Public Private Partnership in Airport Development – Governance and Risk Management Implications from Cochin International Airport Ltd[1].

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Abstract

In India, airports were totally owned and managed by central government or the armed forces. The Airport Authority of India (AAI), a body functioning under the Ministry of Civil Aviation was responsible for managing the airports in India. In 2000, there were 117 usable airports (including 26 civilian enclaves maintained by the military) in India, which according to ICAO (International Civil Aviation Organisation) was more than China, which had 76 airports. Out of these, scheduled commercial operations were made only to 61 airports. According to projections, Indian air passenger traffic was estimated to grow to 100 million passengers by 2012 from 36.98 million in 1998-99. Growth projections in the cargo front were also promising.

The draft policy on Airport Infrastructure of December 1997 acknowledged the importance of developing airport infrastructure in the country. Airport infrastructure was linked to development of India's international competitiveness and her ability to attract foreign investments. The policy opened the doors of private investment in this sector, including investments from foreign airport authorities.

Cochin International Airport Limited (CIAL) was the first airport in India to be built in the joint sector with public – private participation. The airport users and other benefactors, mainly non-resident Indians, the general public, government of Kerala (GOK) and the airport service providers came together to build an airport of international standards. The new Cochin airport project was an alternative to the existing civil enclave in the naval airport, which was not capable of handling larger aircraft due to runway limitations. The development of this airport took place initially irrespective of the policy on airport infrastructure. Some of the parameters of this policy evolved as a result of CIAL.

The cost of expanding the existing airport was almost equal to the cost of constructing a new airport. Further, it was considered near to impossible to obtain budgetary support form Government of India (GOI) for expanding the existing airport. The involvement of users was a pioneering concept of this project, which was conceived even while a definite policy on private participation in airport infrastructure was not in place.

The process of project and financial structuring, project management including land acquisition and resource mobilization, dealing with regulatory bodies and managing early operations in the context of CIAL offers a rich learning experience for governance in developing successful infrastructure projects.

This paper begins with the case study of CIAL, from which implications for governance and risk management are examined. The significant governance issues are land acquisition, rehabilitation and resettlement of project affected people, project development ensuring viability of airports and staffing. The key areas of risk management are political risk, revenue risk, operating risk and regulatory risk.

[1] The basis of this paper is the case `Cochin International Airport Limited' which is under development with the support of 3iNetwork and IIMA. The section on CIAL Experience (including tables) is reproduced from the case, with suitable editorial changes. A part of this paper is to appear in `India Infrastructure Report 2002: Towards Better Governance for Commercialization' (Eds.) Morris, S and Shekar, R, 3iNetwork, Oxford University Press, New Delhi.

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Introduction

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CIAL Experience

Need for an Airport

Air traffic to Kerala (described by the National Geographic Traveler in October 1999 as one of the 50 "must see" destinations and later in April 2001 as the most beautiful place in India) came from tourism and expatriate Keralites and their families, mainly from the Gulf region. It was estimated that more than two million people of Kerala origin were working abroad for whom `air' was the most common mode (rather, the only available) of travel. Kerala had the distinction of having three functional international airports within 600 kms: Trivandrum (Thiruvananthapuram), Cochin (Kochi) and Calicut (Kozhikode).

The Indian Navy owned airport located in Willington Island, in the center of Cochin city had the distinction of integrating multiple forms of transportation (air, sea, rail and road) in a small island. The island also headquartered the Western Command of Indian Navy. The Airports Authority of India (AAI) **(1)** maintained a civilian enclave in the naval airport. The airport was profitable, even though the Indian Navy received a substantial share of the revenue generated. The effective runway available for landing was 5000 feet out of a total runway length of 6000 feet, which allowed landing of smaller Boeing 737 aircraft with a load penalty (limited passengers and fuel). Strategically, Indian Airlines had decided to phase out the

737 series on account of higher fuel consumption and substitute it by larger, new generation aircraft like Airbus 320 and 300. The runway of Cochin airport was not equipped to handle larger aircraft.

The airport had the threat of closure hanging over it. This, along with the need for more direct air connections and seating capacity, generated public opinion towards upgradation of airport facilities. The conservative estimate of expanding the existing runway was Rs. 700 – 720 million (1991 price levels). There were technical and social issues like the giant crane of Cochin shipyard located close to the aircraft approach path, reclamation of land from the backwater, relocation of the railway line and rehabilitation of 200 households. All these were expected to increase the project cost. The owner of Willington island, Cochin Port Trust Ltd., had reservations about airport expansion. In their opinion, the scope for port expansion would be reduced if land were given for expanding the airport. The Indian Navy was also not interested in making investments for developing the airport.

During a meeting called by the civil aviation minister in October 1991 to discuss expansion plans, the suggestion for building a new airport itself was considered worth exploring. The district collector of Ernakulam was asked to identify suitable land for the airport, in the vicinity of Cochin city. Later, the team of experts from AAI identified Nedumbasserry from the six sites shown by the district administration on behalf of the state. AAI cited financial constraints, ruling out any immediate investment in the project However, if money could be found from other sources, AAI was willing to offer technical support to construct the airport. Meanwhile, AAI experts conducted a viability study and concluded that a new airport in Cochin could be profit making.

Initial Financing Plan

The fund requirement for a new airport was estimated at roughly Rs 2000 million, based on discussions with AAI and aviation experts. One of the subcollectors proposed the idea of raising money from the Gulf based NRIs (Keralites) who stood to benefit most from the new airport. (The Gulf bound air passengers were forced to spend two days in transit in Mumbai or other cities. Their representatives had been demanding direct connection from Kerala. Trivandrum and Calicut airports had direct Gulf connection, but the demand far outstripped supply). Investment could come in the form of interest free loans and donations from NRIs as well as corporates and other societies. Kissan Vikas Patrikas (KVP: a savings scheme of Government of India, which doubled the principal in 66 months) could back the loans. For every Rs. 5000, KVP of Rs. 2500 would take care of repayment, yielding Rs. 2500 directly as cash. GOI had a scheme of lending back 75% of the collected amount to the state government for developmental purposes as low interest, long term loan. Remaining amount could be raised as donations from corporate bodies. Four lakh investors, constituting 20% of Gulf based Keralites could build the airport by contributing Rs 5000 each. Table I gives details of the initial financing plan.

This loan from GOI came at very low interest and long repayment period. Repayment could be made when income from the airport accrued and from the sale of excess land (By design, extra land had to be acquired, keeping repayment in view). The contributors would have privileges like special check in counters, waiting lounge, reserved car parking, directorship in the airport board etc.

The new financing plan was submitted to the Chief Minister (CM) of Kerala by the district collector. Impressed by the innovative fund raising technique (which had no financial burden on the state government), the CM asked the district collector to prepare a proper project report and agreed to the suggestion of forming a charitable society for the purpose of raising money. Meanwhile, media carried news about the developments on the airport project, which mostly evoked positive responses. The NRI community was particularly enthused by the project. The first contribution came to the district collector as a personal cheque for Rs. 20000, from Mr. Jose Maliakal, an NRI form Gulf.

The Kochi International Airport Society

The AAI chairman appreciated the idea and reiterated the earlier promise of providing technical support to the project. Later, the Minister for Civil Aviation also approved the project. (At that time, the state government had not formally approved it). Meanwhile, there was similar pressure for developing the

airport in Calicut and an all-party action council for the development of Calicut airport was formed. There were allegations that Calicut was politically more favored since the constituency was represented by the CM's son and a first time MP. Subsequently, the state government approved the project, and the Kochi International Airport Society (KIAS) was incorporated as a charitable society in July 1993. The district collector was appointed the special officer for the airport project and was relieved of field responsibilities.

The next challenge was to reach the target investors, particularly NRIs, and mobilize resources. That proved to be a difficult task, since a comprehensive database of NRIs could not be found. Commercial banks, however, had direct access to NRIs and their households, which they used for limited purposes like sending greetings. Some bankers were persuaded to send the information about the new airport to their clients. Popular newspapers were used for advertisements, news and editorials about the airport project. (It should be noted that for setting up the office and printing brochures, the special officer had to persuade local bodies and associations like Ernakulam Chamber of Commerce and GCDA (Greater Cochin Development Authority) Shopping Complex Traders Association to donate office equipment and print the brochures). Soon, Mr. C.V Jacob, a businessperson from Cochin, made a donation of Rs 2.5 million, which gave the society much needed initial capital.

The euphoria about the airport project dampened quickly and the funds did not flow in as expected. Abroad, particularly in the Gulf countries, KIAS had to compete with the fund raising attempts of Calicut airport. (Calicut airport had also adopted the same model for funding, on the suggestion from AAI.). The scheme could raise only Rs 40 million, as against the anticipated Rs 2000 million.

Formation of Cochin International Airport Limited (CIAL)

Meanwhile, the land acquisition proceedings had progressed to the stage of issuing notifications under the Land Acquisition Act 1894. (Notification for acquiring about 500 acres for `public purpose' had been issued by then **(2**)). It was impossible to revert back. The district collector (new appointee), who was empowered to acquire the land, insisted that the society deposit the money required for land acquisition in advance. GOK was reluctant to contribute money for the airport at that stage. To mobilize funds, it was decided to incorporate a public limited company. The project would be funded by equity share capital of Rs. 700 million and loan funds of Rs. 1300 million. Thus, the Cochin International Airport Limited (CIAL) was incorporated on 30 March 1994 as a public limited company, with Rs. 900 million authorised capital. KIAS entrusted the responsibility of constructing the airport to CIAL, and the special officer was appointed the Managing Director of the Company. The existing donors were given the option to convert their loans into equity shares. The project was to be completed in three years, and the tentative date for inauguration was fixed as August 15, 1997.

