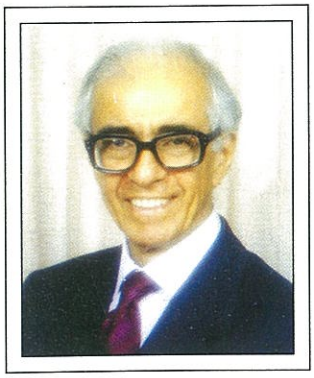
# BOMBAY first THE CITY

A Publication of Bombay First

Vol 1 • Number 1 • March - May 2007

## Mumbai Health & Education



# Chairman's Statement

As I sit down to write this statement, it gives me immense pleasure to present to you some remarkable progress we have achieved on some of the issues during the last year. Bombay First has come a long way in pursuit of our primary goal of making Mumbai a world-class city. We have tried to tackle several issues but a lot still remains to be done and we are working with the Government to resolve these.

Mumbai has always been the powerhouse of industry, trade, commerce and finance in India for a long time. The city has grown on its own strength and as a nodal center it supports activities across the country. Yet overtime it slipped off the growth path and began to experience decline on several fronts. At the same time, the city has also undergone a turbulent political path. All these factors affected the quality of life on one hand and the investment climate on the other. Urban Planning, which was the need of the hour, has not been given significant recognition.

Bombay first has played an active role in the formation of the Citizens' Action Group (CAG) to act as a monitoring cum feedback mechanism. Subsequent to the floods of 26/7 a need was felt to have a single point authority for the city. We took up this issue with the Honorable Chief Minister through CAG and an Empowered Committee has now been created under a government resolution, which is headed by the Chief Secretary – Government of Maharashtra. The objective of this committee is to oversee planning and accelerate the implementation of projects and policy changes in a coordinated manner to attain designed goal of transforming Mumbai into a World Class city.

In our view, to delay the construction of vital projects would be to risk the on-going success not just of Mumbai, but also of India on the whole. It is not a risk any of us can afford to take.

In the recent decade, India has made significant strides in the financial sector. Some of the important developments are strengthening of banks, deregulation of interest rates and sector competition in the banking system, etc. This raised the question of how Mumbai could play a bigger role in the global market for financial services.

A road map for Mumbai as an International Financial Center was prepared by Bombay First and submitted to the Honorable Prime Minister, the Honorable Finance Minister and the Honorable Chairman of the Planning Commission. Bombay First emphasized the suitability of Mumbai to become an International Financial Center in various meetings to officials of the central government. Subsequently the Ministry of Finance, Government of India constituted a High-Powered Expert Committee on making Mumbai a Regional Financial Center on 28th November 2005. The committee has met on few occasions and we believe that the recommendations will be submitted to the government soon.

Now that many of the physical infrastructure projects are being implemented we are now shifting our focus on issues pertaining to social infrastructure enveloping health and education. A core group of committed doctors are formed to study various problems facing primary health and find out the gaps between private and public sector that can be bridged. We need to improve the public health of the city and need to define our role, the role of the NGO's and the private practitioners. With respect to education, have been encouraging the promotion of Sarva Shisha Abhiyan (SSA), a government flagship project to achieve universal education for children in the age group of 6 to14. We have several meetings with various educationist, NGO, representatives from the Times Foundation in the effort to keep this movement active.

In conclusion, I would like to express my appreciation and sincere thanks on behalf of the Governing Board of Bombay First, to the Chairmen and members of our expert committees/sub – groups without whose support and cooperation it would not have been possible to take forward the agenda of this unique organization.

I also wish to mention that we have been receiving significant help from, Bombay Chamber or Commerce and Industry (BCCI) in pursuit of our objective .

# CONTENTS


From the Editor's Desk ..... 3

**Issues in Social Infrastructure**

**SCOPE**

1. Revitalizing Education in Mumbai: A Five-Pronged Approach – Dr. Abhay Pethe ..... 5

**PERSPECTIVES**

2. Importance of Quality Educational Institution to make Mumbai an International Commercial Center – Ms. Manju J. Nichani ..... 9

**FOCUS**

3. Education and Health Infrastructure in Mumbai – Mr. A.K. Jain ..... 11
   a) Role of Health in a World Class city
   b) Public Health Infrastructure in Mumbai
   c) Health Strategy
      - *Developing effective health care infrastructure*
      - *Addressing major killers*
      - *Creating clean and healthy environment*
      - *Economic growth and good health infrastructure*
      - *Community involvement*
      - *Integrating and disseminating information*
   d) Way Forward
   e) Present Scenario of Primary Education
   f) Strategic Plans and suggestions for Improving Education in Mumbai
      - *Improving Enrollment in Mumbai Schools*
      - *Improving quality of Teachers*
      - *Improving School Infrastructure*
   g) Sarva Shiksha Abhiyan (SSA)

**PERSPECTIVES**

4. Health in Urban Slums - An Overview - Dr. Armida Fernandez ..... 22

**SCOPE**

5. Health System and Alternatives - Mrs. Nirja Mattoo ..... 24

**PERSPECTIVES**

6. Shwana Van (Stray dog control alternative) and Occupational Health Problems – Dr. Uday Kulkarni ..... 29

**INSIGHTS**

7. Some facets about Mumbai and Air Pollution - Dr. Rajiva Prasad ..... 35



## EDITORIAL TEAM

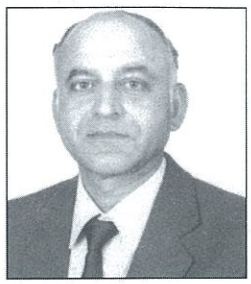
| | | |
|---|---|---|
| *Chief Editor* | : | Wg. Cdr. Vijay Mahajan |
| *Associate Editors* | : | Ms. Sonya Fernandes |
| *Secretary* | : | Maria D'Souza |
| *Printers* | : | Uchitha Graphic Printers Pvt. Ltd. |



## BOMBAY FIRST

4th Floor, Yashwantrao Chavan Centre
Gen. Jagannath Bhosale Marg,
Nariman Point, Mumbai - 400 021
Tel.: 2281 0070 / 71 • Telefax: 2281 0072
E-mail: mumbaifirst@vsnl.net.
Website: www.bombayfirst.org


# From the Editor's Desk



*Mumbai is changing into a globalized economy based on the ideals of changes and modernization. Keeping this dynamistic view in mind we have chosen the theme of our "The City" Magazine as Health and Education. Primary Health and Education have always been issues most discussed in various government and non – government forums but least acted on. The time is now to instill in this huge process as sense of "appropriateness" to these issues.*

*This particular edition aims towards highlighting key health and education issues by bringing together the views of Practitioners, Academicians, Institutions and the government through the articles.*

*There is a need to achieve a concrete outcome and provide a sustainable direction in these areas. We also aim to address the related issues on a common platform to debate there issues and create a proactive action strategy. We intend on catalyzing the process of creating a new framework, involving community participation to transform the social-economic occurring of the inadequacy of these services.*

*We have decided to take up the suggestion of the members of our social infrastructure group to work towards creating a prototype for the city where in 2 municipality schools can be pooled in with one private school and have a gap analysis done. This will be done to isolate the reasons for rising drop out rates and to build knowledge on improving the quality of education in the city.*

*Through this magazine we hope to create an active network of individuals and institutions dedicated to working on the issues of City Health and Education.*

This is 4 year old Shreya.
Her parents abandoned her and vanished. If you turn the page, you'll do the same.

With no one left in the world, little Shreya doesn't have the slightest hope of facing the future, unless she gets an education. And that's where you come in, to make a dream called Nanhi Kali come true. Through Nanhi Kali, you can support the education of a deserving girl child. Be her guardian and give her the assurance that no matter what trials her family faces, she will never have to drop out of school. As her guardian, you will receive regular reports on her progress, including a photograph.

**Nanhi Kali is a Project for the Girl Child jointly managed by K. C. Mahindra Education Trust and Naandi Foundation.** These not-for-profits led by eminent captains of industry have brought together the finest professionals of the development sector to ensure every girl child in the country can complete her education.

Through Nanhi Kali, you can become the foster parent of a little girl like Shreya. By contributing a small amount per month towards her education, your 'daughter' will be put into school. The cost of sponsoring a Nanhi Kali's education is Rs. 1800 per annum for girls studying in Elementary School (Std. I – VII) and Rs. 2500 per annum for girls studying in High School (Std. VIII – X). So, please don't turn the page yet and ensure that every girl child in the country completes 10 years of formal education.

Nanhi kali
for the girl child

A project jointly managed by
**K. C. Mahindra Education Trust** and **Naandi Foundation**

580701

Space donated by Mahindra & Mahindra Ltd.

Yes I, _____ would like to adopt a 'Nanhi Kali' like Shreya. Enclosed is my cheque of Rs.1800/Rs.2500 in favour of K. C. Mahindra Education Trust A/C Nanhi Kali for one year's education of one Nanhi Kali. Instead of one Nanhi Kali, I would like to adopt _____ Nanhi Kalis for _____ years. My cheque for Rs. _____ is enclosed @ Rs.1800 (for Nanhi Kali's studying in Std. I to VII) / Rs.2500 (for Nanhi Kali's studying in Std. VIII to X) per Nanhi Kali per year. All donations are exempted under Section 80 G of the Income Tax Act.

Please send your cheque to the K. C. Mahindra Education Trust, Cecil Court, 3rd floor, Near Regal Cinema, Mahakavi Bhushan Marg, Mumbai - 400 001. Tel.: (022) 22021031 Fax: (022) 22852441.

# Revitalizing Education in Mumbai: A Five Pronged Approach

Abhay Pethe

The Indian economy has attained *cruise control* within the environment of LPG almost in an irretrievable fashion. The Indian growth story is now too well known and does not bear repetition. The brave new *global* world is driven by the 'knowledge economy', one of the arenas in which India has a comparative advantage. In order to press the advantage however, it is essential that we get the policies and architecture right as far as the educational sector is concerned. The other relevant strand here is informed by the fact that India's future is urban. In a global knowledge economy the role of cities (especially metros) is undisputed. These – apart from several other things – represent hubs of education, innovation and connectivity. Mumbai as a premier *mega polis* has a special role to play in assuring continued success of the Indian story.

Mumbai has an area of only about 437 square kilometers populated by over 12 million people packed at an average density is 27000 persons per square kilometer. The growth is taking place in suburban areas with the population size in the main city having attained a plateau. The share of migration in the growth is to the tune of 36%, clearly indicating that Mumbai is still a major attractor for 'outsiders'. Of the total population about 50 to 55% live in slums, encroaching on 3500 hectares of prime land. Mumbai is one of the great and certainly the largest cosmopolitan cities of India. It has aspirations to becoming one of the premier cities in the world. Mumbai represents the quintessential dream world with all its sweat and blood, its skyscrapers and slums, its education and industry, anonymity and glamorous city-lights it affords, but above all its spirit and resilient character is what makes it tick. In this piece we take as read the aspects of Mumbai in its varied dimensions – emphasizing its prowess – and go on to comment on the educational sector and what needs to be done, so as to transform Mumbai into a world class metro. In this, I have been informed by the position (so aptly put by Thomas Friedman in his World is Flat) that once the 'wholesale reforms' by way of prerequisite have been accomplished, what is important is to get urgently into the business of retail reform agenda concerned with the micro-design. *This involves looking at four key aspects of the society – infrastructure, institutional or regulatory reforms, education and culture.* Here I shall concentrate on education and with specific focus on Mumbai.

