

## PULSE AND IMPULSE IMPACT ON THE DEVELOPMENT OF DELHI

A.K. Jain\*

Delhi, as the capital of India, one of the largest democracy, is a cosmopolis, which is parallel to the cities of Rome and Athens. It is a unique city, which lives by ambition, power and opportunism. Through 2000 years of history, it had been built, abandoned, razed and rebuilt by successive waves of time. The historiography reveals that Delhi has grown and died more due to pulse and impulses and due to unexpected and sporadic events. Political events, national and international sports, cultural and religious festivals have changed the course of its development. The impacts and effects of such decisions and events have often overtaken its natural growth. These have caused unexpected fluctuations in demands for transport, housing and infrastructure services. Wherever such infrastructure had been provided for a particular event, for a while these posed a problem of surplus capacity, but soon got absorbed in the overall system.

Delhi is amongst fastest growing cities of India, adding about half million population per year. Of this about 2,00,000 are added due to natural growth, while about 3,00,000 are the immigrants. Today the population of Delhi is around 13.8 million, (2001 Census), which has grown 6 times the population of 1961, the period when the Delhi Master Plan came into existence. The current urban scene presents a picture of severe housing shortage, stress on physical and social infrastructure,

congestion, dilapidation, pollution, degenerated river, overstressed transport system, and large scale squatting, unauthorised constructions and misuse. The situation of physical infrastructure is most alarming, as given below:

	Demand	Supply	Gap
Water (Mgd)	1024	580	444
Sewerage (Mgd)	900	280	620
Power (Mw)	2739	2352	384
Solid Waste (Mt)	6735	5543	1192

### Physical Infrastructure Gap

Source: Physical Infrastructure Sub-Group, DDA (2000)

Out of total area of Delhi (1486 Sq. km.), about 50% has already been urbanised and the rest is under heavy pressure of urbanisation. In order to restrict the growth of the city, National Capital Region, covering about 30,000 sq.km. has been delineated. However, the runaway growth of Delhi continues unrestricted. It has expanded and exploded. It is no more just a national capital, but an international centre of politics, business, sports, culture and education and has emerged as one of the prime movers and a nerve centre of national and international events.

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\*Addl. Commissioner (Planning), Delhi Development Authority

### **Pulse and Impulse Events**

Major events, which have triggered the runaway growth of Delhi after the independence of the country in August 1947 are the following:

- 1947 About half million refugees sought shelter in Delhi due to partition of the country, thus almost doubling its population.
- 1950 India declared Republic, marked by impressive extravagant parade and procession at the Central Vista and other ceremonies, which have become an annual ritual.
- 1951 Delhi became a State
- 1951 Asian Games
- 1955 UNESCO Conference, Vigyan Bhawan built
- 1957 First International Trade Fair held
- 1968 UNCTAD Conference
- 1972 Asian Trade Fair held, Trade fair ground in the Centre of city covering about 80 Ha. was developed. Thereafter it became an annual event, with round the year national and international trade fairs. Last year 3 million visitors were attracted by it, causing frequent choking of roads and huge parking spill over.
- 1975 Jawaharlal Nehru University established (400 Ha.)
- 1982 IX Asian Games, investment about Rs. 10,000 million, construction of 3 major stadia (Indoor Stadium of 30,000 capacity, Jawaharlal Nehru Stadium of 75,000 capacity, Talkatora Swimming Pool), 11 Five Star hotels, development of Ring Railway system, Asian Games Village (54 ha.), media centres, exhibition, conference halls and theatres, flyovers etc. Estimated labour engaged – 2,50,000
- 1985 Indira Gandhi Open University established
- 1990-91 Adoption of policies of Economic Liberalisation & Globalisation
- 1994 Delhi State and assembly constituted.
- 1998 G.G.S. Indraprastha University established

The mega-events, which usually took place over a short period of time, attracted massive visitors and have been highly demanding in land, human resource, building materials and infrastructure. Whilst these mega-events are beneficial in a financial sense, they also brought several distortions and adverse impacts. It has been a major challenge to utilise the massive

infrastructure after the events and to provide jobs to those who became unemployed after the event was over. On one hand the big projects and events have added prestige to the identity of the city and helped in replacing old facilities with new, they also posed serious problem of shelter, traffic and municipal services. On the face of city's dominant identity, the individual seems to have been lost in its vast wilderness. A fallout of this has been

acute law and order problem. The city has become anonymous and its social fabric has become fragmented with the unknown and potential threats to security. The terrorism is an emerging phenomenon. The rallies, demonstrations, strikes, political processions, religious and cultural celebrations have all become daily affairs in Delhi, which adversely affect the smooth flow of traffic and upset the routine of the common man. The problem is further compounded by marriage processions and the current trend of holding huge marriage ceremonies in the farm houses in Rural Delhi, where the roads are too narrow and services are almost non-existent and incapable of taking sudden overload. However, makeshift arrangements (like generator for electric supply and tankers for water supply) have become the routine provisions.

#### **Impact of Pulse and Impulse Events**

The question is can the planning system provide resilience to absorb such unplanned mega-events and mitigate their adverse effects? The planners and urban managers have to deal with such sudden and temporary demands for which flexible options have to be developed and regulatory mechanism has to be enforced. The challenge is to use creatively the momentum, which is driving the big event to bring about advantage to the social, physical and economic enrichment of the city. The strategies are to be evolved to reconcile peak season demands with those of the low season and utilise surplus infrastructure. It is necessary to work out a system, which ensures that a share of profits from pulse events is directed back to the city.