The company had to face hurdles in the land acquisition and project management fronts. By then, GOI had given a green signal to the BOT (Build – Operate – Transfer) model for private sector involvement in infrastructure. CIAL had explored such possibilities. The estimate provided by a British company for building the airport was Rs 5000 million, excluding land price. Meanwhile, The Federal Bank Ltd, a scheduled commercial bank that had its origins in the neighborhood of Nedumbasserry, sanctioned a bridge loan of Rs 100 million for 6 months, at 15% interest. The bank was convinced to associate itself with the project, based on emotional ties with the locality.

Land Acquisition

The land acquisition program faced political and social troubles. Three associations of landowners were formed. Politically supported protests on their behalf became a regular feature. A section of landowners were against the project and demanded the project to be scrapped or taken elsewhere. Another section indicated their willingness to part with land, but for a good price. The land identified for the proposed airport was distributed among three panchayaths and one municipality. Each panchayath had 10 elected members and the municipality had 20 elected members. The area was represented by two MLAs and one MP. The elected representatives had diverse political affiliations. Meanwhile, the CM, who supported the project initially, had to move out of power following an internal political reorganization.

Although the original intention of CIAL was to acquire 1400 acres of land, finally 1300 acres of land were acquired. The project also involved shifting and relocating three high tension (110 KV) power lines and an irrigation canal, so that water supply to agricultural land was not disrupted. Even though, the original layout demanded realigning the railway track, it was dropped on cost considerations. In the revised design, the rail line passed along the western boundary of the airport and the eastern boundary extended till the Periyar river. This resulted in the terminal building being located away from the national highway. Additional land had to be acquired to build an approach road to the airport with a rail overbridge.

The land acquired for the approach road was more than what was required for a four-lane road. CIAL had plans to commercially exploit the additional land, at a later stage. As the land value along the approach road appreciated, the original landowners demanded that the excess land be returned. (Their demand had political support, and CIAL board had eventually taken a decision to return the land). The original landowners were willing to pay back the price paid during acquisition. However, under the Land Acquisition Act, it was near to impossible to work out the return of land, which would open altogether another speculative dimension in the already troubled subject of land acquisition.

In order to obtain flight path clearance, CIAL had to cut off trees from land adjoining the airport. CIAL had not acquired the land, but paid compensation for the trees (Coconut, Arecanut etc). Close to 5000 trees were cut and spot payment of compensation was made. Since the land was on the approach path of flights, the landowners were prohibited from planting trees in this land. Even though this strip of land was fertile, it was not economical for the cultivation of crops like paddy. The market value of land in this strip had reduced considerably. This group of landowners had initiated collective action, both legal and political, to force CIAL to acquire the land, at the same rates, which CIAL had paid for the adjoining land. They claimed that the notification for cutting trees was made under the Land Acquisition Act, which implied taking over the land for public good. In the case of cutting trees, relevant sections of the Aircraft Act could have been invoked.

Land Compensation

Fixing the `good price' was a very contentious issue. According to the act, the district collector could decide the amount of compensation or the court could determine the same. The fair price calculation would consider the last few land transactions to arrive at the market price. The common practice followed in land transactions was to declare lower land value in the transaction records, to minimize transaction charges. Hence, the compensation paid would not be the right reflection of market value. The aggrieved would then approach the courts and the project would be delayed indefinitely.

The airport authorities used a new option of negotiating with landowners to determine the compensation package. Through negotiation, it was possible to build in contentious variables like quality of land, earning potential of the land etc. **(3)** A broad framework for compensating and rehabilitating the affected people was arrived at after consultations with representatives of the landowner's associations and representatives of political parties. All the negotiations were based on the tactical understanding developed with the opinion leaders. Table II provides details of the rehabilitation package. A high power committee chaired by a state minister negotiated the prices with representatives of land owners. CIAL made price offers of Rs 4,000 – 6,500 per cent of dry land and Rs. 300 – 1,800 per cent of wet land (including paddy fields). The airport society would purchase the land at these prices and hand it over to CIAL. Provisions of the Land Acquisition Act would be invoked to those cases, which refused the negotiated agreement.

Even though the overall compensation package was better than the legal requirement, around 400 court cases were filed and one of them was decided by the Supreme Court**.** The land for airport was acquired from about 2,300 landowners. 872 households had to be shifted. Those who lost houses were rehabilitated in three locations which came to be called as `Six Cent Colonies' (since six cents of land was given to each family losing their house). One member from each family which lost both house and land would be considered for direct employment or provided indirect employment opportunities in the airport like taxi permit, managing public telephone facility or vending beverages. As on February 28, 2001, 85 evictees had direct employment in CIAL and 691 were given indirect opportunities.

The hurdles in land acquisition continued at every stage. Runway and terminal building construction could not start as planned because some residents refused to move out. There were some bogus claims of houses in the form of temporary hutments that came up overnight. They were bargaining a better deal, creating discontent among those who had willingly given up their property rights. These claims were surpassed with caveats from court and at times through forceful eviction.

In addition, CIAL had to deal with socially sensitive issues like relocating three temples, two churches, a burial ground and a mystery tree, which had acquired the status of a pilgrimage center. (The tree located near the proposed runway was considered impossible to fell and that it possessed divine powers. However, it fell down (or made to fall down) on a cyclonic night). CIAL followed a liberal approach to relocating the places of worship, after detailed discussions with religious leaders, priests and community leaders. All expenses for relocation, including cost of conducting religious rituals related to relocation were borne by CIAL.

Building the Airport

The airport project was planned to be completed in two stages. Phase one included construction of the runway and terminal buildings required for operating domestic and international flights. Initially, the runway construction was also to be done in two phases. Later, the decision to construct the entire length of the runway in phase one itself was taken, since runway extension during phase two would entail closing down the airport temporarily. According to the original plan, the first phase was expected to be over in December 1997 and the second phase was expected to commence from January 1999.

AAI had agreed to provide technical advice and runway design to CIAL, free of charge. The foundation stone for CIAL was laid on August 21, 1994. CIAL appointed KITCO, a state government enterprise as technical consultants. KITCO was responsible for monitoring the progress of the project and coordination. A global tender for construction of the runway was floated and the contract was awarded to a Hyderabad based firm. Land acquisition was progressing at the same time. In addition, construction of other airport facilities including terminal buildings, approach road etc. also started. This concurrent approach reduced the time required for the airport to become operational, but the need for coordination was very high. In addition to the 100 odd contractors, CIAL had to coordinate with 32 governmental agencies (Table III) that were involved at different stages. In the absence of clear guidelines, interdepartmental conflicts had often brought work to the brink of stoppage. CIAL could also claim the distinction of not losing even one day of project time because of labor unrest, otherwise a common feature in Kerala.

Financial Resource Mobilisation

In 1994 itself, CIAL had initiated talks with HUDCO for obtaining a term loan. The top brasses of HUDCO were highly supportive of this venture. An appraisal team from HUDCO visited the site and discussed with the CIAL team. The budget of February 1995 stressed the need for infrastructure development and gave it industry status. In March 1995, HUDCO sanctioned a term loan of Rs 250 million at 16.5 %. GOK sanctioned Rs 10 million towards equity.

The political structure of the state changed in July 1996, when the ruling alliance was voted out of power and the left parties led (Left Democratic Front) coalition government took over. A prominent leader of the anti airport protests, secured ministerial position in the new government. The composition of CIAL board also changed, and the LDF - CM took over as chairman of the company. The government contributed the next installment of Rs. 50 million to equity. Private placement efforts brought in Rs. 150 million as equity.

In order to mobilize more resources to keep the construction going on, the company decided to adopt the public issue route. The public issue was discussed with merchant bankers and financial institutions, whose response was not very encouraging. GOK indicated its inability to contribute resources, but was at the same time concerned about loosing control if another strategic partner was brought in. The 12th meeting of the board of directors of CIAL suggested that, for maintaining control, GOK should hold at least 51% percent of the equity. The government accepted this decision and a notification was issued in September 1997, in

principle enhancing the equity participation of GOK to 51%. This notification became the policy governing future investment decisions in CIAL.

Since GOK was not in a position to contribute its equity share, efforts were made in the direction of raising equity from the other stakeholders. Three public sector oil companies were approached for giving refueling rights in CIAL. BPCL won the exclusive rights in exchange for Rs. 50 million contribution towards equity. Equity contribution also came from other service providers and public. The equity holding community was spread in 30 countries. Majority of the NRI as well as domestic investors were attracted to the project through word of mouth and news about CIAL. The company also contributed its bit towards public relations through press releases and public meetings in different parts of Kerala. NRIs, businesspersons and local self-governments were personally contacted and requested to commit to the project. The idea of owning a share in an airport was emotionally irresistible to many. The public relations drive, directly handled by the MD, prompted many service providers as well as small investors to look at CIAL favorably.

First Year of Operations

The airport was inaugurated by the President of India on May 25, 1999. Commercial operations started from June 1999 with Air India operating the first flight to the Gulf. Shortly afterwards, the commercial enclave in the old airport was closed and domestic operations shifted to CIAL

The airport had put in place a spacious car park, visitor's gallery, a pre-paid taxi system run through a co-operative society and airport security managed by Kerala Police. Other airport services like fuelling facilities, public canteen, foreign exchange counters etc were in place by agencies who participated in financing the airport. Even though GOI had not yet declared CIAL as an international airport (implying foreign airlines could not use the airport), national carriers would operate international flights. Central agencies like customs and immigration required for handling international travellers had been organised. The airport project envisaged handling 17 flights a day during the first year of operations, moving up to 31 flights a day in the fifth year of operations.