Education is one of the crucial areas that urban areas and mega cities like Mumbai are specially supposed to cater to from the stand point of the entire country. As Amartya Sen has aptly put it, *education (along with health), especially basic is not an instrument but a very constituent of development and its instrumental value is secondary.* The spectrum is large, extending from *KG to PG* and from Liberal Arts to Pure Sciences and from Technology to Professional streams. Finance and Entertainment apart, educational set up is huge in Mumbai. Technological advancements allow us to not only cater to the city but can set up extension services –qualitatively and quantitatively enhanced – to the immediate hinterland and indeed all over the country and the world. Let me turn to some doable things that ought and must occupy our attention in our stated quest.

1. It is clear that our efforts at rigid, institutionalized universal primary education (and adult literacy) for all have failed. What is required is ***an extension and informal approach enabled through the instrument of Civil Society organs***. The clinical approach that was embodied in the Municipal schools structure has not delivered and is anyway on the decline. An extension approach therefore is called for. The private schools' structure is not big enough to take care of all the potential recipients and is

*Chair Professor, Vibhooti Shukla Chair and Unit in Urban Economic and Regional Development, Department of Economics, University of Mumbai*

not affordable for all. This issue needs to be looked at in a way that is integrated with livelihood issue. Thus child care system has to go with education hand in hand. ***Out of box thinking is called for and the grass root NGOs will have to be empowered to use general guidance in terms of circular content and skills to deliver.*** This alone will ensure comfort to the kids in learning using idioms and montages that, they can identify with.

2. For higher (University and Professional) level learning we need to set up ***institutions of excellence*** if we want to cater to the kind of economy for Mumbai that we have been talking about. The ***huge infrastructural needs*** mean that the state has to provide the requisite resources. Also the human resources required will have to be of a very high quality. That will imply that the wage contracts will have to match the best alternatives available. The government sector will have to identify and focus on ***nurturing few such institutions and back it with requisite resources.*** This will require a self binding commitment on the part of the government that unfortunately seems unrealistic to assume in the present socio-political climate. The problem of access is so gigantic that there is no realistic solution that ignores the fruitful use of distance mode of learning. *There are issues of reverse discrimination that become contentious and can be ignored only at one's peril. These issues will have to be squarely faced. Best practices such as bridge/ remedial courses and mentoring will have be recognized and introduced as serious activities.*

3. The ***private sector will have to play a role in this context in a big way.*** This has already started happening in Mumbai. Whilst we are hopeful of the emergence of this new institutional mechanism of private Colleges and Universities there are teething problems. There will have to be a proper mix worked out of un-intrusive supervision and regulation that allows private enterprise to thrive but will have transparency vis-à-vis admission policy and fee structure. With academic freedom to devise market driven courses we are hopeful that such a policy will deliver to a great extent.

4. **Technology** provides a tremendous opportunity that will have to be garnered with ingenuity. With Mumbai emerging as a gaming and media hub interesting kits and modules can be easily created. Also, there is a huge potential for **e-learning** that needs to be tapped. Again the skill sets and economically viable solutions exist that are waiting to be exploited. Here too the private-public as well as formal and informal sectors will have to forge synergistic relationships. It is advised that this be done as far as possible outside the formal governmental sector (but indeed with its help) in a mission mode.

5. Mumbai has been growing at an impressive growth of around 9% for the last few years. All indications are that this is likely to continue at an accelerated pace in the medium term. It is well to remember that such growth – which is essential for any developmental aspirations – is unsustainable unless it is also accompanied by employment generation and has an inclusive character. This is crucial for socio-political viability which is of essence in any democratic society. Any growth that is either jobless or is based on imported employment is self defeating. Thus, given the magnitude of vulnerable section in Mumbai, it will be required that government intervene in setting up or facilitating setting up of **vocational institutes/ polytechnics** in a big way. This will ensure that the *young marginal citizens will be able to acquire job skills that will ensure them livelihoods.* This is one area where Mumbai is lacking and warrants serious attention.

Mumbai faces huge challenges in its march towards transforming itself into a world class metro. Infrastructure, governance and finance are top of the list. Education and health-care are equally important. It is imperative that Mumbai shows its famed spirit, culture and resilience in pushing forward the agenda on all fronts and emerge triumphant as a *Prima Donna* amongst Indian megapolises. ■

*Where joy, elegance and beauty spread their fragrance.*

# Hiranandani Gardens, Powai

*The crowning glory of Mumbai*

**New Launch**

| Glen Dale | Glen Ridge |
|---|---|
| 3 BHK - 2125 sq.ft. | 4 BHK - 2650 sq.ft. |

**Township Facilities:** Dr L H Hiranandani Hospital • ICSE school • Clubhouse • Galleria shopping mall • The LOFT • Culture Shop • HAIKO supermarket • RODAS an ecotel hotel • HAKONE sports & entertainment • Hiranandani Business Park

**Prime Shopping Premises Available On Central Avenue For Reputed Brands On Leave And License Basis.**
**Contact: 98205 48173 / 98195 00038**

Home loans available from
HDFC HOME LOANS
WITH YOU, RIGHT THROUGH

**Tel.: 2576 6724 / 98193 02087 / 98196 85876 / 98201 21739 / 98211 52462**

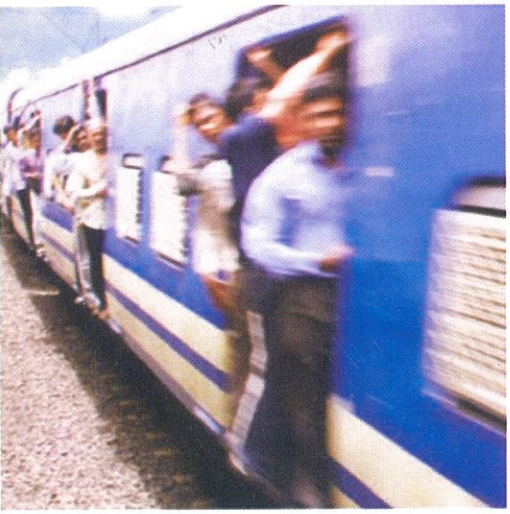
Olympia, Central Avenue, Hiranandani Business Park, Powai, Mumbai - 400 076.
Fax: 2570 6444 • E-mail: sales@hiranandani.net • www.hiranandani.com

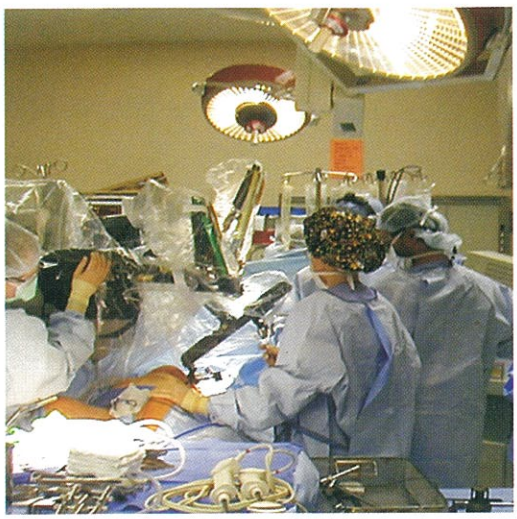
Hiranandani
creating better communities

Jaya

TATA

# A catalyst for growth





## Committed to ensuring uninterrupted power supply

From pioneering the generation of electricity in India to becoming the largest private power company, Tata Power has earned a reputation of trust, reliability and excellence in customer service. It is committed to setting new standards of excellence and raising the bar in the Indian power sector to pave the way towards the future.

**TATA POWER**

**The power of the future**

# Importance of Quality Educational Institutions to make Mumbai an International Commercial Centre

Manju J. Nichani

When asked how much educated men were superior to those uneducated, Aristotle answered, "As much as the living are to the dead." How right Aristotle was centuries earlier can be gauged from the fact that in today's world an uneducated person is termed as unhealthy. In fact Health is defined in WHO's Constitution as a state of complete physical, mental and social well being and not merely the absence of disease or infirmity. The value of good education cannot be stressed enough. While education keeps a man healthy it is quality higher education, which contributes to the economic, social & cultural development and improvement of society as a whole in a sustainable manner.

In India the target population of the education system is the group within the age of 6 to 24 years, which is around 411 million. Out of this only 224 million enroll in any formal education system and out of this figure only 9.95 million are able to enjoy the fruits of higher education. This is hardly 2.4 % of the target population and of this a substantial proportion, belongs to Mumbai. . Mumbai has the unique distinction of having one of the earliest Universities in the country. The Bombay University was set up in 1857. Higher education has therefore been quite high on Mumbai's agenda.

The educated citizens of Mumbai have played a major role in the country's progress. It is this group that converted the country's image of a largely agrarian society to a modern IT hub; where people from all over the world are keen to invest. Mumbai is the commercial capital of the country and contributes majorly to the nation's economy. Mumbai has a number of premier institutions of higher education but those are just not enough. The number of students seeking higher education goes on increasing every year more so since the prior steady fields of engineering and medical are losing their charms a little for the students. The demand for graduates has increased in the job market and the youth require quality education to succeed not only individually but to lead to the country's growth too.

As the world becomes more a global village and the economy prospers, the youth face more and more challenges. In such a scenario only those institutions that reinvent themselves and remodel themselves to suit the needs of the youth and the nation will thrive while the rest will peter away. The need of the hour is to provide learning in stride with earning. Youth will be attracted to those areas of study, which will also garner for them a good pay package. Higher education needs to stay in tandem with the industry so as to study the market, identify areas of growth and adapt syllabuses to be able to fill up the demands perceived. This was how India managed to better the world with respect to the IT sector and the BPO sector. Mumbai is one of the prime centers of the BPO sector and the IT industry. Apart from these most of the Multinationals have Mumbai as their headquarters and many other industries like pharmaceuticals, textiles, electronic goods, trade etc are all flourishing here. All of these industries need trained and educated personnel, which can be provided only through higher educational institutions.

Let us not undermine the economic importance of higher education. Highly educated youth of the country will and already have bought great business to the country. If suddenly India and her affairs are looking up, it is partly due to higher education. Our strong capacity for learning, for numbers and for languages and science has all been noticed by the world today. It therefore behoves the government to see that more of an investment is made in higher education and its difficulties are addressed speedily. Existing vacancies need to be filled fast, teachers' training programmes have to be steadily implemented, teachers' salaries have to be paid in time, teachers themselves have to make use of modern technology to appeal to the modern student, colleges have to have state of the art facilities for learning and an education-industry interaction has to be developed. Mumbai can lead India in matters of higher education since we have the will only the way has to be found.

*Principal - K.C. College, Secretary - Hydrabad (Sind) National Collegiate Board*

Today we have foreign universities wanting to come to India only to tap its rich resource of students. Similarly Indian Universities today are getting into meaningful collaborations with well known foreign universities to provide the best of learning to our students. Quality education is important and good foreign universities will therefore be welcomed here, the fact remains that we have all to get our acts together quickly and earnestly if we don't want to be left behind. Those of us who believe in anticipating change and getting ready for it will forge ahead.

Higher education is becoming costlier by the day. Good students from the economically weaker background are not able to afford education in premier institutes due to lack of resources. Higher Education may become costlier once the foreign universities are allowed to set shops here. Banks should therefore further ease their procedure for sanctioning of loan for higher education. The time is ripe for setting up of a bank specializing only in Higher Education loan similar to institutes like HDFC / SIDBI which specialize in area specific areas. The youngsters of Mumbai will reap rich benefits from such a bank.