Every decision, particularly those outside the planning framework, causes immediate and long-term impacts. It is essential to study and forecast the impacts

on city's growth, infrastructure services, employment, etc. For example, the opening of GGS Indraprastha University in Delhi together with privatisation of higher education, have triggered a process of Delhi emerging as a national centre of higher education with more than 100 colleges affiliated to it sprang up in Delhi during last 5 years. The impact study should also cover the effects on law and order, traffic, physical and social infrastructure/city services, labour, employment and economy, real estate market, housing etc. Keeping in view the capacity limitations, it is necessary to work out the scale of mega-events, such as international trade fair vis-à-vis critical factors, such as expected traffic and parking demand and restrict the scale and duration of the event so as to be self-contained, without spill over. While working out the scale, it is also necessary to consider the short range and long range impacts, critical factors and multiplier effects of the mega-events.

#### **Planning Intervention**

In Delhi the mega events have usually taken place without adequate provision of corresponding infrastructure. Their activities keep growing and expanding. Although it is desirable to relocate certain activities from the core of Delhi to the National Capital Region (NCR) outside Delhi or at the peripheral locations, it is not easily feasible. What can be done is to adopt a two pronged strategy – (a) to limit the scale so that their requirements are confined within the premises, (b) to augment services and mass transport so that the generation of traffic and parking demands are reduced to the extent possible. In case of International Trade Fair grounds, there are proposals to shift the existing ground to a peripheral location, which is served by the

railways, Metro Rapid Transport System (MRTS) and expressway/highways. However, the existing infrastructure can be utilised on a reduced scale of operations whereby the parking and traffic are confined within the existing capacity of roads and parking space. It is also necessary to examine whether the existing exhibition grounds can be linked with the MRTS.

It is worth recapitulating that the Delhi Development Act, 1957 postulates planned development of Delhi with the objective to secure the planned development of Delhi in accordance with the Plan. Accordingly, Delhi has a comprehensive and legally enforceable Development Plan since 1962. The Master Plan (1962) warned that “in a planless regime, development is effected by inconvenient time lags on an *ad hoc* basis – a process like organising fire fighting services as and when a fire occurs. Development when carried out in this piece-meal, erratic and inconsistent manner inevitably costs much more in the end; economies which could be effected through timely and systematic planning are no longer possible”. The review of Delhi Master Plan states that “the inescapable conclusion of this review is that planned development has not taken place in a planned manner. Ironically whatever implementation has taken place, has been mainly in response to the pressures developing from place to place and from time to time and not in accordance with a definite time-sequence of a well-conceived programme”.

The National Capital Region Planning Board Act, 1985 also postulates decentralisation of economic activities in a wider region and put a cap on the establishment new offices, government undertakings, industry, institutions etc. in Delhi. However, often the political

decisions have superseded the planning decisions. It hardly needs to be emphasised that the provisions and objectives of DD Act, 1957 and NCRPB Act, 1985 should be adhered to with impunity. However, in a democratic polity compromises are to be made. Thus to cope up with the pulse effects of unplanned decision, the following strategies are proposed to be adopted:

- i) To identify areawise/project wise critical factors and impacts (such as water supply, power, parking, mass transport etc.)
- ii) To study the internal and external impacts of the project in short range and long range
- iii) To plan for overspill, fall-out of the mega-event. For example if large labour force is involved, to provide for their housing, services and employment for a sizeable proportion of those.
- iv) To provide for a (25 to 33%) factor of safety for infrastructure services at the city level (roads, parking, mass transport, water supply and power).
- v) To levy charges on such developments for city infrastructure fund. Such charges may be in the range of 10 per cent of investment and 2 percent of annual transaction of the mega-event.
- vi) To control and review the counter-productive policies which trigger unplanned growth of mega-events and have multiplier effects (such as using farm houses for marriage ceremonies, subsidised allotment of land to educational and other institutions, incentives for opening up of new colleges, professional institutions, universities, industrial, commercial activities and

- residential colonies, subsidised/free of cost allotment of plots to squatters, expansion of public sector undertakings etc.).
- vii) To work out traffic contingency and management plans for the political rallies, processions, religious festivals etc.
  - viii) To review the law and order situation vis-à-vis the potential of security machinery and limit the frequency and scale of mega-events, processions, celebrations and rallies.
  - ix) To identify and notify the opportunity zones and areas of surplus infrastructure capacity, which can be reserved for cyclic
- mega-events. Such grounds may not be built upon and are to be used for various events around the year. Such locations should preferably be served by major roads, MRTS and Railway network and should not hinder the ecology or disturb day-to-day routine. At the same time, the central and prohibited areas (such as ecologically sensitive zones, heritage zones) can be specified where no mega-events may be permitted.
- x) Integration of mega-event developments with the overall city structure is crucial for which planning efforts should be made.

In a fluctuating wave of growth, city planners and managers have to understand the implications of economic and political decisions and plan to cope up with their pulse and impulse effects. Although they are typically ephemeral, it is possible to minimize their adverse impact on the city and to capture their positive contributions by strategic interventions.