AAI was the designated agency under the Airports Authority Act, responsible for providing Air Traffic Control (ATC) services over Indian airspace. In all AAI owned airports, all equipments required for ATC was installed by AAI. The facility was managed by a special cadre of Air Traffic Controllers, who were AAI employees. According to international convention, all airlines travelling through the airspace had to pay for the navigation support provided by ATC. This was a major source of aeronautical revenue for AAI. (The proposed new policy on civil aviation which permitted private participation in airports, had clarified that ATC was AAI's responsibility. However, the policy was vague on the investment for ATC equipments and facilities and the revenue sharing between AAI and the private airport. Pending resolution of this issue, the inauguration of the airport was impossible.) AAI insisted that CIAL install the ATC equipment while they would manage the facilities and keep the revenue. AAI further said that would not charge any additional fee from CIAL for providing the services.

The MD of CIAL, keeping the date of inauguration in view, signed an MOU with AAI, where all equipment would be installed by AAI for which CIAL would make payments later on a cost plus basis. ATC charges had two components: Route Navigation Facility Charge (RNFC) and Terminal Navigation and Landing Charge (TNLC). According to the MOU, CIAL would reimburse the cost of navigation equipment installed by AAI and allow it to keep the RNFC. CIAL would receive revenue from TNLC levied on airlines. This MOU was subject to the approval of the CIAL board. AAI went ahead and installed the necessary equipments for traffic control.

AAI was the licensing authority for all airports in India. AAI, which itself was responsible for constructing and managing the airports, gave a permanent license to the airports. Periodic inspections were conducted to ensure compliance to standards. CIAL, being the first airport outside the control of AAI was given a temporary license valid for three months. The license was renewable every three months based on regular inspections. CIAL's demand for a permanent license was not accepted.

The closing of the old naval airport to civilian traffic was a precondition for the viability of CIAL. The Indian Navy had already recorded its objections about the active civilian enclave, on grounds of internal security. However, some prominent citizens of Cochin objected to the closure of the old airport and filed a public interest litigation (PIL). AAI employees stationed at the old airport and the private airline company which had made investments there also acted as pressure groups against shifting domestic operations. There was also pressure from domestic travelers to keep the old terminal open and leave CIAL to handle international flights only. However, the court decision and the civil aviation ministry favoured CIAL for domestic operations. The civil enclave in the old airport was closed and the AAI employees were redeployed.

The civilian enclave supported a number of taxis that provided the last leg of connectivity to the passengers. The taxi operators from the old airport had approached the CIAL management demanding rights to operate taxi services. However, by that time, CIAL had formed a society of evicted people to operate the taxi services. The evictees had approached banks for loans. The initial traffic was not sufficient to provide work for all the taxis. The taxi drivers were under pressure to service the loans. (Some of the taxi owners had borrowed money from private agencies against pledge of the vehicle. The loan disbursement was faster and involved less paper work. Default in payment resulted in the vehicle being confiscated without notice) Relatives who came with own transport usually received the NRI travellers. Business passengers and tourists used the pickup service provided by the city hotels. The traffic flow in international and domestic terminals was different. The CIAL taxi drivers went to the extent of preventing city hotels from picking up passengers directly from airport and forced NRIs to use their services. The matter was resolved by reengineering the prepaid taxi system. In addition, restrictions were set for other private vehicles and auto-rickshaws for picking passengers from the terminals. The old airport taxis were disallowed the right to operate from CIAL. Informally, CIAL did not press for operating long distance state transport buses from the airport even though such an arrangement could have benefited the passengers. In return, the taxi drivers had voluntarily agreed to follow a CIAL managed allocation and payment system. They also agreed to a code of conduct with passengers.

CIAL had decided to allow a single agent to handle the ground service operations in CIAL. This was the common international practice. Air India was given the exclusive rights through open bidding and a high profile pitch made by the Chairman, Air India to the Board of Directors. Other parties involved in the bidding process approached the court against the order. The domestic private airline company, Jet Airways, also approached the court citing that the exclusive agent arrangement, that too by a rival airline company, was detrimental to customer service.

CIAL had high expectations on revenue generation from cargo operations. The responsibility of managing the cargo operations was entrusted to Air India on a revenue sharing basis. (15% of cargo revenue would accrue to CIAL.) The cargo operations failed to reach expected levels, since according to CIAL, the tariff offered by AI was on the higher side.

At the time of inauguration of the airport, the company was already facing the interest burden from loans taken from banks and FIs, particularly HUDCO. This information led to speculations regarding the viability of the airport and even the probable closure of the airport. This had its effect on investor confidence.

Competition from Calicut and Trivandrum could not be discounted. When CIAL started operations, Air India and Indian Airlines diverted some of their international flights from these airports. All the three airports required more flights to be viable. In the process, the lobbying done by state government got diffused and all three airports were competing between themselves to protect their existing flights. Even before inauguration of the airport, several international airline companies had indicated their willingness to operate direct flights from CIAL, which included diverting existing flights from neighboring states. CIAL was able to obtain virtual monopoly of allowing chartered flights carrying pilgrims for performing Haj ceremony. The airport had anticipated that market and built special facilities for catering to Haj pilgrims. Calicut airport was directly competing with CIAL for the Haj flights.

On the land acquisition front CIAL continued to face hurdles. The critical Instrument Landing System (ILS) commissioning was delayed because of the failure to acquire land and remove obstacles (including houses) that fell in the glide path of the aircraft. Lack of ILS was cited as a reason which delayed the international airport status for CIAL and had created discomfort to passengers and airline companies. The delay which came from the GOK side, inspite of the fact that all the owners were willing to surrender their land for a negotiated price, was attributed to vested interests operating in other airports (Malayala Manorama, November 9, 1999). In addition, land acquisition proceedings for the approach road and the eastern end of the runway was in progress.

Into the Second Year: At Crossroads

Twenty months after the inauguration, CIAL continued its struggle to resolve various policy level and socio-political issues. Non resolution of these issues could be very detrimental to CIAL and similar projects be modeled on CIAL.

In the strictest sense, CIAL was not a private airport. GOK, through a board level resolution, had decided to hold minimum of 51% stake in CIAL. This would be achieved through direct contribution from GOK and investments from profit making state enterprises. Central PSUs like AI and BPCL also held equity stake in the company. In the strictest sense, CIAL could be defined as a 'joint sector' airport with private–public participation. Even as on March 2001, the state government had not contributed its full share of equity capital

GOI controlled awarding landing rights to airline companies which allowed them to operate from a specific airport. India has so far entered into bilateral air service agreements with 96 countries out of 185 countries that were part of ICAO (International Civil Aviation Organisation), out of which 54 involved Air India. According to the Civil Aviation minister, (Source: Interview of the Civil Aviation Minister, Business India, June 11-24, 2001) the demand for bilaterals came from state governments interested in more connectivity for their respective populations. In spite of demands from passengers, request from GOK and applications made by various foreign airline companies, no decision was taken until March 2001. In April 2001, the central government allowed one foreign airline to operate form CIAL.

Aircraft refueling was another revenue earning activity that was envisaged and oil companies had created necessary infrastructure, particularly a fuel hydrant system that could reduce refueling time considerably. CIAL could not exploit this revenue earning facility also. Lack of traffic affected the non-aeronautical revenue stream also, since this had a direct relationship with passenger traffic.

Right from the first day of commercial operations, CIAL followed the tariff structure adopted by AAI for landing charges, since any new tariff structure had to be ratified by AAI. The landing charges were fixed based on the weight of the aircraft. According to CIAL, the AAI tariff structure was inappropriate for new airports, since the cost structure of AAI airports and CIAL were different. A flexible tariff structure would enable the airport to offer innovative and flexible packages to airline companies. In addition, CIAL faced difficulty in collecting the charges from PSU airline companies.

The MOU signed between AAI and MD, CIAL regarding ATC payment was rejected by the board of CIAL. According to the MOU, CIAL was to receive revenue only from TNLC levied on airlines. As per CIAL, the RNFC receipts were four to five times the TNLC. CIAL refused to honour the MOU commitment, since it implied that CIAL had to reimburse AAI to install and maintain the ATC equipment, while AAI received the bulk of the revenue. CIAL argued that the revenues already received by AAI from RNFC was sufficient to provide a 60% return on investment (ROI) on AAI's investment. This standoff came in the way of upgrading the navigational facilities, including installing radar facility (estimated to cost Rs 250 million). Further, CIAL argued that, under the AAI act and the draft policy on aviation, AAI was bound to provide ATC services over Indian airspace. CIAL was ready to allow AAI to keep the entire RNFC revenue, if AAI was responsible for investment in ATC equipment and its maintenance. On the other hand, it sought a share of RNFC revenue from AAI.

Security services in the airport became a subject of concern for CIAL. Initially, the state police had the responsibility for maintaining airport security. The police department charged the airport a fee for the services. Later, the services of a professional security agency was enlisted for traffic control, parking area etc. In view of the increased threat perception to aircrafts and aviation infrastructure, GOI had unilaterally handed over the responsibility of airport security to a paramilitary force, Central Industrial Security Force (CISF). The cost involved in maintaining CISF, a paramilitary force in an airport was considerably higher than using services of state police. The airport had no direct control over CISF, since it would be under the Commissioner of Aviation Security, Ministry of Civil Aviation. However, the airport had to bear expenses of CISF and provide required infrastructure like family housing and transportation. Moreover, there were concerns about the customer friendliness of an organized paramilitary force. (CISF itself had commissioned a customer perception survey, the results of the survey indicated otherwise). CIAL was able to negotiate an arrangement with AAI, where the expenses for maintaining CISF would be subsidized and the company would forfeit a large share of the passenger service fee component in the flight ticket in favour of AAI.

Competition form Calicut and Tiruvananthapuram airports were expected to continue. The runway expansion project of Calicut was nearing completion and plans for upgradation of the international airport at Trivandrum with government support was on. CIAL's competitive advantage came from its strategic location near the international air route, land available for future expansion and the level of total customer satisfaction it could offer to airlines, which would not be possible in other AAI run airports.