There is a shortage of quality higher education institutes in Mumbai. This becomes painfully apparent during the admission time every year. We at KC College have first hand experience of ever increasing crowds vying for admissions to limited seats on offer. Needless to say that a number of more institutes that can provide quality, vocationally oriented education needs to be set up. A major constraint in setting up an institute in Mumbai is the lack of space. Starting evening classes in colleges may be one way of increasing the capacity of these colleges. This may not be very difficult as Mumbai provides round the clock safe and reliable road and rail transport to its citizens.

We in the Hyderabad Sind National Collegiate Board (HSNC) have always been very aware of the need of quality education, which is why our founders like Professor K.M Kundnani and Mr. Hotchand Advani were visionaries who established this board to provide opportunities for higher education to the youth of the nation. The HSNC Board has a number of educational institutions under its aegis in Mumbai, and its primary aim has been to produce graduates with the drive to build, nurture and succeed in whatever field they choose to adopt. The individual's success is ultimately the country's success.

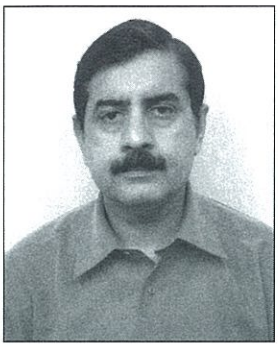
KC College as one of the constituent colleges of HSNC Board has also believed in keeping the flag of higher education flying high. Our college has from time to time started new courses, provided infrastructure and a dedicated staff to cater to a changing economy and the changing needs of the youth. We are one of the most reputed South Mumbai colleges with our own limitations of space but we have believed in being innovative and stretching our infrastructure to cater to the needs of our students.

However, much remains to be done and as we strain to provide admissions each year to more and more students whose numbers keep on swelling, as we keep on evaluating and re-evaluating the quality of our education and as we fight to increase our infrastructure and other facilities – we may falter occasionally but never stop and go on with renewed vigour when even one of our students achieves outstanding results and excels in his/her field of working. ■

Vision Mumbai document targets at health and education as the key areas of improvement for social infrastructure which would lead to better quality of life for the common citizen of Mumbai. In order to transform Mumbai into a city with globally comparable infrastructure and offer a comfortable quality of life, there is a need to identify the problems and come up with a strategy to reach our goals. First report of the Chief Minister's Task force seeks to improve physical and social infrastructure in Mumbai where delivery of social services will be upgraded to world class levels. This would require drastic improvement in the infrastructure for health and education i.e. improvement in government run hospitals and schools which cater to the common man. The World Bank Mission in March 2005 has enlisted infrastructure as a major area of focus in the transformation process. This includes provision of better social services with improved social infrastructure. The World Bank Mission in November 2005 has reiterated the need to focus on education and health as the key sectors of improvement. While establishing the relationship between education, health and growing economy, the Mission has pointed that tertiary education cannot be ignored. Education provides the city with skilled and talented people to run the city's economy.

# Education and Health Infrastructure in Mumbai

A.K. Jain



## THE VISION FOR MUMBAI

**Vision Mumbai document** targets at health and education as the key areas of improvement for social infrastructure which would lead to better quality of life for the common citizen of Mumbai. In order to transform Mumbai into a city with globally comparable infrastructure and offer a comfortable quality of life, there is a need to identify the problems and come up with a strategy to reach our goals. **First report of the Chief Minister's Task force** seeks to improve physical and social infrastructure in Mumbai where delivery of social services will be upgraded to world class levels. This would require drastic improvement in the infrastructure for health and education i.e. improvement in government run hospitals and schools which cater to the common man. **The World Bank Mission in March 2005** has enlisted infrastructure as a major area of focus in the transformation process. This includes provision of better social services with improved social infrastructure. **The World Bank Mission in November 2005** has reiterated the need to focus on education and health as the key sectors of improvement. While establishing the relationship between education, health and growing economy, the Mission has pointed that tertiary education cannot be ignored. Education provides the city with skilled and talented people to run the city's economy.

## Public Health Infrastructure in Mumbai

### Role of health in a World class city

1. Rapid and unplanned urbanization is a marked feature of Indian demography during last 40-50 years. The urban population of India, according to 2001 Census, accounts for 27.8% of the total population equating 285 million. This represents 100 times increase in the past century and nearly 40% increase during the last decade. It is projected that by 2025 India's urban population will touch 666 million. Maharashtra is one of the most urbanized states in the country with more than 42% population in cities and towns (2001 census). Therefore the impact of the problems that come with urbanization is much more severally felt in this state and particularly in cities like Mumbai.

2. A characteristic phenomenon of urbanization during the second part of the last century is urban poverty. It is estimated that nearly 23.6% of the urban population in the country is below the poverty line. This figure does not include floating population or unaccounted population. Different studies indicate that the growth of urban poverty is more brisk than the rural poverty now. The parameters of poverty differ from city to city; the fact however remains that urban poor do not enjoy the physical and social infrastructure in most of the cities or their coverage is far too inadequate. In city, like Mumbai, urban poverty manifests in informal settlements and slum which have little or no access to sanitation, water supply, education and health infrastructure. Slum population in Mumbai is more than 50%. Therefore transformation of Mumbai into a world class city has to address the challenge of extending its physical and social infrastructure to urban poor, staying particularly in slum.

3. The strategy of upgrading in health infrastructure has to be evolved within the global and national policy of health which focuses on health for all. The Millennium Development Goals, adopted by United Nations in 2000 aim to achieve reduction in child mortality by 2/3 between 1990-2015 also reducing by 3/4 mother mortality rate between 1990-2015. These targets have been accepted by Govt. of India and the State Govt. and accordingly the health infrastructure is being developed. Upgradation of public health infrastructure in Mumbai has to be viewed in this framework.

* *The Author is a Project Manager of Mumbai Transformation Unit and a Senior IAS Officer.*

4. The Vision Mumbai document aims to transform Mumbai into city with the globally comparable infrastructure to provide dynamic growth and quality of life. The Vision document targets health and education as the area of improvement of infrastructure that would lead to better quality of life for the common citizen of Mumbai. The Task Force Committee reports released by the Govt. of Maharashtra also indicates commitment of the Govt. to drastically improve the health infrastructure in Mumbai. Though the health infrastructure in Mumbai is good on the whole, there is need to improve quality and standard of services provided in the hospitals, particularly, those which are catering to the needs of the common man. In Mumbai is more than 50% population lives in slums and especially in low income categories have to depend on the public sector health facilities. The access to public health infrastructure is not equitable and is more heavily tilted towards Island city, which is disproportionate to the democratic pattern. Majority of the population depend on the public sector health infrastructure as the services provided by the private sector hospitals are beyond their reach. Thus, while on one hand the city boasts of a medical health infrastructure which attracts people not only up country, but also from abroad for specialized treatment, coverage of most of the population by the primary health facilities is inadequate and leaves much to be desired.

**Public Health Infrastructure in Mumbai**

5. In Mumbai, the health infrastructure is provided by

1. Municipal Corporation of Greater Mumbai
2. Government of Maharashtra and
3. Public Trusts and Private owners of the Hospitals.

The MCGM provides a very comprehensive infrastructure at primary, secondary and Tertiary levels. The health infrastructure under the MCGM is as follows:-

**Primary:**

- Health Posts ..... 168
- Dispensaries ..... 163
- Post Partum Centers ..... 23

**Secondary:**

- Peripheral Hospitals ..... 16
- Specialty Hospitals ..... 5
- Maternity Hospitals ..... 27

The MCGM runs 4 medical colleges attracts with major hospitals namely –

1. Seth G.S. Medical College (KEM Hospital)
2. Topiwala Memorial Medical College (Nair Hospital)
3. Lokmanya Tilak Memorial College (Sion Hospital)
4. Nair Dental College.

Of these, KEM hospital is proposed to be elevated to the level of All India Institute Medical Science, New Delhi.

6. The Government of Maharashtra owns and runs Grant Medical College (JJ Hospital), St. Georges Hospital, Gokuldas Tejpal Hospital and Cama Hospital as the major health care facilities in city area. However, there are no such Govt. facilities in suburbs. In addition, there are hosts of private hospitals and the hospital owned by various charitable trusts such as Bombay Hospital, Jaslok Hospital, Breach Candy Hospital, Hinduja Hospital etc. with super specialties. The quality and range of medical care and treatment provided by the private hospitals is good quality. It is however far too expensive to be within the reach of the common citizen.

7. In terms of distribution of in patient beds of the total 40,000 beds in Gr. Mumbai, 22% are provided by Govt., 28% by MCGM and 50% by private. As mentioned earlier, the MCGM provides public health services at primary, secondary and Tertiary levels, while most of the citizens can be served during the primary health care levels, the distribution of municipal hospitals beds is highly skewed as mentioned below :-

| Hospitals | Beds |
|---|---|
| Major Hospitals | 4,454 |
| Peripheral Hospitals | 3,733 |
| Specialized Hospitals | 1,890 |
| Maternity Hospitals | 520 |
| **Total** | **10,597** |

8. The distribution of hospital beds in the city, eastern and western suburbs is also highly skewed and disproportionate to the population as shown in the following statement.

| | Population | Hospital beds | Population per beds |
|---|---|---|---|
| City | 33,38,031 | 6464 | 516 |
| Eastern suburbs | 35,08,096 | 1919 | 1828 |
| Western suburbs | 51,32,323 | 2214 | 2318 |
| **Total** | **1,19,78,450** | **10597** | **1130** |

9. As per the Municipal Corporation Act, the MCGM is primarily responsible for preventing health care majors in the city. However, the current focus of the health services in the city is more on the secondary and Tertiary levels rather than on the primary public health care activities. This can be seen in the following statement:-

- **Budget for Major Hospital**

(Rs. in Thousand)

| | Revenue | Capital Works (Civil) | Plant & Machinery | Total |
|---|---|---|---|---|
| 1. Public Health Department | 98,39,60 | 3,73,80 | 75 | 102,14,15 |
| 2. Medical Relief & Education | | | | |
| a. Medical Relief | | | | |
| b. Medical Education | 536,98,81 | 62,71,60 | 45,58,00 | 707,36,71 |
| | 62,38,30 | | | |
| | 599,37,11 | | | |
| 3. Measures to Control Environmental Air Pollution | 3,69,70 | 11,22 | 69,30 | 4,41,22 |
| **Total** | **701,46,41** | **66,26,62** | **46,19,05** | **813,92,08** |

- **Budget for Major Hospitals**

(Rs. in Thousand)

| | | | |
|---|---|---|---|
| 1. | **KEM Hospital & GSM College** | Revenue | 114,08,28 |
| | | Civil | 10,83,30 |
| | | Plant & Machinery | 12,59,00 |
| | | **Total** | **137,50,58** |
| 2. | **LTMG Hospital & College** | Revenue | 93,18,19 |
| | | Civil | 18,89,90 |
| | | Plant & Machinery | 11,98,00 |
| | | **Total** | **124,06,09** |
| 3. | **BYL Nair Hospital & TNM College** | Revenue | 70,86,49 |
| | | Civil | 23,51,28 |
| | | Plant & Machinery | 17,30,00 |
| | | **Total** | **111,67,77** |
| 4. | **Nair Hospital Dental College** | Revenue | 7,44,04 |
| | | Civil | 83,60 |
| | | Plant & Machinery | 1,45,00 |
| | | **Total** | **9,72,64** |
| | **Total of Major Hospitals** | | **382,97,08** |

