,832
27	1987-88	2,158	1,735	3,893
28	1988-89	3,367	2,245	5,612
29	1989-90	3,954	3,131	7,085
30	1990-91	4,152	3,400	7,552
31	1991-92	4,849	4,052	8,901
32	1992-93	6,096	4,544	10,640
Note :	Gujarat Maritime Board was setup in 1982			
Source: 1.	Report of the Steering Group on Ports Including Coastal Zone Management for Seventh Five Year Plan, Ports and Fisheries Department, 1984 (for 1960-61 to 1982-83 data)			
2.	Compiled from GMB Internal Data, 1993 (for 1983-83 to 1992-93 data)			

Exhibit 2						
Portwise Traffic for 1992-93 ('000 Tonnes)						
S.No.	Name of Port	Import	Export	Total	% Of Total	Cumulative %
1	Magdalla	2,425	372	2,797	26.29%	26.29%
2	Bedi	499	2,123	2,623	24.65%	50.93%
3	Porbandar	156	669	825	7.75%	58.69%
4	Jafrabad	0	709	709	6.66%	65.35%
5	Bhavnagar	569	107	675	6.35%	71.69%
6	Sikka	465	137	602	5.66%	77.36%
7	Okha	382	170	552	5.19%	82.54%
8	Navlakhi	344	80	424	3.98%	86.53%
9	Veraval	257	94	351	3.30%	89.82%
10	Mandvi	22	45	67	0.63%	90.45%
11	L.D.T.	943	0	943	8.86%	99.31%
12	Other Minor Ports	33	40	73	0.69%	100.00%
13	Total	6,096	4,545	10,641	100.00%	

Source : Compiled from GMB Internal Data, 1993

Exhibit 3

Commoditywise Import Traffic ('000 Tonnes)									
S. No.	Commodities	1988-89	1989-90	1990-91	1991-92	1992-93	For 1992-93 % Of Total	Cumulative %	% Of Total Traffic
1	Iron Ore	0	418	728	1,724	1,661	27.25%	27.25%	15.61%
2	Fertilizer	757	1,201	821	877	1,166	19.13%	46.37%	10.96%
3	Clinker	483	443	541	516	413	6.77%	53.15%	3.88%
4	Phosphoric Acid	275	198	197	315	370	6.07%	59.22%	3.48%
5	Rock Phosphate	332	433	425	289	342	5.61%	64.83%	3.21%
6	Foodgrain	382	43	26	15	297	4.87%	69.70%	2.79%
7	Coal	227	281	247	52	221	3.63%	73.33%	2.08%
8	Sulphur	99	126	123	142	178	2.92%	76.25%	1.67%
9	Fuel Oil	68	96	93	110	137	2.25%	78.49%	1.29%
10	Ammonia	83	30	78	74	95	1.56%	80.05%	0.89%
11	L.D.T	266	459	581	592	945	15.50%	95.55%	8.88%
12	Other	369	226	293	144	271	4.45%	100.00%	2.55%
13	Total of Import	3,341	3,954	4,153	4,850	6,096	100.00%		57.29%
Commoditywise Export Traffic ('000 Tonnes)									
1	Oil Cakes	803	1558	1660	2004	2292	50.43%	50.43%	21.54%
2	Clinker	693	652	825	796	745	16.39%	66.82%	7.00%
3	Cement	40	43	54	40	292	6.42%	73.25%	2.74%
4	Bauxite	220	379	239	186	216	4.75%	78.00%	2.03%
5	Salt	268	140	196	339	179	3.94%	81.94%	1.68%
6	Rice Bran Ext.	47	156	74	108	99	2.18%	84.11%	0.93%
7	Bentonite	60	21	64	75	51	1.12%	85.24%	0.48%
8	Onion & Garlic	5	22	13	19	36	0.79%	86.03%	0.34%
9	Fish	1	2	12	19	30	0.66%	86.69%	0.28%
10	Foodgrain	1	11	48	153	3	0.07%	86.75%	0.03%
11	Other	107	148	216	313	602	13.25%	100.00%	5.66%
	Total of Export	2245	3132	3401	4052	4545	100.00%		42.71%
Total of Import/export						10641			
Source : Compiled from GMB Internal Data,1993									

Exhibit 4			
Portwise Traffic and Financial Performance (1992-93)			
Port Group Name	Total Tonnage (000 Tons)	Revenue (000 Rs.)	Revenue Expenditure (000 Rs.)
Bedi (and Sikka)	2623 602	161871	50340
Bhavnagar (and Alang)	675 943	143854	68176
Porbandar	825	51085	26920
Magdalla	2797	47780	13517
Okha	552	32529	22461
Jafrabad	709	13024	5423
Navlakhi	424	31920	25790
Veraval	351	30655	23771
Mandvi	67	6913	8928
Bharuch	-	406	2161
Total	10905	520037	247487

Source: Compiled from GMB Internal Data, 1993.

Exhibit 5				
Average Tonnage Per Turnround Day				
Port	# Of Ships Sampled	Total Qty (tons)	Total Turnround (ship Day)	Avg. Tonnage Per Turnround Day
Bedi	24	200,342	306.33	654.01
Jafrabad	49	71,940	27.52	2,614.10
Magdalla	8	244,455	192.46	1,270.16
Navlakhi	9	121,341	163.84	740.61
Okha	9	118,130	174.57	676.69
Porbandar	9	109,517	52.92	2,069.43
Sikka	6	73,367	33.76	2,173.19
Veraval	3	18,909	26.72	707.67
Total	117	958,001	978.12	979.43

Source : Compiled From GMB Internal Data, 1993

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