On the cargo front, customers preferred to take cargo to Tiruvananthapuram or Calicut. AI was not proactively marketing their services to exporters. Hence the facilities and capacity created by CIAL were unused. CIAL took over the cargo operations from AI and started to manage the operations with its own staff. Efforts to promote the cargo operations included direct contact with exporters and construction of a cargo village in the airport land, modelled after the Dubai cargo village. AI did not take this move very kindly.

The knowledge base developed by CIAL, in the areas of airport project management and airport operations could be leveraged for growth and revenue. CIAL had proved to be successful in containing the cost of airport construction and management. It had evolved new cost standards and staffing norms. (The proposed Bangalore airport project cost was placed at Rs. 15000 million–Rs. 20000 million, while CIAL phase one involved Rs. 3200 million expenditure only. The employee strength was less than similar AAI run airports). It had also established industry norms in cleanliness and passenger comforts. However the current staffing system which relied on deputation for manning key positions combined with inadequate attention to HRD could be bottlenecks in future.

Revenue Model

The revenue models for airports were built around two components i.e. aeronautical revenue and non-aeronautical revenue. Internationally, airports follow the model of higher share of income from non-aeronautical revenues. US airports receive as high as 70% of revenue form non-aeronautical sources.

CIAL envisaged 50:50 split between the revenue streams, while in the case of other Indian airports managed by AAI, aeronautical revenue far exceeded the other. As seen in table IV, the actual share of aeronautical revenue during the 10 month period (June 1999 – March 2000) was 86% and during the nine month period (April 2000 – December 2000) was 88%. The project average during the latter period was 78%. The primary reason for the difference between the projected and the actual (even though aeronautical revenues themselves were less in actual compared to the projected), was the inability to get the duty free shops started and rental income from other shops being less than projected. Further, the income from visitors entry was also less than anticipated, primarily due to the restrictions enforced by GOI on allowing entry for non passengers into the airport after the hijacking of IA aircraft. This restriction was subsequently removed.

In terms of absolute income, the aeronautical revenues were significantly less than projected in the landing related charges and international passenger service charges. This can be attributed to the fact that, actual number of international passengers who used the airport was a little over two lakhs in each of the two

periods (Table V) while the corresponding prorated, projected traffic was about 5.5 lakh passengers (Table VI shows the projection 6.5 lakhs in the first year and 7.6 lakhs in the second year). Over the 18 month period (July 1999 to December 2000), the actual number of domestic passengers were 6.3 lakhs, compared to the prorated projected figure of 7.1 lakhs. Such differences raise doubts on the projections made by consultants for CIAL on various revenue driving parameters (Table VI).

The monthly average flights were 280 in the domestic sector and 109 in the international sector during the initial operations until December 2000, while the projected averages were 330 domestic flights and 190 international flights even during the first year. The international flights were less since foreign airlines could not land, since CIAL was declared as an international airport an year later. Even after the declaration as an international airport, lack of bilateral agreements did not allow landings in CIAL, in spite of requests from several airline companies.

The business model of CIAL was heavily dependent on the Gulf based NRIs. Employment trends in the Gulf region indicated that job opportunities were shrinking as a result of the 'Emiritisation drive' and fast-changing job profiles in Gulf countries. Unskilled and semi-skilled labourers, who had gone during the boom period, were returning in thousands, causing a severe strain on the Kerala economy. At the same time, trend was shifting towards employment markets in Europe, the Far East and US. Kerala was also fast becoming a tourist destination and a critical point in the southern circuit considered as the alternative to the traditional golden triangle. However, the national carriers were restricting themselves to the Gulf sector, which was very lucrative for them. Allowing direct flights from other sectors were necessary for long term viability of CIAL. This would pre-empt the competition from Calicut, which has Gulf bound traffic as the only market segment as well as boost the tourism development efforts of Kerala.

The cargo operations began in September 1999. In the first 16 months until December 2000, the monthly average was 159 tonnes in the domestic sector and 244 tonnes in the international sector, adding to a total of 403 tonnes. The projected average for the first year of operations was a total of 1250 tonnes. It is interesting to note that in the international sector, the export traffic was twice the import traffic. According to CIAL, the cargo-handling agents (Air India) had not invested much in marketing the cargo service. As a result the cargo traffic did not yield the expected revenues, more so since the operations was based on revenue sharing. CIAL subsequently terminated Air India services and took over cargo handling.

The monthly average operating expenditure was Rs. 62 lakhs, during the period June 1999 to March 2000 and Rs. 59 lakhs during April to December 2000 (Table VII). During the latter period, the actual was about the same as projected. The personnel costs were kept at half the projected, through control on intake and deferring the revision of compensation structure. (CIAL had patterned the compensation following AAI, which was later revised. All AAI deputationists were paid according to revised scales.) While maintenance changes were lower than projected, the general expenses were higher. The expenditures on electricity and water charges as well as reimbursements to AAI were significantly higher than the projected figures.

Based on the summary of incomes and expenses (Table VIII), we see that CIAL had an operating surplus right from the first year of its operations. However, the margin is inadequate to cover the debt servicing. As per projections, complete debt servicing was expected to be feasible from the second year. The actuals indicate otherwise leading to the need for financial restructuring.

The most important problem facing CIAL was servicing the debt, particularly the high cost HUDCO term loan. GOK had also failed to contribute its share of equity, required to maintain its controlling position. Sensing the need for financial restructuring, CIAL board appointed a consulting firm. The consultants were mandated to suggest means reduce the interest burden and increase revenue – particularly revenue from non-aeronautical stream. CIAL had offered 1:1 rights issue, which failed to collect the required money, because GOK could not contribute its share and other investors insisted for GOK subscription.

Corporate Governance

The position of chairperson, Board of Directors CIAL was held by the CM of Kerala. Other members of the board were elected legislators, beaurocrats, FI nominees and investor directors. The managing director of

CIAL was a board member. The board had provision for 15 members including three positions reserved for nominees of financial institutions. The composition of board as on 31 March 2001 indicates that two positions of FI nominees are vacant.

The composition of the board, particularly its political nature had been a subject of criticism in the local press. Apprehensions about political and official influence on CIAL project were raised at different points of time. However, CIAL was of the opinion that, the presence of the chief minister and legislators as board members facilitated the company, to work around complex governmental systems, particularly land acquisition. Please see Table IX for profile of board members.

(The fourth annual general meeting (AGM) of CIAL became a platform for open political infighting. The Member of Parliament who represented the airport area [who was the CM of Kerala when the idea of a new airport was mooted] demanded membership in the board. This demand was opposed politically, and more than transacting serious business, the board meetings concentrated on political squabbling. Even though, the issue ended with the MP withdrawing his nomination for election before the AGM, the incident had brought to the surface very pertinent questions about governance and role of government. Source: Newspaper Reports).

Key people who managed the airport development came form the state government services and AAI. The first MD was from the IAS with prior experience in district administration and management of state enterprises. CIAL had recruited some senior professionals for critical position like finance, fire services, Company Secretary etc from the market. All technical personnel came from AAI on deputation. Personnel for critical administrative functions like Personnel and Administration, Land Acquisition etc came on deputation from state government. Some deputationists choose to join CIAL at a later stage. The state government appointed the present managing director, who also belonged to the IAS. The present MD had prior experience of managing major infrastructure facility in Kerala, even though by cadre affiliation belonged to another state.

The minority shareholders (Indian public and NRI's) numbering around 10,040 had also demanded representation in the board. Under the umbrella of Cochin International Airport Share Holders Association (CIASHA), their nominees had planned to contest for directorship. However, on request of the chairman (CM of Kerala) the nominations were withdrawn. The other demands placed by the association included immediate payment of dividend, while an infrastructure project in normal course required high gestation period.

The general elections conducted in April 2001 witnessed complete reversal of fortunes of the then ruling front. The new political alignment (which was in power while the project was initiated) had reiterated its commitment to the development of CIAL. However, a section among them demanded removal of all political nominees of the previous government from the board of CIAL and the new CM should assume chairmanship of the board. One argument was, since, the CM of Kerala occupied the position of chairman of CIAL board, the previous CM automatically ceased to occupy the position. However, there was another point of view. Since the existing board appointment was made by the AGM, it would be prudent to wait till the next AGM for appointing the chairman. In addition, a former CM of Kerala also indicated the interest in the chairmanship. Air-India, which had equity and other financial investment in CIAL also demanded board level representation. They also cited the absence of air transportation professionals who could offer guidance to the company at the board level as a risky practice.

Capital Structure

The total project cost was expected to close at Rs 3400 million. (The 1993 estimate was Rs 2000 million.) As of 31/3/2001, Rs 3208.5 million had been raised through equity participation (Rs 900 million out of which Rs 789.3 had been paid up), loans (Rs 2169.2 million) and interest free deposits (Rs 250 million). Table X provides birds eye view of the project cost (Phase I) as on 31/December/2000. Table XI carries the capital structure as on 31/March 2001.

Out of the loans, Rs 1527 million (including Rs 144.9 million as interest accrued) was from HUDCO at an average interest rate of 16.34 %. The Federal Bank loan of Rs 246.9 was at 2% over Prime Lending Rate (PLR), SBT loan of Rs 275.1 million (including Rs 25.1 million as interest accrued) at PLR and loan of Rs 120 million from District Cooperative Bank at PLR. The HUDCO loan repayment, expected to start in April 1997 had been rescheduled initially to start in July 1999 and is currently being renegotiated for June 2002. The Federal Bank loan repayment is expected to start in March 2001. (Collect information about SBT and DCB repayment schedule).

CIAL had an authorized capital of Rs. 900 million and a paid up capital of Rs 789. 3 million as on March 31, 2001. The government of Kerala, (as per a CIAL Board decision dated 23/9/1996 and the related government order (GO) dated 29/8/1997) had decided to hold at least 51% of equity in CIAL, directly and through state owned enterprises. This was to have effective government control over the company. The GOK contribution stood at Rs 324.5 million, which was 39.85% of the paid up capital. To make the GOK share 51%, under the current paid up capital, the authorized capital has to increase to Rs 940 million. GOK would have to bring in Rs 155 million.