- **Budget of Special & Peripheral Hospitals**

(Rs. in Thousand)

| | | |
|---|---|---|
| 1 | Bhajekar Hospital | 1,37 |
| 2 | ENT Hospital | 2,97,50 |
| 3 | Eye Hospital | 1,70,68 |
| 4 | K B Bhabha Hospital Bandra | 15,90,13 |
| 5 | K.B. Bhabha Hospital Kurla | 8,39,98 |
| 6 | Mun. Gen. Hospital Ghatkopar | 19,89,70 |
| 7 | Bhagwati Hospital | 14,44,39 |
| 8 | MTA Mun Gen Hospital, Mulund | 8,86,37 |
| 9 | Cooper Hospital | 21,79,23 |
| 10 | D N Mehta Hospital Chembur | 4,13,67 |
| 11 | V N Desai Hospital, Santa Cruz | 8,91,97 |
| 12 | M W Desai Hospital, Malad East | 4,63,26 |
| 13 | V.D. Savarkar Hospital, Mulund | 3,44,16 |
| 14 | MGH Barvenagar Hospital, | 3,62,88 |
| 15 | S K Patil Hospital, Malad East | 1,66,46 |
| 16 | Centenary Hospital , Kandivali | 3,66,72 |
| 17 | Centenary Hospital, Govandi | 6,65,11 |
| 18 | Mahatma Jyotiba Phule Hospital, Vikhroli | 4,68,92 |
| 19 | Siddhartha Nagar, Goregaon, | 3,40,15 |
| 20 | BSES Mun. Gen. Hospital, Andheri West | 2,69 |
| | **Total** | **138,85,34** |

- **Infectious Diseases Hospitals, Tuberculosis Hospitals etc.**

| | | (Rs. in Thousand) |
|---|---|---|
| 1 | Kasturba Hospital | 14,37,07 |
| 2 | GTB Hospital | 17,65,48 |
| 3 | RDTB Clinic Dadar | 41,70 |
| 4 | Shamaldas Gandhi Marg TB clinic | 30,74 |
| 5 | Balaram Street TB Clinic | 23,33 |
| 6 | TB Clinic, Khar | 93,04 |
| 7 | Nawab Tank, TB Clinic | 27,16 |
| 8 | Acworth Leprosy Hospital | 1,40,03 |
| | **Total** | **35,58,55** |

- **Others**

| | | (Rs. in Thousand) |
|---|---|---|
| 1 | Maternity Homes, Children Welfare, Services etc | 59,03,21 |
| 2 | Dispensaries | 20,58,71 |
| 3 | CH.M.S.(PH) | 3,54 |
| 4 | Central Analytical Lab. | 29,02 |
| | **Total** | 79,94,40 |
| 5 | Public Health Department | 98,39,60 |
| 6 | Measures to Control Environmental Air Pollution | 3,69,70 |

**10.** Another factor to be considered while analyzing the health service is that the existing health infrastructure of the city was planned between 1950 to 1980 to cater population of about 52 to 70 lakh while the facilities are currently used by about 13 million people. It is therefore essential to drastically increase and upgrade the health infrastructure and also prioritizing the improvement of services at the primary level which will include a package of improvement of physical infrastructure trained staff and public private partnerships to ensure quality and responsibility of the services.

**11.** Studies have shown that there is strong preference to access public sector health infrastructure by most people in Mumbai, largely due to affordability factor. This makes it mandatory to strengthen the public health infrastructure and improve the quality of services and accountability of service providers to the citizens.

## HEALTH STRATEGY

After discussion and consultation with experts in the field of health care, the following strategy devised for achieving better health for the city of Mumbai. It was agreed that it should include quantitative as well as qualitative aspects. One cannot achieve health just by upgrading health infrastructure but supporting healthy and clean environment is equally essential. Therefore the following aim and objectives are set up to reach a world class level in health of the city.

## AIM

Accessible, equitable, quality and cost effective health care system for all in the Mumbai region.

## OBJECTIVES

- To develop a City Health Profile including quantitative and qualitative data that will provide a description of the health of the people and the conditions in which they live.
- To evolve health policy for Mumbai region clarifying the roles of state government, ULBs, private sector health institutions and community based and non governmental organizations in full filling the aim.
- To facilitate the development of new integrated approaches and co-ordination of all health and heath related activities within the city.
- To enable communities to participate in and influence decision-making processes.
- To provide a rational basis for decision-making, one which is geared towards investing in health and reducing inequalities in health.
- To develop a monitoring and evaluation framework that will indicate progress on action stages and measure outcomes of the City Health Plan process.

The above objectives will enable a sound data base which will in turn be the basis to identify areas of concern in terms of health care need. The creation of a database and monitoring system would also help the government to encourage public participation. It is very important to quantify the health indicators which can help in analysis and further appropriate action.

Most of the times it is seen that decisions are taken on the basis of individual or community

perception. Instead the action should be based on a scientific and rational understanding of the situation. In order to improve health care and health for all, various components of the system need to be looked into in detail.

**A) Developing effective health care infrastructure**

12. Effective health care infrastructure includes the buildings for health posts, hospitals, dispensaries etc. These have to be adequate in number and located at convenient spots for easy access to its catchments. More important is the staff appointed in these including doctors and other paramedical and non-medical staff. They should be available when required even at times of emergency as per the norms. This calls for a good management system and commitment of the staff and the authority to serve the people.

Following steps can be identified to develop an effective health care system.

- Baseline study to identify health infrastructure in Mumbai
- Defining the standards of world class health care services and adopt adequate standards.
- Identifying gaps and issues related to referral system considering the present scenario
- Develop action plan based on these gaps

**B) Addressing major killers**

13. In order to address major killers-i.e fatal diseases which are the reason for high death rate for the city, there must be a good surveillance system. There should be trained medical staff for identifying those diseases which contribute more towards deaths. These killers could be infectious diseases or chronic and lifestyle linked diseases such as TB, HIV/AIDS, malaria, heart problems, cancer, etc. Mortality and morbidity rate for the city should be monitored and these killers be targeted at through special programmes. Accidents can also be a factor contributing to death in a metropolitan city where there is unsafe traffic and other accident prone areas. The following steps can be taken to identify major killers and come up with an action plan.

- Evolve a strategy to control and reduced the incidence as per national guidelines.
- Identify the gaps in the present infrastructure to tackle the above diseases.
- Devise strategy to establish required health infrastructure
- Evolve effective IEC / BCC(Behaviour Change Community) strategy, generate awareness and involve community in both prevention and control of diseases.

**C) Creating clean and healthy environment in the city**

14. It has been observed that a clean and healthy environment contributes to good health of its citizens. Therefore emphasis should be given on policies of other sectors which are environment friendly and contribute to clean and healthy atmosphere. It is implied that supply of clean drinking water and proper sanitation facilities prevent incidence of water borne diseases. Similarly good transport strategy and clean means of transport can contribute to clean air and in turn reduce respiratory disorders. It should be ensured through housing policy that the citizens get healthy living conditions and proliferation of slums is reduced. Clean localities where solid waste and bio-medical waste is effectively managed can transform the quality of life in the city. The following steps can lead to better planning for prevention of illness;

- Study the status of environment in the region and identify factors contributing to ill health. (drinking water, proper sanitation facilities, solid and biomedical waste mgmt, air pollution)
- Identify factors to be addressed and devise action plan
- Study the status of housing and its impact on health in Mumbai (drinking water, proper sanitation, solid waste mgmt, ventilation etc)
- Identify factors to be addressed and devise plan.
- Integrate health impact assessment in planning infrastructure for the city
- Understand how sustainable transport system can be developed to promote healthier environment (reduction in air pollution, reduction in fuel, development of open spaces, walking tracks etc)

D) **Economic Growth and good health infrastructure**

15. It is well-known that effectiveness in any activity is increased due to good health. Thus healthy population contributes to better workforce which in turn leads to economic growth. However there needs to be authentic data to support this i.e. the correlation between illness and absenteeism at work, pollution at workplace, occupational hazards etc. should be studied for the city. Knowing this there can be actions taken to increase the productivity and effectiveness of human resource of the city. Good health infrastructure can also be a source of income to the city. This heath care assets can cater to patients out of the city as well as from abroad. In order to reach out to the poor and assist them to maintain good health support such as health insurance is needed. A viable model of health insurance for the poor can be devised. Before that it is necessary to understand the relationship between heath and the city's economy. Following steps can be followed to find out the same.
    - Baseline study to understand how economic growth of Mumbai can be linked to health.
    - Identify factors that would boost economic growth
    - Devise strategy and action plan

E) **Community involvement**

16. For the success of any health strategy it is very important for it to be acceptable by the community. In the city of Mumbai we find that community needs are extremely varied. Hence one blanket solution cannot address all. Though the ultimate goal is health for all, the community involvement can be of varied nature. Firstly the needs of different communities should be assessed and then decisions should be made with community participation for smaller programmes. This should be a two way process whereby there is trust built up at the community level as well as the service delivery i.e. supply end. Issues such as timings of service of the health posts, disease surveillance, referral system etc. can be effectively dealt with. The following action steps can lead to effective participation of people in delivery of health services.
    - Need assessment of communities.
    - Identify gaps in the service delivery system
    - Develop appropriate strategy and action plan with community participation
    - Develop proper IEC material and create health awareness amongst the people.

F) **Education**

17. Education can be very effective medium of creating health awareness. The school curriculum should include basic preventive measures, good sanitation practices, awareness about killer diseases, awareness against superstitions, etc. Therefore it is necessary to devise a strategy for education which covers aspects of health awareness.

G) **Integrating and disseminating Information**

18. Information dissemination is an important aspect of health services. People need to be informed about the various programmes run by the heath department and where people can avail of health services. Other data generated by the department also needs to be compiled and provided to other departments and the common citizen. In order to compile, collate and disseminate information, the needs of the citizen and the target group have to be identified. Another important aspect would be to network all the hospitals so that unnecessary delay in treatment is avoided and help in case of emergency is prompt. Therefore following studies and actions are required:
    - Study on information required by common man regarding health services and for effective working of health care facilities.
    - Develop integrated information system.
    - Develop mechanism to make the same accessible to all.
    - Awareness amongst the communities about the same.

**Way forward: the consultative process**

19. As a part of the Mumbai transformation project and the Business plan for the transformation process, the way forward would be as follows. A way forward is to identify activities to be done further so that a health strategy for the city will emerge through a consultative process.

# Education

## ☐ ISSUES IN IMPROVING THE QUALITY OF EDUCATION

More than anything else, quality of input determines the quality of output of a school. Whether the system is working efficiently, can be seen, when certain norms are satisfied.

## ☐ SYSTEM ENGINEERING OF SCHOOL EDUCATION SYSTEM

To understand specific issues faced by schools in Mumbai, field visits were conducted to a selected set of schools. Criticality / Relevance of factors and their inter-dependencies were understood and were incorporated in the study.

System Engineering of School Education System (A Study by Tata Consultancy Services)

As these systems are those having extensive human interactions and as part of large and open societal systems, it is imperative to study them from a systemic perspective to understand the obvious and hidden dimensions and their inter-relationships as part of the problem situation. Systemic thinking provides advantages in two fundamental areas:

- in avoiding under reckoning or not proper ascription of relationships when constructing an understanding of a problem situation, and
- in producing better action based on that understanding.