Airport services providers (Air India, Bharat Petroleum Corporation Limited, State Bank of India and Federal Bank) had brought in Rs 212.5 million as equity. NRI directors and their relatives contributed Rs 141.4 million. 6160 Indian residents and 3880 NRI's were equity holders in the project with contribution of Rs 44.8 million and Rs 54.0 million respectively. The NRI investors were spread in 30 countries. Two banks, IOB and Dhanalskshmi Bank Ltd. together contributed Rs 7.5 million as equity.

In order to make payments towards HUDCO term loan, CIAL wanted to raise additional equity by offering a 1:1 rights issue. The closing date for rights issue had to be extended twice. The GOK's inability to contribute its share had shaken the confidence of other investors, who refused to subscribe unless GOK contributed its full share. Further, the rules disallowing capital and dividend repatriation prevented NRI investors from contributing to the equity. (In April 2001, the Foreign Investment Promotion Board (FIPB) allowed dividend repatriation). The rights issue could generate equity up to Rs 1880 million.

During the initial stages, CIAL had offered equity stake to the Airport Authority of India. AAI rejected the offer on the grounds that the AAI Act did not permit equity holding. According to press reports, while the international investment community and the Indian FIs had shown interest in CIAL, the state government was against such investments due to perceived dilution of its interest.

Implications for Governance

Land Acquisition

All matters related to acquisition of land for project purposes were governed by the Land Acquisition Act of 1894. The act empowered the central and state governments to acquire land for what was considered to be `Public Purpose'. From inception, the term `Public Purpose" has been defined in vague terms. The Supreme Court also supported the view that the term need not be defined strictly. The apex court was of the view that, the conditions which existed during the time of acquisition need to be taken into consideration and hence it would be better if the term is not clearly defined. The power of the act could be leveraged by the government for notifying the intention of taking the land. The process also gave opportunity for the affected public to voice their reservations. Past experience of land acquisition in India, showed that the process let to acquiring more than required land. The additional land was kept often kept without any economic activity. The CIAL project also acquired more land that it wanted for its core operations and further expansion. Further, the project financials had built in income from land sale and commercial exploitation of surplus activity as major sources of revenue.

During the process of land acquisition, complete information about the extend of land required was kept hidden from the public. In this case, land acquisition and the project proceeded almost together. While this approach could have phased the pressure on payments, operationally it was not a desirable process. At a later stage, the project layout had to be altered, under political pressure and to meet the convenience of

influential individuals. The process followed led to avoidable misperceptions among public and considerable energy had to be diverted to resolve the conflicts. A section of landowners were able to obtain a decision from CIAL board to have their land returned. This decision which is awaiting governmental approval could set a precedence of returning the land acquired for `public purpose'.

To clear the flight path, trees in the flight path area were cut and compensated by evoking the relevant provisions of Aircrafts Act. While the land ownership remained, but there are restrictions on further construction in the area. The residents of the area suffer noise pollution, loss of income and damage to houses. The application of Aircraft Act denied compensation for any of the above effects. Legal and mass action was initiated to acquire the land and compensate. The differences which would arise out of application of the two different acts need to be dealt with.

Compensation for acquired land was a contentious issue in land acquisition deals. The practice for determining the price, based on prices declared in governments records would not work. Such prices are normally understated. Acceptable compensation could be arrived at, only by leveraging the political process, and at rates close to real market value. It was equally important to manage the public perception that the evictees had received a fair deal and the local community would also benefit from the project. In spite of this, there would be legal battles that need to be anticipated and prepared for.

Rehabilitation and Resettlement

Land acquisition, often resulted in depriving a set of people the livelihood and quality of life they were used to. The process also harms the fragile cultural fabric, which is shared by the community. The mechanical process of compensation payment and resettlement does not always help them to effectively rebuild their lives. Experiences of similar schemes were not very encouraging.

Rehabilitation schemes conducted with proper socio- economic assessment of the locality, with emphasis on family and cultural identities, could reduce the pain of relocation. In addition, community participation in the scheme through open dialogue and involvement of political, social and religious leaders who had the trust of community members could ensure speedy resolution of conflicts. Community members also expect their own economic upliftment in return to the sacrifice made. They would invariably support projects, which provide them with such opportunities. Involvement in the form of direct employment or indirect beneficiaries was the acceptable convention. Here also, legal battles and hard bargaining need to be expected and prepared for.

Viability of Airports

It could be observed in the Indian context, that decisions about locating airports are at times based on political considerations, than commercial viability. Kerala's proposed fourth airport, to be located at Kannur was gifted by a civil aviation minister who was born in Kannur. This decision was announced in a public meeting, inspite of the fact there are two functional airports in the vicinity, Calicut and Mangalore. Eventhough, traffic studies conducted by AAI indicated that the airport was economically non-viable, political interference led to identification of land and even eliciting commitment from private sector investors (including a member of a Middle East ruling family, known for making high profile investments). Similar experiences could be traced in other states also.

This raises serious questions about demand assessment, competition policy and governance, since in the absence of clear guidelines governments can encourage pure speculative and political interests affecting the viability of an airport, with a significant capital investment.

Staffing

Key people who managed the airport development came from the state government services and AAI. The first MD was from the IAS with prior experience in district administration and management of state enterprises. CIAL had recruited some senior professionals for critical positions like finance, fire services, Company Secretary etc from the market. All technical personnel came from AAI on deputation. Staff for

critical administrative functions like personnel and administration, land acquisition etc came on deputation from state government. Some deputationists chose to join CIAL at a later stage. The state government appointed the present managing director, who also belonged to the IAS. (The present MD had prior experience of managing major infrastructure facility in Kerala, even though by cadre affiliation he belonged to another state.)

Airport operation is a niche area that requires high quality trained personnel. Currently, AAI is the only source of trained people, which has developed its captive recruitment and human resource development capabilities. As private airports increase, the natural inclination will be to recruit personnel from AAI. This might hurt the interests of AAI, and eventually lead to strained relationships. (The national air carrier, Indian Airlines Ltd. faced a similar situation when the airline sector was opened) Planned interventions at the national level to develop human resources for managing airports are required.

Implications for Risk Management

CIAL faced a variety of risks including political risk, revenue risk, operating risk and regulatory risk.

The political risk was due to non-continuity of political leadership, lack of clarity on the decision making roles of the center and the state and local political activism. Effective corporate governance and clear national policy on air infrastructure would be essential to mitigate this risk.

The revenue risk was due to demand uncertainties (driven by the market environment, service and policy on bilateral agreements) and pricing. This risk can be mitigated by creating a better dependence on non-aeronautical revenues, developing and executing marketing strategies aimed at different market segments (foreign and domestic airline companies, charter flight operators, cargo) being customer friendly in service delivery, lobbying for more traffic through bilateral agreements and in doing sufficient homework to take appropriate pricing decisions.

The operating risks were due to cost escalation, unanticipated delivery of obligatory services like security in the manner determined by external agencies, staffing, labour union relations and lack of coordination among various agencies. Each of these causes of risks are complex and need to dealt with in a generic manner through better anticipation and professional management.

The regulatory risks were due to uncertainty in licensing (by DGCA), tariff fixation and revenue sharing (with AAI). Clarity in the policy for air infrastructure would help mitigate the risk.

Political Risk

Corporate Governance: The composition of CIAL board was skewed towards political representation (as nominees of state government) and investor representatives who were businesspersons. The board lacked professionals with expertise in airport related areas, who could have guided the company advised the operating managers. According to CIAL, the presence of ministers and political representatives had helped in resolving the complex regulatory and coordination problems like land acquisition. As the major shareholder, the state government had exercised its leverage over critical decisions, particularly appointment of CEO. At times, the interference was extended to daily operational issues. This was a matter of concern for some institutions who had made substantial investments in CIAL. Of late, investor confidence was affected when the state government failed to honour the commitment to share capital, due to the precarious financial position. This eventually led to the failure of rights issue, which was envisaged to reduce the debt burden of CIAL.

The governance structure cannot be considered as model arrangement governance of infrastructure projects. The experience showed that, while the company could reap short-term gains, it had sacrificed other benefits, which would have accrued if a professional board were in place. The environment which existed needed active state involvement in CIAL, since the state governments role in lobbying with the central government (like repatriation of dividends, international airport status, favorable bilaterals etc) could not be

ignored. Efficacy of the current governance structure, with inbuilt handicap could be enhanced to a limited extent by inviting expert opinion as input for decision making and the professional managers contributing more to the quality of the decisions by presenting rigorous analysis and building multiple scenarios.

However, should a decision to professionalize the board and management be taken, issues about selection of professionals, their remuneration and extend of involvement in managing the airport need to be addressed.

Center State Relations: The financial health of the airport to a large extent depended on the number of flights using the airport. International airline companies, including cargo operate to specific airports on the basis of bilateral agreements signed between governments. From the Indian side, the national carriers alone had to fulfill the bilateral obligations. Capacity limitations and inability to enter into code-sharing arrangements with other airlines eventually led to reluctance to sign new bilaterals and utilize available rights.

Even though, the state government had a role in initiating the demand for more flights operated by foreign airlines, central government made the decision. This scenario left ample space for lobbying by different state governments and other vested interests. Ultimately, the airport's capability to influence the central government determined more aircrafts using the facilities.

Charter flights had to obtain case by case clearance from the central government (DGCA) for airport specific operations. The restrictions imposed on charter airlines and time required for obtaining approvals made charter operations to Indian airports unattractive.

Continuity of Political Leadership: Change in political alignments and the consequent power shifts had always proved to be detrimental to the viability of infrastructure project. In certain instances, the priorities assigned to projects had altered, which placed the investors at risk. This was particularly true for infrastructure projects with private investment, where the government support was required beyond project conception stage.

Continued political support was necessary for bringing the required clarity at the policy level and obtaining support of the bureaucracy. Integrating the divergent political forces during the initial stages of project itself, through intense dialoging, emotional stake building of all the political fractions and publicizing the support would help the investor to obtain continued political support.

Local Political Activism: In a politically conscious state like Kerala, a project involving large scale displacement of residents or threat to the livelihood of local community members was bound to attract political attention. Local political leadership viewed such projects as an opportunity to establish their credentials. Often there could be conflicting political ideologies as well as personal interests which increased the intensity of resistance.

Uncertainties and lack of transparency in dealings prompted the public to seek political support or remain as passive spectators. Project managers who are able to understand the local political dynamics could effectively handle such moves. It would be wise to take along all the political forces, since it would otherwise be impossible to isolate them. Equally effective would be conscious efforts to build a local support base that publicly advocates the project on grounds of larger common good along with local economic development. Efforts to enhance information flow would also help mitigate this risk.

Revenue Risk

Demand: Revenues can accrue from both demand for aeronautical and non aeronautical services offered by an airport.

On the aeronautical side, different market segments, like cargo, charter flights, aircraft parking, refueling of long distance flights and setting up maintenance base need to be addressed. With the availability of night

landing facilities and 24-hour ATC services, efforts could be initiated to make use of the airport facilities for technical/commercial purposes during off peak hours at differential prices.

Passenger and cargo demand would be directly driven by the availability of convenient flights. In a competitive situation especially in Kerala, passenger choice would further be influenced by airport comforts and cargo demand through appropriate handling and supply chain systems. The nature of traffic bound/from Kerala was mainly employment related, specifically the Gulf. Diminishing employment opportunities in the Gulf could affect the demand in the long run, since there will a decrease in passenger traffic. The recent efforts to start passenger ships to Gulf nations had received good response, the airport was exposed to the threat from another competitor. This service, inspite of long transit time (few days to Gulf) offered cost advantage and higher baggage limits, thereby became attractive to low income passengers.

Working with airlines to offer convenient schedules and better in-flight services could be a route to enhance attractiveness of the airport. Better quality of customer service that the airport could provide, would further help attract more passengers to the airport. Facilitating smooth movement of passengers, both inside and outside the terminal buildings and standardizing quality of the last leg of the journey (Prepaid taxi systems, connections to hotels and keeping away touts, tourist guidance etc) were effective strategies to improve customer satisfaction.

Responding to the anticipated decrease in gulf demand due to the changing employment pattern there by offering connections to other destinations (Europe, US etc) and working with other agencies to improve alternate purposes of traffic (like tourism) would be necessary for long term viability.

Indian airports which traditionally depended on aeronautical revenue stream could improve the their financial position by exploiting the potential of non aeronautical avenues. Both streams are dependent on the traffic (passenger and cargo) which utilise the airport facilities. They have to be tailored to local demands and marketed effectively through partnership agreements.

Providing visitor comforts would help to make the airport an attractive destination, increasing revenues from visitor fees and other non-aeronautical sources like gallery, shopping etc. An important risk mitigant is to have a judicious mix of aeronautical and non-aeronautical revenues.

Price: In the aeronautical stream, private airports face the risk of following AAI determined prices. Effective lobbying with the government would be necessary to have leverage over this issue.

Operating Risk

Cost Escalation: Essential services (security, ATC services etc) for the airport functioning came at a cost which was fixed by the service provider and imposed on CIAL. Unplanned revisions in the service rates and imposition of service providers led to increased expenditure and operational difficulties. Such moves reduced the airport's leverage to choose appropriate service providers, who were cost effective and service oriented.

The decision to hand over airport security to Central Industrial Security Force (CISF) became a costly proposition. The previous practice of utilizing the state police was less expensive. Even though the decision to introduce the CISF was taken on grounds of national security, the agency had no prior experience in handling sophisticated sector like airline passengers. There was a threat of increased passenger dissatisfaction, which the CISF had to address. CISF had initiated training of its personnel and developed systems for tracking passenger satisfaction.

In the long run, establishing norms for security (like already available standards for fire and safety in airports) and allowing airports to choose the service provider would be more feasible; financially and operationally.

Staffing: Human resources, with expertise related to airport operations, both at the project and operation stages were difficult to find locally. However, it was possible to get critical personnel on deputation from AAI, which had the requisite talent pool. The deputation route was a good opportunity to observe the fit of the person into CIAL, with the view of absorption at a later stage. They were also of use in developing local talent to requirements. However, this route had the risk of creating internal disparity (particularly salary differences) and organizational politics.

The pressures from local community and other vested interests for employment in the project could be a serious threat. These forces could not be ignored due to obvious reasons. Outsourcing and reserving indirect employment opportunities for local community members (project affected people) could take care of the demands to some degree. Strict control over staffing numbers was required to prevent overstaffing. Transparent as well as scientific selection procedure which included external experts aiding selection decision making, helped to build public confidence. Serious efforts are required from the organization to develop the people and maintain the customer service orientation.

Labor Unions: The airport is located in Kerala, a state known for its high level of political activism and trade union penetration. The trade unions of Kerala, both in the organized sector and unorganized sector had the history of protecting labor rights, very vocally.

While common perception about the trade unions in Kerala are not favorable, the system had over time evolved institutional frameworks like collective bargaining, dispute resolving machinery and adherence to negotiated settlement. The demands from labour unions would invariably include preferential employment for local citizens at different stages of the project.

In a situation where it was difficult to demarcate trade unionism and political involvement, any progress in labor relation front was possible by coordination with the labour unions at every stage. Regular coordination with all prominent labour unions and consensus building about issues led to the project being completed without the loss of a single day due to labour unrest. The support from state government and the political leadership also facilitated this achievement. The personal relationship between the local labour leadership (irrespective of political affiliations) and the CIAL management and the willingness to negotiate rather than stop work over differences, helped to a great degree. In such projects, recognition of the role of the labour union and following a consultative approach would be helpful. This requires the active support and involvement of the state government machinery.

Coordination between Governmental Agencies: At the project implementation stage, CIAL had to deal with a large number of governmental agencies, representing the state and center. Majority of the agencies was to be dealt for obtaining mandatory clearances for the project construction and operations. In the absence of a single window arrangement, CIAL had to deal with each agency on a one to one basis. Lack of a clear framework about the information/procedural requirements of each agency made it difficult for the company to plan ahead. This led to avoidable delays in the project.

At the operation stage, the airport had to host another set of governmental agencies, like customs, immigration, state police etc. Each agency worked with pre-defined objectives within the airport premises or limits. The airport management had no administrative control over these agencies, which took direct instructions from their corresponding ministries or supervising agencies. The inter agency conflicts and coordination failures affected the operations, which included bad publicity. Formalized arrangements for inter agency coordination at multiple levels would be a sustainable arrangement for conflict resolution. Institutionalizing such an arrangement would require policy level intervention.

Regulatory Risk

Classification and Licensing: International airport status was necessary for airports to allow international flight operations, particularly from foreign airline companies. It was difficult for the foreign airline companies to obtain permission for operating flights from custom notified airports. The time delay taken in obtaining international airport status had become a costly proposition for the airport in attracting the foreign airline companies.

International status required upgradation of facilities (like permanent customs, immigration stations and technical specifications) which were mandatory for handling international passengers. However, it enhanced the airport's leverage to market itself to foreign airline companies. This status was not obtained automatically, but declared by the central government. This required intense lobbying with the central government.

DGCA was the government body responsible for licensing the private airports and airstrips in India. This license was required for scheduled landings and commercial operations from the airport. AAI run airports were exempted form obtaining this formal license. Thus, they enjoyed benefits of permanent license.

The practice of issuing license for short duration to non-AAI airports (in CIAL it was 3 months) and the frequent inspections required for renewal of license created administrative inconvenience. The airport always faced an uncertainty about continued operation, which had impacted its long range planning and marketing efforts. The uncertainties involved are reduced to a considerable degree by ensuring that the internal management systems and compliances are maintained.

Tariff Fixation: The aeronautical tariff rates, RNFC (Route Navigation Facility Charge) and TNLC (Terminal, Navigation and Landing Charge) are benchmarked on AAI rates, even though private airports where free to charge other tariff rates. In the absence of policy guidelines, the airport followed the AAI tariff structure. The tariff structure did not reflect the cost considerations of a new airport and lacked flexibility (provision to charge premium or off peak rates depending on terminal demand, offering bulk rates etc.)

The airport was also charged (directly and indirectly) for the services rendered by other governmental agencies located in the airport premises. The airport had no role in fixing those rates. Temporarily, some payment options were negoitated (CISF payments) without additional revenue outflow. The absence of a Central Tariff Authority, which was authorized to regulate the charges and bring the flexibility demanded by new entrants had compounded the problem. Till then, airport specific, short-term concessions would be the best option.

Revenue Sharing: AAI was the sole agency to provide ATC services over Indian airspace. The initial arrangement was, the airport had to reimburse AAI the full cost of ATC equipment and forfeit the RNFC component of aeronautical revenue. This agreement proved detrimental to the airport's interest. In the absence of clear policy guideline on revenue sharing, CIAL took the position that turned out as confrontation with AAI. It stopped the payment due to AAI, violating the earlier agreement.

Clarity at the policy level about revenue sharing and creating an independent body to regulate and resolve such conflicts within the framework of policy is necessarry. The authority need to develop a sharing system, which assures adequate return to AAI for providing ATC services, while allowing the airport to keep its share of RNFC.

Review of Policy on Air Infrastructure.