To understand the inter-dependencies among various factors affecting the quality of education, a cybernetic influence diagram has been drawn. By analyzing the different clusters and loops in the diagram, we get a holistic view on the multiple factors and variables that affect the problem. Design interventions, as perceived by us, to strengthen the loops are also presented.

An initial look at the problem as depicted in Figure 1 shows that "Availability of Good Teachers", "Quality of Schools", "Quality of Teaching" and "Drop outs" are the issues of concern in the problem. In a Cybernetic Influence Diagram, the issues of concern are recognized as those nodes where a large number of arcs converge. The issues identified at the first level are, in turn, influenced by factors such as Commitment of Faculty, School Infrastructure, Cost of Education, and Lack of (student) motivation.

## ☐ SARVA SHIKSHA ABHIYAN (SSA)

Presently the schools of MCGM function under the policy framework of **Sarva Shiksha Abhiyan (SSA) of the Government of India.** Under this SSA, the management of schools is under a ward Education committee where the headmaster of the nodal school is the secretary of this committee. The education committee consists of 16 members representing parents, teachers, and experts on education, NGOs as well as the elected Councillor for that ward who is the chairperson. One nodal school is identified per electoral ward. This looks after the other schools in the given cluster. This scheme is running for the last one and a half year. Although this model has not been reviewed yet, it has been quite effective in bringing children of the lower strata to school.

## ☐ PROBLEMS OF SSA IN MUMBAI

Survey of 'out of school' children difficult since households often not fixed and habitations mobile. Teachers in Mumbai are reluctant to carry out survey. Personal persuasion to guardians to send their wards to schools is difficult in Mumbai. It is easy to get menial jobs even without education. Hence here is no motivation for taking education.

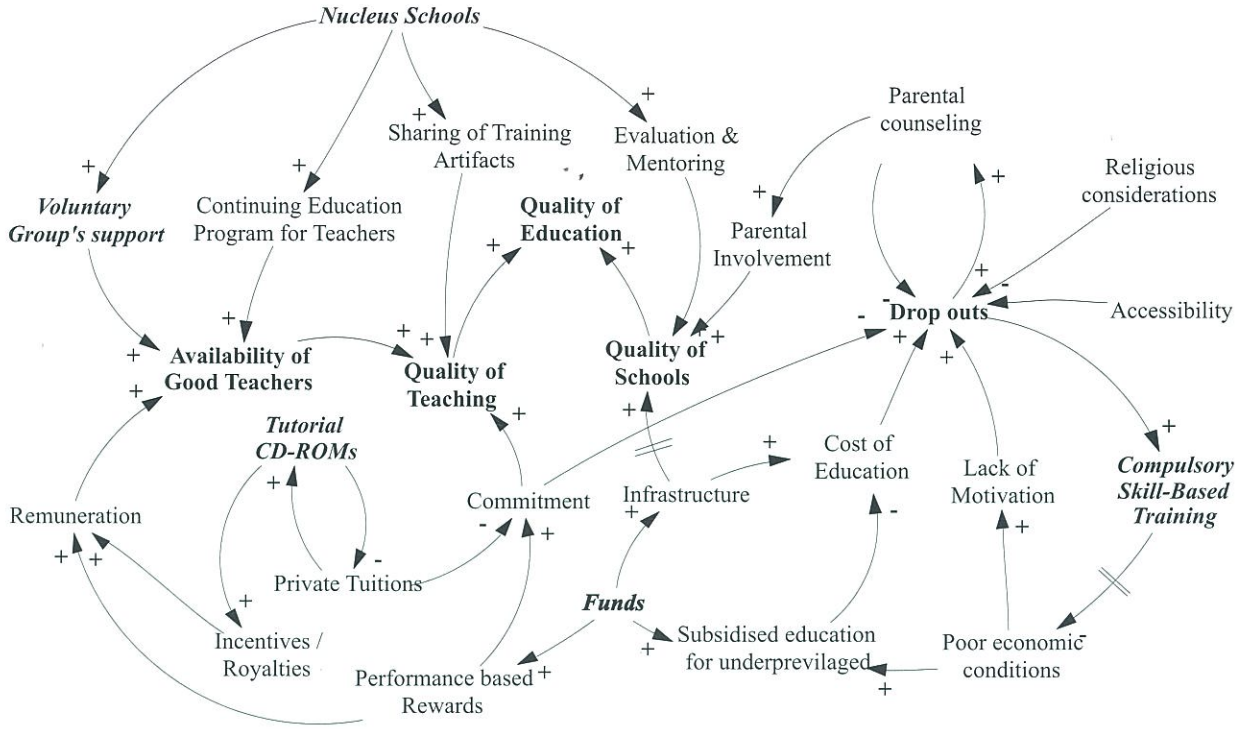
(For details of Sarva Shiksha Abhiyan refer Annexure I)

Four 'R's - Registration, Retention, Regularity and Result' is the strategy for improving the picture of education for the city of Mumbai.

## ☐ ISSUES IN PRIMARY EDUCATION

The following issues related with primary education in Mumbai are required to be considered for evolving a strategy and a business plan for improving the quality of primary education -

**Figure 1: Cybernetic Influence Diagram representing Education System in Mumbai**




*(Source: Studies done by Dr. F.C. Kholi in association with TISS)*

The proportion of MCGM schools is skewed for the suburbs and the island city.

a) There is no dearth of funds for the education sector in the MCGM. But it is a sad situation that funds are not utilized.

b) The overall standard in terms of result is lower in MCGM schools as compared to other schools.

c) Per child expenditure in the MCGM school is higher than in the private school.

d) Today it is seen that English is the language which has better prospects in the job market. Hence there is attraction for English medium in Mumbai.

## □ RECOMMENDATIONS FOR IMPROVING PRIMARY EDUCATION

To summarize the above study and suggestions, following recommendations can be made:

1) Early childhood care and education should also be taken care of by encouraging balwadis.

2) Enrollment of all the school-going children should be ensured and monitored through provision of schools with appointment of adequate number of teachers.

3) Drop out rate can be minimized by keeping proper record of the children changing their place of residence. It should be seen whether the child has enrolled the respective school of the locality where he/she has moved into. The Enrolment must be corresponding to the number of children in the area. The intra-generation educational gain actually higher in government schools. Therefore the Government needs to see to it that their primary education covers all strata of the society. The drop out rate can be minimised through.

- Skills based vocational training/ apprenticeship from 8th standard onwards. This will provide opportunities for becoming capable of getting gainfully employed and socially productive

- Counseling by the teachers and involving parents in the exercise by bringing out the benefits and rewards of education
- Arrange subsidised or free tuitions to make up deficiencies

4) Ensure that there is adequate number of teachers in every school. The teachers should be committed to their job. This can be ensured through proper incentives. To the handle the problem of "private tuitions", the tacit knowledge of the good teachers can be captured through a tutorial aids (like CD-ROMs) and royalty can be paid to the said teachers. This is will enhance their commitment to teaching at educational institutions, rather than looking for the alternative of private tuitions.

5) New schools should be opened by studying the requirements of the particular area and an appropriate mechanism of sustaining the same can be adopted such as MCGM partnership with NGO or private institution, CBO, etc. spatial planning of the city should address the social needs of the city. Reservations and land allocations should be made after considering the local situation and duplication of amenities should be avoided.

6) Optimum use of educational infrastructure should be made for carrying out activities related to education. Large number of MCGM school buildings lying vacant can be used for educational purpose. These can be given on lease/rent basis to private educational societies to open and run the schools. If rooms are available these can be rented out commercially for running vocational courses on yearly, monthly, daily or hourly basis. This will fetch the considerable revenue for MCGM. This amount could be kept with the school for updating and maintenance of the MCGM.

7) It is difficult to build the school building in slum area for want of space or it is not as per the rule, in such cases temporary structure like porta- cabins can be thought. Some mobile schools can be thought of where carriages can be built on wheels, could be taken for that period of time and can be carried to other places at different times of the day.

8) There should be training components related to present era i.e. Information Technology, access to the computer education and handling of educational technology. All teaching aids and facilities like physical education Research, preparation of teaching materials, etc., must be used at its maximum capacity.

9) In-service training centre must be up-graded and special teachers educators are to be appointed.

10) MCGM is probably the only corporation in the country who runs the schools in 8 mediums so this can be used for bringing the children in the school. It has also various wings like research and statistics, use of art & music academy, Language Development Project having its own recording studio, school community development project to bring the out-of-school children and the children in the school, in-service training centre, and teacher libraries to keep the knowledge of teachers up-date, science curiosity development home and physical education section. There are special teachers for art, music and physical education. The judicious use of these facilities could definitely improve the education of MCGM what is the needed is the strengthening restructuring and supporting these structures.

11) Mumbai is known for its philanthropic contribution. There are many trusts that are willing to help social and educational activities. Looking at their past record, NGOs can be assigned major role in this regard.

12) While expanding the education facilities, preference should be given to suburbs and the slums in particular.

## ☐ TERTIARY EDUCATION

Presently Mumbai does have good educational institutions and universities. These need to play an important role in feeding the economy with the desired workforce. Education at elementary level as well as higher level should connect with the skills required in real field. It is necessary for the government to outsource its research to the universities. Tertiary education should be demand driven to feed the economy. Tertiary education should play an important role in the

transformation process. Higher educational leadership should get involved in the transformation process e.g. IIT Mumbai university etc.

## ☐ WAY FORWARD

Local problems need locally worked out solutions. Understanding children's needs in specific communities has to be the basis of designing solutions. "Blanket" provisions will still leave gaps. While habitation level data and surveys provide a good beginning point, locally specific flexible strategies and flexible resource allocation will be needed to solve some of the hard core problems of access in the mega cities like Mumbai. While competing with other world class cities of the world, attention has to be paid to include the lowest of the low citizen in the process of transformation. In order to bring the entire city population to a world class level, transformation efforts should focus issues at all levels simultaneously.

➢ Following are some of the suggestions which have emerged out of the SSA survey Report by Pratham-April 2004 which address the local and specific needs.

### Children who have Never Enrolled

Micro planning is required in areas which have large number of children who have never enrolled in school. The reasons for this may be :

(1) Children live with migrating families

(2) There is a lack of schools: In Mumbai city there are areas such as unauthorized slums and encroached areas where the school is more than a kilometer away. The issue of access in this area implies distance as well as presence of hazards such as highways, railway lines and nallas. Accessible schools if present may be over crowded and unable to admit children who need to be mainstreamed.

Some strategies to address these problems are:

(1) Construction, maintenance and repairs of the existing schools.

(2) Revival of the MCGM's Bhag Shala scheme

(3) To overcome the problem of hazardous access transportation (BEST bus/ Escorts) will be needed.

### Children who have Dropped out of School

Children drop out of school for a variety of reasons. While there are reasons of poverty and access many of them drop out because they cannot cope with the demands of the schools. Although data on children who will potentially drop out in the coming years is not available, significant numbers of children have irregular attendance and are lagging behind in class academically.

Some strategies to address these problems are:

(1) Preparation of out of school children prior to mainstreaming via EGS and Vasti Shalas

(2) Remedial education and libraries in schools made permissible.

### Working Children

Working children are found in a number of places such as construction sites, intersections of roads, pavement dwellings, in factories, in institutions like observation homes, on platforms and on the trains.

Some strategies to address these children are:

(1) Center based approach and Contact based approach can be implemented

(2) Education and Rehabilitation (Vocational Training)

(3) Residential Camps/Drop in Centers planned for children who are working without families

(4) Specific groups who are found in the various markets and those who work all over Mumbai but come to specific areas to sleep in the night for example in Null Bazar, Kalba Devi and Chor Bazar should be covered through mobile classes, libraries or night classes in the specific areas.

(5) Convergence of health and other services and schemes of the corporation.

When all issues are addressed in a holistic manner, we can achieve bigger targets in less time. To start the process following studies are identified based on which further action plan can be devised. The action plan will be a part of the larger business plan which guides the transformation process for the social infrastructure sector and in turn the overall transformation of the city.

## ☐ STUDIES NEEDED

- Ward wise assessment of existing and backlog of education infrastructure. Study the spatial distribution and ward wise analysis

to be done for demand assessment. Determine the action plan in the top 80 Prabhags that account for 90% of the children out of school.

- Identify the causes of why children have dropped out from school. Identification of causes will help retain students within the schooling system going forward. Calculation methodology to be devised for controlling drop out rate of school children and out of school children. A system of tracking children throughout their school going age and monitor their educational progress.
- Identify the number of pre-school children that do not have access to pre-school education and are to be provided for under the SSA. Each municipal school building could house a preschool center. The pre-school program could partner with ICDS, CDOs and other NGOs that are running balwadis. Pratham is expected to conduct 859 balwadis in Mumbai next year.
- Accurately estimate the number of working children and provide appropriate solution for them
- Study the demand for secondary and tertiary, vocational education needs of children passing out of MCGM schools.
- Identify and set parameters of 'world class' education in the context of Mumbai. The gaps in educational infrastructure can then be quantified.
- Study the potential role of NGOs and private institutions with the MCGM in providing world class education.
- Develop a vision for education sector for the city and integrate it with spatial planning of the city. ■

*The developed world still bears the lion's shares of cancer cases, but less developed areas are catching up. Worldwide, lung cancer is the most common and deadliest cancer. As Ahmedin Jemal, program director for cancer occurrence at the American Cancer Society in Atlanta said, "One important aspect is the increase in the cancer burden in developing countries, which is lifestyle like increased smoking, different dietary patterns and less physical activity." The other key contributor is age. "Life expectancy is increasing in lesser developed countries, and historically cancer has been a problem of developed countries, but that might be changing. As people tend to live longer in developing countries, especially in urban areas the burden of cancer is expected to increase."*

*The two most common cancers among Indian women are those of the cervical and breast. Breast cancer is the second most common cancer, but the fifth-highest cause of death thanks to a relatively good prognosis once diagnosed while Cervical cancer is the seventh most common cancer overall and the second most common cancer in women. Urban Indian women are increasingly falling prey to dreaded forms of breast cancer. Once considered a Westerner's scourge, breast cancer has now hit home with a 23% incidence among Indian women (according to the Indian Council of Medical Research). Oncologists say that one in every 30 Mumbaikars has breast cancer as a lifetime risk. In fact, doctors are worried about breast cancer, as it has now overtaken cervical cancer to become the leading cause of morbidity among urban women. Dr. Suresh Advani, Director, Medical Oncology, Jaslok Hospital says that "Women's lifestyle patters have changed over the last decade, with late marriages and late child-bearing becoming the norm in Indian metros." Genetic build-up, lack of physical activity, changing attitude to breast-feeding and junk diets is triggering factors, he adds.*

*Cervical cancer is easily detected with relatively low-cost methods awareness of and access to such services is severely limited, especially among poor rural women. Moreover, while cervical cancer has long been the leading cause of cancer death among Indian women, breast cancer is on the rise and now is the leading cancer in urban areas like Mumbai.*

*According to a recent National Tobacco Control report Indian is the third largest producer of tobacco in the world. One third of the global deaths due to tobacco occur in India. Of all tobacco related cancers, 7.5% are found in the oral cavity, pharynx and larynx while 15% are found in the lungs. Focusing on the high prevalent use of tobacco in the country the national tobacco control report has highlighted the burning issue facing health experts-the urgent need to affect on additional change in the mindset of parents and youngster towards tobacco, 10 - 40% of school children and 70% of college students in Mumbai consume tobacco products in sizeable amounts. The rise in smoking amongst the middle and upper class youth is a cause for concern. The main reason for such large number of youngsters falling prey to tobacco is that they constantly watch their icons — Bollywood superstars, a leading model - smoking as a part of their life style. Following Dr. Ranjan P. Shah (Hon. Prof. Of ENT Grant Medical College and J.J. Hospital, Mumbai India.) advice, to keep our young generation healthy we must direct all our efforts towards education them and making them aware about the hazardous ill effects to tobacco consumption. We must not spare any effort in preventing the children from developing this tobacco habit. If we can successfully prevent our children from falling into "Tobacco Trap" - it will be a great achievement indeed.*

*(Compiled by Sonya Fernandes)*

# Health in Urban Slums –An Overview

Dr. Armida Fernandez

Over the last few decades greater emphasis has been laid on rural health as over 80% of our population lived in our villages. Urbanization however is spreading rapidly and although urban health indicators are better than the rural, there is a wide disparity between the urban rich and the urban poor.

### Magnitude of the problem

The pace of urbanization is such that it is resulting in changing proportions of urban to rural population throughout the developing world. Population projections suggest that by 2025, India's population will grow to 660 million with more than half the population of India residing in urban slums [1]

While the population of India has grown at the rate of 2%, urban India has grown at 3%, mega cities at 4% and slum populations by 5 %. Demographers have described this as the 2-3-4-5 syndrome. [2] The population of the urban poor is in a constant state of flux with new migrations occurring on a continuous basis. These populations are located in urban slums, dwell on pavements and construction sites and form newer squatter settlements on vacant lands and the fringes of the city.

The urban advantage has evaded the urban poor and 23.6 % of the urban population lies below the poverty line[3]. Urban slums are amongst the world's most life threatening environments.

### Health infrastructure in urban slums

In a majority of slums in this country there is no envisaged primary health infrastructure with its planned network. Health services vary from absence of health services to a multitude of health care providers which include the local municipal authorities, the government, NGOs and the private sector. Even when large number of service providers are available there is a lack of planning and distribution of these services with overlap of services in some slums and minimal or absent health services in newer settlements. In a few large metropolitan cities, like Mumbai primary health services have been created through the government and the World Bank projects. Surveys in these slums suggest that despite primary health infrastructure antenatal and postnatal facilities are not available at the health center and 90 percent of mothers reported no home visit after birth from a health worker .[4]

Slums dwellers have some advantage over their rural counter part, as there is availability of a wide variety health services in urban areas. Accessibility also is not a great issue as transport facilities exist in towns and cities. Problems are related to lack of utilization of public health services, [5] high cost of medical services in the private sector and the presence of large number of more affordable and non-qualified doctors that are easily available.

Besides the existing public health system leaves much to be desired. Tertiary hospitals when available are overcrowded as there is a lack of a system of referral. Insufficient resources, understaffing non–functioning equipment lack of standardized clinical protocols results in poor quality of service, poor communication skills, attitude and behaviour of the staff, coercion for family planning and costs are quoted reasons for patients not accessing public health services. [4]

### Inappropriate health seeking behaviour

Behaviour is often based on traditional and cultural practices. Studies on a few urban slums have indicated that despite availability of public hospitals,

[1] (1) National Institute for Urban Affairs (NIUA). India's urban sector profile, New Delhi, India, Research study series number 61, 1998.

[2] (2) Chatterjee, G. 2002. Consensus confrontation: Local authorities and state agencies form partnerships with urban poor communities in Mumbai. Urban Secretariat, United Nations Human Settlement Programme, UN HABITAT.

[3] (3) National sample survey organizations 55th round survey 1999– 2000.

[4] (4) Baseline Survey of Dharavi slums conducted by SNEHA (Society for Nutrition, Education & Health Action) 2003-2004 (Unpublished data).

[5] (5) Thora S, Awadhiya S, Chansoriya M, Kaul K K Perinaatal and Infant Mortality In Urban Slums Under ICDS Scheme. Indian Pediatr 1996, 33:19-23.

*Ex-Professor & Ex-Dean, LTMG Hospital, Sion; Founder Trustee SNEHA (Society for Nutrition Education & Health Action)*

up to 90% of deliveries in certain slums in smaller cities take place at home. [4]

The first preference for medical advice is the private practitioner, who may not be qualified [5]. In a study carried out in Dharavi slum of Mumbai 40% of mothers registered with private practitioners. 48% of women did not make a postnatal visit to the hospital. Of the women who reported that their neonate exhibited danger signs, 75% did not seek treatment. [4]

**Additional challenges**

Health is not priority for the urban poor. They struggle for every day survival, issues of food, water and sanitation are a priority for slum dwellers. Problems of stress, alienation, instability, insecurity lead to other psycho- social problems and addiction.

Nuclear families are common in urban slums. The mother and the neonate lack the support of the extended family. The population is diverse as communities may be formed of heterogeneous groups migrants from different parts of the country having different economic, educational backgrounds and cultural beliefs. The sense of collective responsibility is low and voluntary efforts less common.

**Setting up a System of Primary Health Care & Referral**

A primary health care system is in place in rural India and some slums in the urban area. Since slums are growing rapidly and newer slums are mushrooming in every city there needs to be some system of primary health care plan for urban slums. In order to facilitate maximum and effective utilization of health services in urban areas, it is also necessary to set up a definite system of referral in the existing health services and to create linkages between domiciliary, health center and hospital level.

There are many lessons learnt from the existing primary public health services. These must be kept in mind well planning urban health services. Newer modules which include partnership with private sector and NGOs need to be evaluated.

When necessary, linkages must be established between the public and private sector as significant numbers of slum dwellers use the services of doctors and maternity home in the private sector.

**Increase Utilisation of Health Services**

When quality services are offered there are greater chances of utilization of services. There is also need for behaviour change both at the facility and community level. Health care personal should have good communication skills and communities must be made aware of the existing health facilities.

**Community Participation and Ownership**

If we understand how families behave and why they do so then we could focus our interventions to improve them.

The strength of any programme lies in community mobilization and participation. Since the community in the slums in heterogeneous group community participation is more of a challenge. Formation of self-help groups and use of the existing platform of Mahila Mandals should be used for health education. Adolescent groups and men should also be included in planning, training and motivation. Getting the community to take responsibility for their own health should the goal. ■

> If we are to teach real peace in this world, and if we are to carry on a real war against war, we shall have to begin with the children.
>
> **Mahatma Gandhi**

# Health System & Alternatives

Ms Nirja Mattoo

Health is the precursor of all wealth. A nation can only prosper when its citizens are healthy. Health is important to spur economic development, reduce poverty, and promote global security.

In India public expenditure on health care today is a dismal 0.9% of GDP; patients pay the overwhelming majority of health costs out of pocket. For many, even minor illnesses can cause big financial setbacks, and hospitalization is out of the question. This is the abysmal scene in the Indian health sector today.

Indian constitution has been explicit in noting a 'right to live' to everyone (Article 21) and has acceded to the International Covenant on Economic, Social and Cultural Rights. Article 12 of ICESCR refers to "the right to the highest attainable standard of health," requiring availability, accessibility, acceptability and quality as imperatives in health care in along with universal access to the underlying preconditions of good health. Way back in 1946, a very forward-looking Health Survey and Development Committee outlined a universal health care plan. Anticipating that large sections of the population may be unable to pay for health care, the committee recommended that no person should be denied medical care because of an inability to pay for it. It also recommended that health workers be on the public payroll, limiting the need for private practitioners. It has been over 50 years and the grand designs are evidently in shambles.