Eventhough the private sector pioneered commercial airline operations in India, they were nationalized in the 50's. The ground infrastructure was provided by the public sector, namely, the International Airports Authority if India (IAAI) and National Airports Authority of India (NAAI). AAI was formed by merging IAAI and AAI in 1994. In 1991, the government opened the airline sector to private participation by allowing private air taxi services. Later, the private sector was allowed to operate scheduled airline services, while adhering to guidelines about deploying capacity across different sectors.

The New Civil Aviation policy (1997) allowed private investment in the air infrastructure sector, including foreign equity investments. Automatic approval would be given for foreign equity investments up to 74 % and 100 % in special cases, for construction of green field airports or upgradation of existing airports. State Governments, urban local bodies, private companies, individuals and joint ventures are allowed to invest. Investment is allowed in the form of Build-Own-Operate (BOO) and other forms depending on

circumstances. The policy also stipulates that, aviation safety and air traffic control will continue to be provided by AAI and customs and immigration by the respective government agencies. The GOI had initiated steps to privatize the ground handling services of major international airports through open tenders. Under this system, a single handling agent was to handle all ground handling services in all major international airports.

The policy is silent about security, which was supervised by the Bureau of Civil Aviation Security, under the ministry of civil aviation. Apart from allowing the state governments to invest in airport projects, the policy is silent about other roles.

Conclusion

CIAL had faced problems because of the lack of clarity of policy at various levels. Critical areas requiring clarity, both at the infrastructure creation and service delivery stages were: (i) framework for market based pricing for services (both revenue generating and cost incurring), (ii) relationship and coordination between agencies and (iii) airport licensing.

Airport operation is a niche area that requires high quality trained personnel. Currently, AAI is the only source of trained people, which has developed its captive recruitment and human resource development capabilities. As private airports increase, the natural inclination will be to recruit personnel from AAI. This might hurt the interests of AAI, and eventually lead to strained relationships. (The national air carrier, Indian Airlines Ltd. Faced a similar situation when the airline sector was opened) Planned interventions at the national level to develop human resources for managing airports are required.

The new civil aviation policy envisaged a statutory autonomous body, Civil Aviation Authority (CAA), which would be responsible to ensure safety, security and effective regulation of air transport in a liberalized environment. This has not yet been set up. The CIAL experience clearly indicates the need for constituting such an agency for effective growth of the air infrastructure sector.

Table I

Initial Financing Plan (1992)

Rs millions

A	Interest Free Deposit from 4 lakh NRI's @ 5000	2000
B	Money invested in KVP's of Rs. 2500 each for repayment in 6 years when the amount doubles	1000
C	Cash in hand (A-B)	1000
D	Loan against KVP's (75 % of Rs 1000 million) *	750
E	Donations	250
	Total C + D + E	**2000**

***** GOI loans upto 75 per cent of the money collected, back to the states at very low interest and long repayment period. The money needs to be used for developmental purposes.

Source: CIAL Records.

Table II

Rehabilitation Package for the Persons Evicted from the Land Acquired for the Project

The salient features of the rehabilitation package are:

1. Land and Houses were valued and compensation paid at the prevailing market rates
2. No depreciation built in while valuing the house
3. Six cents of land were given free to each family who lost their houses. Uniformity was maintained irrespective of the land acquired.
4. The owners were allowed to dismantle the houses and take away materials. Rs 20000/- was paid for Dismantling and transportation was arranged to rehabilitation colony in CIAL expense.
5. The rehabilitation area was provided with aspalted approach roads, streetlights, electricity connection, water connections etc on CIAL expense.
6. All unskilled jobs at the airport were strictly from persons who lost houses and consideration was given for higher level positions, depending on fulfillment of basic qualification and relaxed performance in the selection process (Test and Interview).
7. Permits for plying taxi services in the airport were provided to the evictees.

Source: CIAL Records

Table III

Various Government Agencies Involved with the Cochin International Airport Project

Government of India	Government of Kerala
1. Ministry of Civil Aviation	1. Department of Revenue
2. Airport Authority of India	2. Department of Finance
3. Director General of Civil Aviation	3. Department of Public Works
4. Bureau of Civil Aviation Security	4. Kerala Water Authority
5. Ministry of Environment and Forest	5. Kerala State Electricity Board
6. Ministry of Home	6. Department of Fire Force
7. Ministry of Finance (Customs)	7. Department of Labour
8. Ministry of Science and Technology	8. Department of Home of Kerala
9. Ministry of Commerce	9. Pollution Control Board
10. Ministry of Agriculture	10. Electrical Inspectorate
11. Ministry of Health	11. Department of Forest
12. Ministry of Defence	12. Department of Transport
13. Ministry of Railways	13. Department of Mining and Technology
14. Ministry of Telecommunications	14. Department of Irrigation
15. Reserve Bank of India	15. Panchayat Directorate
	16. Municipal Directorate
	17. Department of Agriculture

Source: CIAL Records

Table IV

Operating Income

Rs lakhs

Sr No		Year 1: June 99 – March 00 (10 months)			Year 2: April 00 – December 00 (9 months)				
		Actuals	**%**	**Actual Monthly Average**	**Actuals**	**%**	**Actual Monthly Average**	**Projected Monthly Average**	**%**
	No of Flights	3234.00		323.40	3939.00		437.70	524.00	
A	**Aeronautical Revenues**								
1	Landing, Parking, X-Ray and TNLC								
	Passenger Flights	790.52	53.16	79.05	854.70	41.24	94.97	147.62	31.76
	Cargo Flights							6.25	1.34
	Non Scheduled Flights	2.97	0.20	0.30	2.12	0.10	0.24		
2	Passenger Service Charges								
	International				458.19	22.11	50.19	94.97	20.44
	Domestic	120.42	8.10	12.04	100.26	4.84	11.14	22.60	4.86
3	Housing Charges							5.79	1.25
4	Cargo Handling Charges				13.11	0.63	1.46	15.62	3.36
5	Ground Services Royalty from AI	367.34	24.70	36.80	399.94	19.30	44.44	68.75	14.79
6	Technical Landing for Refueling							1.27	0.27
	Total (A)	1281.25	86.16	128.19	1828.32	88.22	202.44	362.87	78.08
B	**Non-Aeronautical Revenue**								
7	Fueling Operations								
	Land Lease*	45.97	3.09	4.60	32.12	1.55	3.57	2.04	0.44
	Royalty	1.35	0.09	0.14				0.60	0.13
8	Star Hotel/Flight Kitchen							2.67	0.57
9	Entry and Parking Charges								
	Vehicle Entry	23.01	1.55	2.30	64.71	3.12	7.19	5.24	1.13
	Visitors Entry	40.77	2.74	4.08	56.63	2.73	6.29	12.66	2.72
10	Rental Income	67.87	4.56	6.79	72.99	3.52	8.11	23.10	4.97
11	Duty Free Shops							53.41	11.49
12	Miscellaneous Income	26.77	1.80	2.68	17.60	0.85	1.96	2.14	0.46
	Total (B)	205.74	13.84	20.59	244.05	11.78	27.12	101.86	21.92
	Total (A + B)	1486.99	100.00	148.78	2072.37	100.00	229.56	464.73	100.00

* Land lease revenue includes contribution from BPCL for aircraft refueling facility and IOC for maintaining a petrol pump for vehicles. These two have not been separated.

Source: CIAL Records and Authors' Analysis

Table V

Flight Movement Statistics

	Domestic Sector			International Sector		
	July 1999 to March 2000	**April 2000 to December 2000**	**Total**	**June 1999 to March 2000**	**April 2000 to December 2000**	**Total**
Flight Traffic						
Total No. of Flights (Landing)	2719	3219	5938	547	740	1287
Average Landing per month	272.0	357.7	313.0	54.7	82.2	68.0
Passenger Movement						
Embarked	147708	174874	309446	116724	108165	219889 pax
Disembarked	143822	178242	316728	92648	111693	204341 pax
Total	291530	353116	626174	209372	219858	424230 pax
Average No of Pax (Arrival + Departure per month)	29153	39235		20937	24429	
Cargo Movement (in mt)	**October 1999 to March 2000**	**April 2000 to December 2000**	**Total**	**October 1999 to March 2000**	**April 2000 to December 2000**	**Total**
Loaded	728	1592	2320	949	1830	2780
Unloaded	956	1216	2171	567	1185	1752
Average Cargo Per month	241	312	299	217	335	302