## HEALTH SCENE

Under the constitution of India the states are largely independent in matters related to the delivery of healthcare to the people. The Indian constitution charges the states with "the raising of the level of nutrition and the standard of living of its people and the improvement of public health". Each state, therefore, has developed its own system of health care delivery, independent of the Central Government. The Central responsibility consists mainly of policy making, planning, guiding, assisting, evaluation and coordinating the work of the State Health Ministries, so that health services cover every part of the country and no state lags behind for want of these services. The system has three main levels, which are central, state and local or peripheral.

Health care consists of three different levels.

- Primary:
  In India Primary health care is provided by primary health centers with their network of multipurpose health workers, village health guides and trained staff.
- Secondary:
  In India, this kind of care is provided in district hospitals & community health centers.
- Tertiary:
  This requires specialized services. This is provided at regional hospitals or medical college hospitals.

The Official organs of the health system consists of:

1. The Ministry of Health & Family Welfare
2. The Directorate General of Health Services
3. The Central Council of Health & Family Welfare

Health care systems can be thought of as having the following main objectives, each of which may be interpreted differently by public and private sector providers:

- Delivering good quality health care services
- Delivering health care services efficiently
- Ensuring equity in access to care
- Ensuring sustainable financing health care

## A BLEAK SCENARIO

Inspite of having a good health system in place India has failed to provide an effective, robust health care in the past 50 years. Many critics of India's National Health Policy, point out that the policy lacks specific measures to achieve broad stated goals. Particular problems include the failure to integrate health services with wider economic and social development, the lack of nutritional support and sanitation, and the poor participatory involvement at the local level.

Health has been declared as a basic human right. This means that the government is responsible for the

*Chairperson, Centre for Development of Corporate Citizenship, S.B. Jain Institute of Management and Research.*

health of the people. However, the healthcare services are criticized for the following reasons:

1. Predominantly urban oriented
2. Mostly curative in nature
3. Accessible mainly to a small part of population

The present concern is to reach the whole population with adequate healthcare services. Healthcare is influenced by factors like food, housing, sanitation, healthy lifestyles, protection against environmental hazards and communicable diseases. Health care means more than just medical care.

The biggest problems with the Indian health system are the lack of government spending in the health sector (0.9 per cent of GDP against an average of 2.2 per cent by lower-middle-income countries) and the inefficiencies and misuse of the meager resources that are available. Since 84 per cent of healthcare is out-of-pocket expense, the system is set up to favor those who can pay.

In theory, governments act in the public interest. In practice, however, many decisions are dictated by the biases of their bureaucratic culture. Government spending is often poorly controlled, allowing suppliers to increase prices, contributing to further inefficiency. Government systems are accountable only indirectly at election-time, rather than being immediately responsive to customer satisfaction. They therefore suffer from low-levels of innovation, especially where the infrastructure and supervisory systems are weak. Finally, despite assumptions that government is best placed to ensure the broad provision of health care, in many countries government-operated health programs fail to reach significant segments of the population in any way. Inadequate training of medical personnel, insufficient supply of drugs, lack of equipment and supplies, and poor systems for monitoring and holding public health practitioners accountable for their actions also represent significant deficiencies.

Government has failed to adequately regulate the private sector. The Private sector needs regulation, if broad access to a high –quality system is to be maintained. However, most governments have regulations and legislation that are not enforced. Often regulations and laws are outdated or there is a lack of information or budgets necessary for enforcement. Corruption, too, is often a problem. Lack of knowledge by government officials is an especially pressing issue – and one that can only grow worse if governments further curtail their involvement in the health care system.

There is a dire lack of information about the nature and quality of services. The effectiveness of a health system depends on the health seeking behavior of the population being served. Basic information about the services provided, the location, cost and effects of the facilities and treatments provided determine the extent to which the target population would avail of such services. However, such information is not readily available to the poor and illiterate. The paucity of meaningful and widely accessible information is the weakness of health systems in most developing countries.

## URBAN HEALTH

Urban Poor is a rapidly increasing segment of India's population. With more than 90 million people living in urban poor settlements, the rate of urban poverty in India is staggering. An analysis of population growth trends between 1991 and 2001, show that while India grew at an average annual growth rate of 2%, urban India grew at 3%, mega cities at 4% and slum populations rose by 5 to 6%. Childhood malnutrition among urban poor is similar to or higher than rural poor: Prevalence of malnutrition among the urban poor is a cause of major concern. Based on re-analysis of National Family Health Survey 2 (1998-99) data by Standard of Living Index, 56.8% of less than 3 years old children (about 4.5 million), among the urban poor are malnourished. Poor Living Environment further adds to health challenges of slum dwellers: Inadequate sanitation, hygiene and water (a predominant feature of urban slums), results not only in more sickness and death but also in higher health costs, lower school enrollment and retention rates and lower work productivity.

Thus as India is moving in the new era of 8% economic growth, it had failed to make its resolution of 'right to life' a reality. As it aspires to become the next superpower of the world it has to set its own backyard right. A lot has to be done to treat the ailing nation. Economic prosperity can only be achieved when each one of its citizens have access to universal health care. We have to reach the un reached and prioritize the most vulnerable. India will have to tackle this problem on a war footing. India has to commit it selves to take the world's most far-reaching community based public health program to reach the millions of underprivileged who despite being in the neighborhood of India's growing millionaires continue to suffer social, nutritional, health and capability deprivation.

# Self- reliance : the keynote of our independence

Long before we won our freedom, self-reliance was the goal of those of our people who could think for themselves and shed the shackles of dependence: men of foresight and determination, like Ardeshir and Pirojsha Godrej, who had confidence in the country's capabilities and shared the same ideals with Tilak, Tagore, Gandhi and Nehru who practised self-reliance.

In Godrej, self-reliance has been considered indispensable to progress, the aim being not just self-sufficiency for the organisation but for the whole country. Progress can only be achieved in a milieu of progress.

Based on our country's needs, and exploiting the country's own resources, Godrej have diversified.

Made to international standards and backed by continuous technical innovation, their products range from locks and security equipment, machine tools, forklift trucks, architecture and furniture, typewriters, refrigerators, computers and electronic business systems as well as soaps, detergents, toiletries, chemicals, animal feeds, agro-products and edible oils.

The Godrej industrial garden township at Vikhroli-Pirojshanagar is an example of self-reliance and progress. For their workers Godrej have provided—in a unique environment—many social benefits: extensive housing, schools and adult education, recreation, medical and family-planning benefits...

Self-reliance is both a means and an end.

## For Godrej it is the essence of independence.

Godrej®

## MUMBAI – HEALTH CARE

The provision of heath services and related infrastructure in Mumbai are met through the MCGM, the State Government and public trusts and private organizations/institutions. The Private sector accounts for about 80% of outpatient treatments, for rich & poor alike.

Addressing the health needs of Mumbai is a primary duty of the MCGM. The Municipal Corporation of Greater Mumbai delivers exhaustive and affordable healthcare facilities to the city of Mumbai. It employs two means to achieve better general health:

1. Through the Public Health Department that focuses on preventive healthcare.
2. Through the Municipal Hospitals that focus on curative healthcare.

## BETTER HEALTH

A lot is known about India's health statistics, but less about how health care is delivered. To utilize public – private sector partnerships in the best way for health and education, it is important to explore which roles are best suited to each sector.

To herald a better future for health care in India the government can take up following measures:

### Overcoming market failures:

Where needs are likely to go unmet because of market failure, there is a role for the government to step in. When the social benefits of services exceeds the private benefits, there is likely to be sub-optimal provision and this often calls for state provision.. For ex. STDs. If the Government bears the cost ( at least partially ) of detection and treatment both individuals already suffering as well as those at risk would be benefited. Another example of market failure is the education of girls. Many families give very low or no priority to education of girls. Girls are viewed as household labor. However as a social investment education of girls is crucial. It will help them lead better healthier lives. Through educational scholarships or consciousness raising campaigns, governments can benefit both girls themselves as well as their families & communities.

### Providing for the poor, the rural and underserved populations:

The public sector is best placed to provide a safety net for citizens who cannot pay direct market prices for health or education. This can be achieved by providing services directly or by creating incentives for the private sector to undertake the task. Providing healthcare or education to rural populations is a difficult task. This is because of the population size and location. Private service providers are scarce or non-existent. This is where the Government has to step in either by directly providing the services or by bonding doctors and teachers in return for their training. It can also place obligations on private providers to provide a broader access or consider subsidizing access to private systems for disadvantaged groups.

### Implementing appropriate regulations to ensure quality:

In education, quality is usually monitored by evaluation and accreditation, with private institutions expected to meet minimum standards. Consumers will also act as a force for quality and government could act as information provider. Students and their families can be provided with different options to choose from. At the same time quality enhancing competition can be induced among providers.

### Controlling Costs:

Government regulates fee structure of private providers. This has to be done where there is little competition, no parallel public provision and the consumers are ill informed. Pharmaceutical costs are one area where control may be necessary.

### The Role of the Private Sector:

There is an important distinction between profit and non-profit organizations. The non-profit sector has proved especially adept at improving provision to the grassroots. They have succeeded where the government has failed.

- Improving Quality:
  Private providers can build their business by retaining existing customers and attracting new ones. This is achieved because of the competition.

- Improving customer service:
  Public services fail because of poor customer care. Business sectors on the other hand are focused on customers. It is interesting to note that poor people borrow to see a doctor privately.

- Improving management standards:
  Management standards are generally higher in the private sector with better-paid and

motivated staff. Business can act as a partner for both the health and education sectors, transferring important skills.

- Investing in research and development:
  The private sector invests in research and to develop new techniques and treatments. The returns from these areas have successfully mobilized private investment in the health business. Government must retain an important role in financing research.

- Developing market based systems of rationing:
  Some costly procedures cannot be funded universally. The government is able to set the context of what is considered an essential service available for all. The private sector can ration access to other services using the price mechanism.

- Developing new services:
  The private sector has an essential role where demand is expanding or the patterns of demand are changing. Services can be funded either directly at the level of the firm or through reimbursement.

**Building Healthy communities**

It is increasingly realized that the health care delivery system requires reform involving the rationalization of price structure and uplifting the care to people's expectation. The system requires a shift from a provider - controlled system to a client oriented one. The effective involvement of the community is an essential ingredient in the process. In a system that has an unbalanced mix of a resource starved public sector and an unregulated exploitative private sector, it is vulnerable the poor, women and children who suffer disproportionately. This calls for a strategy of community financing, where resources would not be generated from the community, but resources would be managed and utilized by the community to ensure that health seeking behavior is supported by appropriate value added health care services. ■

## Health Initiatives by Bombay First

Bombay First is in the process of carrying out a pilot in Kandivili area to identify the gaps in the primary health care system in the area. We decided that the focus of this project is to find out why majority of the people suffering from minor ailments do not visit BMC dispensaries and prefer to visit BMC hospitals thereby causing a strain on these hospitals. The objective is to strengthen the existing primary health care system and prepare a format for base line information on the health profile and facilities available in Kandivili East. We also decided that the study would include both the deficit in the infrastructure and facilities, and also qualitative aspects of the health services provided by BMC dispensaries and health posts. The study would also involve meeting with the stakeholders, health care providers of BMC, local general practitioners, chemists, slum dwellers, etc. Based on the study and consultations, interviews/meetings with stakeholders will be held, gaps would be identified and strategies would be proposed to get over the same.

BMC staff extended their co-operation and volunteered to give whatever data required assessing the health services in this area.