Source: CIAL Records and Authors' Analysis

Table VI

Consultants' Projections for CIAL

Sr No	Item	Unit	Year I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV
1	**Passenger Traffic**																
	No of International Passengers/Annum	Lakhs	6.5	7.6	8.8	10.1	11.6	12.6	13.7	14.8	16.1	17.4	18.9	20.5	20.5	20.5	20.5
	No of Domestic Passengers/Annum	Lakhs	4.3	5.1	6.0	7.0	8.2	9.0	9.9	10.9	11.9	13.2	14.5	15.9	15.9	15.9	15.9
	Total No of Passengers	Lakhs	10.9	12.7	14.8	17.1	19.8	21.6	23.6	25.7	28.0	30.6	33.4	36.5	36.5	36.5	36.5
	International Passengers	Nos/Day	1784.0	2073.0	2400.0	2766.0	3178.0	3448.0	3741.0	4059.0	4404.0	4779.0	5185.0	5625.0	5625.0	5625.0	5625.0
	Domestic Passengers	Nos/Day	1189.0	1401.0	1644.0	1922.0	2238.0	2462.0	2708.0	2979.0	3277.0	3605.0	3965.0	4362.0	4362.0	4362.0	4362.0
2	**Passenger Flights**																
	International																
	B 747	Nos/Annum	0.0	0.0	541.0	623.0	716.0	932.0	1012.0	1097.0	1191.0	1292.0	1402.0	1521.0	1521.0	1521.0	1521.0
	AB 300-600, AB 340, B 777	Nos/Annum	2284.0	2655.0	2305.0	2657.0	3053.0	3091.0	3354.0	3639.0	3948.0	4284.0	4648.0	5043.0	5043.0	5043.0	5043.0
	Domestic																
	AB 320-200	Nos/Annum	505.0	595.0	698.0	816.0	950.0	1045.0	1149.0	1264.0	1391.0	1530.0	1683.0	1851.0	1851.0	1851.0	1851.0
	B 737	Nos/Annum	2612.0	3078.0	3612.0	4222.0	4917.0	5409.0	5949.0	6544.0	7199.0	7919.0	8711.0	9582.0	9582.0	9582.0	9582.0
	Fokker and Others	Nos/Annum	904.0	1066.0	1250.0	1461.0	1702.0	1872.0	2059.0	2265.0	2492.0	2741.0	3015.0	3317.0	3317.0	3317.0	3317.0
	Total Passenger Flights	Nos/Annum	6305.0	7394.0	8406.0	9779.0	11338.0	12349.0	13523.0	14809.0	16221.0	17766.0	19459.0	21314.0	21314.0	21314.0	21314.0
	Passenger Flights (Rounded)	Nos/Day	17.0	20.0	23.0	27.0	31.0	34.0	37.0	41.0	44.0	49.0	53.0	58.0	58.0	58.0	58.0
3	**Cargo Flights**	Nos/Annum	150.0	165.0	182.0	200.0	220.0	242.0	266.0	293.0	322.0	354.0	389.0	428.0	428.0	428.0	428.0
4	**Flights for Maintenance**	Nos/Annum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	**Total Flights**	Nos/Annum	6455.0	7559.0	8588.0	9979.0	11558.0	12591.0	13789.0	15102.0	16543.0	18120.0	19848.0	21742.0	21742.0	21742.0	21742.0
6	**Cargo**	Tons	15000.0	16500.0	18150.0	19965.0	21961.5	24157.7	26573.4	29230.8	32153.8	35369.2	38906.1	42796.8	42796.8	42796.8	42796.8
7	**Fuel Consumption**	'000 kl	143.0	166.0	248.0	287.0	330.0	375.0	408.0	443.0	482.0	525.0	571.0	620.0	620.0	620.0	620.0
8	**Royalty on Fuel (Rs 5/- kl)**	Rs Lakhs	7.2	8.3	12.4	14.4	16.5	18.8	20.4	22.2	24.1	26.3	28.6	31.0	31.0	31.0	31.0
9	**No of Vehlicles/Annum**	Lakhs	6.3	7.3	8.5	9.8	11.3	12.3	13.4	14.6	15.9	17.2	18.8	20.4	20.4	20.4	20.4
10	**No of Visitors/Annum**	Lakhs	15.2	17.7	20.5	23.7	27.3	29.7	32.3	35.1	38.1	41.5	45.1	49.0	49.0	49.0	49.0

Source: Cochin International Airport Limited, *Report on Pre-Investment Study for Cochin International Airport Limited,* (Volume II, Revised), 1997

Table VII

Operating Expenditure

Rs lakhs

	Year 1: June 99 – March 00 (10 months)			Year 2: April 00 – December 00 (9 months)				
	Actuals	**%**	**Actual Monthly Average**	**Actuals**	**%**	**Actual Monthly Average**	**Projected Monthly Average**	**%**
Personnel Cost	159.34	25.51	15.93	151.90	28.56	16.88	31.25	52.76
Consumable	14.65	2.35	1.47	10.80	2.03	1.20	5.25	8.86
Electricity & Water	144.67	23.16	14.47	120.29	22.62	13.37	5.91	9.98
Rent Rates & Taxes	9.58	1.53	0.96	1.15	0.22	0.13	0.46	0.78
Insurance	4.64	0.74	0.46	0.30	0.06	0.03	1.97	3.33
Maintenance	12.76	2.04	1.28	33.82	6.36	3.76	8.84	14.92
Contingencies	14.80	2.37	1.48	0.43	0.08	0.05	2.09	3.53
Admn. Overhead/Phone/Vehicle	22.70	3.63	2.27	24.72	4.65	2.75	0.92	1.55
Travelling & Advertisement	22.19	3.55	2.22	12.27	2.31	1.36	2.31	3.90
Legal Expenses	3.10	0.50	0.31	0.25	0.05	0.03	0.23	0.39
General Expenses	82.80	13.25	8.28	55.74	10.48	6.19		0.00
Total Cash Expenditure	491.23	78.64	49.12	411.67	77.41	45.74	59.23	100.00
Reimbursements to AAI	130.00	20.81	13.00	117.00	22.00	13.00		0.00
Meteorological Dept.	3.45	0.55	0.35	3.15	0.59	0.35		0.00
Total Expenditure	624.68	100.00	62.47	531.82	100.00	59.09	59.23	100.00
Debt Servicing	2464.39		246.44	2457.00		273.00	219.60	

Source: CIAL Records and Authors' Analysis

Table VIII

Summary of Operating Income and Expenditure Statement

Rs lakhs

	Year 1: June 99 – March 00 (10 months)		Year 2: April 00 – December 00 (9 months)		
	Actuals	**Actual Monthly Average**	**Actuals**	**Actual Monthly Average**	**Projected Monthly Average**
Total Revenue Generated (TR)	1486.99	148.70	2072.37	230.26	464.73
Total Expenditure (TE)	624.68	62.47	531.82	59.09	59.23
Revenue Margin (RM)	862.31	86.23	1540.55	171.17	405.50
Debt Servicing (DS)	2464.39	246.44	2457	273.00	219.60
Cash Profit (RM-DS)	-1645.01	-164.50	-916.45	-101.83	185.90

Source: CIAL Records

Table IX

Board of Directors (31st March 2001)

	Name	Position	Affiliation
1.	Mr E K Nayanar	Chairman	Chief Minister (Govt of Kerala)
2.	Mr Babu Rajeev	Managing Director	IAS, Assam Cadre (Former Chairman – Cochin Post Trust)
3.	Mr T Shivadaja Menon	GOK Nominee	Minister (Finance) GOK, MLA
4.	Mr S Sharma	GOK Nominee	Minister (Co-operatives), MLA
5.	Mr K E Ismael	GOK Nominee	MLA
6.	Mr V Krishnamurthy	GOK Nominee	IAS, Chief Secretary, GOK
7.	Mr S Suresh	Institutional Nominee	Chairman, HUDCO
8.	Mr N Mohan Kumar	GOK Nominee	Former Chief Secretary, Retd IAS
9.	Mr Gulfar Muhamad Ali	Investor	Business
10.	Mr E M Batra	Investor	Business
11.	Mr C V Jacob	Investor	Business
12.	Mr N V George	Investor	Business
13.	Vacant	Financial Institution	
14.	Vacant	Financial Institution	
15.	Vacant	Financial Institution	

Source: Annual Reports of CIAL.

Table X

Project Cost (31st December 2000)

The main components of the project expenses include:

	Rs million
Land Acquisition and Rehabilitation Expenses	700
Construction Cost – Runway, Terminal Buildings and Other Utilities	1600
Interest Capitalized	530
Total	**2830**

Source: CIAL Records

Table XI

Capital Structure (31st March 2001)

Rs million

Equity Participation	
Government of Kerala and Public Sector Undertakings	324.50
Non-Resident Indians and others	242.30
Airport service providers	212.50
Total	*779.30*
Loan Funds	
HUDCO – Term Loan	1,527.20
Federal Bank	246.90
State Bank of Travancore	275.10
District Cooperative Bank	120.00
Total	*2169.20*
Interest Free Deposits	
M/s Air India	110.00
M/s. Thomas Cook	5.00
M/s. Indian Oil Corporation	7.50
M/s. Alpha Retail – Duty Free Shop	100.00
Retail outlets	27.50
Total	*250.00*
Total	**3198.50**

Note: The equity contribution of non resident Indians and others was expected to be Rs 363 million, to make the total equity Rs 900 million.

Source: CIAL Records

Notes:

1. Airports Authority of India (AAI) was formed by the merger of International Airports Authority of India and National Airports Authority through Airports Authority Act (N0. 55 of 1994). It came into existence on 1st April 1995. AAI manages all airports which handle commercial air traffic. The airports are classified as international and domestic. Domestic is further classified into three categories. AAI also provides air traffic services over the entire Indian airspace and adjoining oceanic areas.

   International Airports: This status is accorded by GOI. These airports are available for scheduled international operations by Indian and foreign carriers.

   Domestic Airports:

   a) *Customs Airports with Limited International Operations:* These have custom and immigration facilities for limited international operations by national carriers and for foreign tourist and cargo charter flights.

   b) *Civil Enclaves in Defense Airports:* These are civil enclaves in Defense airfields, where limited commercial operations from domestic airlines are permitted. These airports are under the operational control of the defense and AAI uses the facilities on payment basis. (Example: Earlier Cochin Airport)

   c) *Other Domestic Airports:* All other airports, where domestic airlines are allowed are covered in this category

2. The Land Acquisition Act 1894 governed land acquisition by the government in Indian territory. Under the act, both central and state governments hold the power to declare land as being required for public purpose and the respective state machinery initiates the acquisition proceedings. For more detailed discussion about the subject, please see Land Acquisition: Law and Practice, Shivamurthy Y M and Sinha Vinitha, in *India Infrastructure Report: Issues in Regulation and Market Structure*, Oxford, 2000 p 80 – 87.

3. The Land Acquisition Act provides two routes to arrive at compensation. The district collector could decide on the compensation or the court, upon a reference could decide the same. In the former case, there are no concrete guidelines. In the case of court reference, there are certain guidelines to arrive at the compensation. The landowners are allowed to challenge the award in the higher court. (Shivamurthy Y M and Sinha, Vinitha 2000)