# ShwanaVan

Dr. Uday Kulkarni

**Stray - Dog Control Project With A Difference**

Mumbai houses about 3.5 to 4 lac stray dogs. The ratio of per to stray dogs is mois than 1:1000 which is nowhere there in the world.

An orphaned or abandoned child and a stray dog have many things in common. They need support, sympathy & a shelter.

If ***ShwanaVan*** does come into reality it will work wonders for both. Humans as well as dogs.

Effective Implimentation will depend on

1. Locating & Catching the stray
2. Transportation to Shwan Van.
3. Inspection, sterilisation & segregation
4. Allocation to a shelter
5. Training & Rehabilitation
6. Putting them back into society with a new role.

2. Actual ***ShwanaVan*** will have its own

| | | | |
|---|---|---|---|
| 1. | Shelter Units | Housing 20 dogs | |
| 2. | Colony / Society | 20 Units | 400 dogs |
| 3. | Complex | 8 Colonies (160) | 3200 dogs |
| 4. | Township | 8 Complexes (1280) | 25,600 dogs |
| 5. | Mega city | upto 20 townships (51,200) units | 2,12,000 dogs |

1. Shelter Unit : will house 20 dogs in a shelter along with facility for moving around playing. Etc.
2. Colony : Comprising 20 shelter units will have its own cleaning / feeding /training staff, total staff play Assistant training 2. sweepers/ serving person A common ground for alternately allowing the unit members play.
3. Complex : will house 8 colonies will have its own dispensary / food distribution /segregation centre (1 Nurse 1 Social Worker, 1 Professional Trainer Total = 8 x 3 + 3 = 27)
4. Town Ship : a kitchen, a hospital & a staff recreation centre, A water Storage unit, cleaning dept. crematorium
5. Mega city : will have recreation & entertainment centre, Records dept. sterilisation unit, segregation & disposal accounts dept, parking unit, Ambulance & Dogs Vans.

**Salaries : Recurring Cost Each Years**

**1. Shelter units: 400 sq ft each**

The creation of shwan van will be beneficial to the society, local government & dogs in many ways.

i) **Society:** Fearless travel for two wheeler & pedestrians most of the times the fear of dogs is in mind of pedestrians & two wheeler drivers in the day & at night.

This would go if the dogs are removed from streets.

ii) **Peaceful nights:** The barking dogs give sleepless nights in many areas of city.

iii) **Rabies free society:** Three would be near zero rabies score once stray dogs are removed.

iv) **Cleaner Roads:** The garbage contains are honored around by the strays. The removed of strays would mean the garbage bins wont be spoiled & spillage would be controlled.

The local government of municipal corporation would also benefit from this project.

i) **Funds for rabies control:** The huge expenses on rabies control injection & machinery to control it would be spared

ii) **Employment Creation:** The shwan van would require skilled staff which would create employment opportunity for the local government.

iii) The dogs can be trained for security purposed, so that effective manning of different sites of importance can be done at much less cost than humans.

* *The Author is an Homeopathic Practitioner.*

Its estimated that sensitive areas are increasingly becoming targets of attack. Pos 7/11 its imperative that we have to control a thousand of places like railway station, bus station.

To keep a security staff at each of these places would require a stupendous budget.

Instead of this, if the dogs in shwan van are trained for this purpose it would be the cheapest & best option.

Dogs are meant for security so they would be posted at various sites & would be best guards.

This again would save a lot of currency, be sides they dont sleep or wink during duty hours.

3) **Dogs:-**

Dogs would be the most benefited entity. They would get their home, health & hygiene. They would be cared & looked upon & won't be hated as stray besides this they can be put to use of the society in their real form.

i) **As a friend of man: -** Some people love dogs as a pet. The dogs can be taken home by these dog lovers.

ii) **As a security guard: -** Local government can put to use the trained doge as security guards at sensitive areas. Also co-op societies bank of schools, colleges, commercial establishment can utilize the services as that would be cheapest & safest way at protection. Dogs are meant or it.

iii) **As a Guard: -** Build people can use as guard dogs.

iv) **Entertainment:-** Dogs are pets who can be trained for safe entertainment within the shwan van. This may include dogs trained for safe entertainment within the shwan van. This may include Dogs train, Ball games Racing, Jumping etc.

v) **Ethical Research:-** It would be a blessing to the society it dogs can be utilized for ethical research on medical & food products before putting the product for human use.

These researches are safe & done with almost care of the animal & with proper sanctions committees

All in all the best part of this project would be healthy relationship between human & dogs would be recreated which is currently twisted & tortured.

## Occupation By Choice

## But

## Traveling isn't Nice

Mumbai Runs on the wheels literally each Mumbai citizen working in any filed has to travel an average One hours daily & in for suburos its 2 hours or more.

This traveling on Rail, Buses or two or fore wheelers daily means. A lot from health angle. It means more expose to air & noise pollution, skin diseases, air borne infections like TB & Cough & Cold. It also leads to backaches spondylitis, arthritis. Add to this the adulterated & since food like Vadapav, Samosa, Misal which one tends to eat in the transit & you add a few more probable of digestive problems like diamhoea, unless & acidity etc,

In true Mumbai fashion Mumbai citizens have adopted all these features of fast life. But the medical expenses have shot up to a huge scale.

You'll find every second person taking leave of 8 to 10 days in a years, for travel related problems. This may have different social & economical angles. Here we'll look two medical angle & try to find same solution to it.

Travel related sickness can be classified into

1. Air & Pollution
2. Skin & Beauty
3. Skeletal Systems
4. Stress
5. Digestive Disorders
6. Eye & sensory organs

Though yet to be confirmed by in depth clinical research. It's almost certain that the exhaustive traveling which a person has to do every day the above mentioned problems do every day the above mentioned problems do show their presence in murhbaikars & metro citizens than other less urbanised sections which means in other words these can be termed as frequent "Traveller Sicknesses".

Let's see them one by one

1. *Air & Pollution:* The more you travel more you are exposed to the fames of chemicals, vehicle exhausts, pollens & dust etc.

   These pollutants (like carbon, monoxide, sulphur dioxide, benzene, formaldehyde etc.) have tendency to attack the systems of body. They enter our body there respiration & are

absorbed into the blood stream from the lungs.

It can lead to recurrent cough, cold, headache, asthma, allergic, sinusitis also it can lead to eye soaring, conjunctivitis. It may also lead to cancer in longer run.

2. *Skin & Beauty:* The exposive to pollutants, sun & the humid climate in Mumbai & also the continues contact with fellow commuters, the excessive sweating due to small compontnents & less ventilation leads to skin infections allergies.

   Rashes on skin, tanning etching, redness skin infections etc. are common in regular , train & bus passagers.

3. *Skeletal System:* The Joints of knee are most affected. The backache & neck ache are inevitable. The jerks & jitleres due to potholes & speed breakers on road; and the same is true in standing journey is local trains. The rise in incidences of spinal surgeries, disc prolepses repairs & knee replacements speak volumes about the increasing menace due to traveling in suburbs.

4. *Stress:* The usual stress of daily routine is compounded with the stress to catch a bus or a train. The tongue lashing by fellow commuters, seat sharing & worries & fears of traffic- jams, late trains, & special monsoon. Situations like 7/26 add Mumbai citizens.

   The stress is major factor in Hypertension (High Blood Pressure), Heat related problems, Diabetes & paralysis. Apart from this it can also lead to anxiety depression or bipolar disorders.

5. *Digestive Disorders:* The fast food, junk food available road side mostly consumed in transit by us is another source of worries.

   It leads to indigestion, hyperacidity frequent stomach upset & dysentery.

6. *Eye & Sensory organs:* The eyes & sensory organs specially the ears are exposed to the pollutions.

   Soon eyes, recurrent conjunctivitis, dryness are mostly seen.

   Ears are exposed to heavy & harsh sounds regularly in travelling this results in hearing loss & inability to perceive low sounds after age 35.

As one can see a normal person living in Mumbai who is traveling regularly is at a risk to so manly problems, it's necessary to see how it can be kept under control without avoiding travellings.

**Health Tips for Frequent Travellers.**

A healthy life style can only prevent traveling related problems.

1. Get- up 15 minutes are than your usual times.

   These 15 minutes are enough to so exercises to keep your system fit & improve immunity & resistance.

2. Drink 1 glass of hot water after brushing. On empty stomach.

   This hot water flushes the system & makes it ready for the fresh food.

3. **Work out & meditation :**

   Do spot jogging for / minute & Sun – Salutation 6 to 12 times to tone up your body.

   A few stretching bending & twisting exercises or asana would be still better. (do it under supervision).

   10 to 15 strokes of deep breathing to allowed by a total realseation one helpful for controlling the emotions.

   It can also be supplemented by Inspiration Breath Holding expiration 10 cycles & inspiration – expiration breath holding 10 cycles for controlling the mind. It also helps to control the breathing while traveling in polluted, conjested areas.

4. **Nasal Instillation:** Putting 2-3 drops of ghee / oil into each of nostril or applying it inside the nostril or applying it inside the nostril help, to control the effects of air pollution & allergies.

   Doing it daily & regularly is helpful for all travellers.

   It also improves eye sight, learning & ability to breath better, if done with medicated oils it can help to boost up the memory.

5. **Break fast :** it's always better to have light or heavy breakfast before leaving home. It reduces the urge to eat outside & avoids outside food borne diseases.

6. **Carrying Tiffin's:** With one self is also helpful.

Most of the problems with junk food can thus be eliminated. One can also keep boil water with one self.

7. **While Travelling :** The most difficult part in traveling is the jerks & jitters due to vertical uncontrolled movement of the vehicle. These jerks are either due to the faulty suspensions of vehicles & also due to pothole ridden roads.

To minimize this one should always try to set while resting his back & neck on the seat totally i.e. persons back right from neck till buttocks should touch the back to bench totally.

While standing one should have distance of 1 to 1 ½ feet between the legs. Also neck should be bend backwards.

If one is having briefcase it should be rested between the legs & should not be hold in hand for too long.

The staircase should be negotiated with straight back & not leaning forward or backwards.

In any type of travel one should always make sure to keep at least 5 minutes for warming up.

If travel time is more than ½ hr one should try loosening exercies (twisting & stretching also one should try to do Deep Inhalation also.

**Evening / Night Schedules:** In the home one should take hot water bath for complete physical realization evening food should be light.

Thus if a person tries and reschedules his daily routines he can cope with the travelling related sickness & remain healthy. ■

## Millenium Development Goals (MDG)

Millenium Development Goals (MDG) are a pledge by the community of nations to a comprehensive development vision. The MDGs were launched in the Millenium Summit of the United Nations in New York in 2000. One of the key elements of socio-economic progress as identified by the MDGs is primary education. Following are the MDGs with respect to education;

| | |
|---|---|
| Goal 2: | To achieve universal primary education |
| Target 3: | Ensure that by 2015, all children will be able to complete a full course of primary schooling. |
| Goal 3: | To promote gender equality and employment |
| Target 4: | Eliminate gender disparity in primary and secondary levels by 2005 and all levels by 2015. |

The Government of India has carried out the 86th Amendment to the Constitution making free and compulsory education to all children from 6 to 14 years of age to be a Fundamental Right. If adequate provisions are made for effective enforcement of this fundamental right, the two millennium goals would be automatically achieved. It is abundantly recognized that while the MDGs are global, they will only be achieved through actions at the local level. The responsibility mainly lies with the local bodies to achieve the targets listed in the MDGs.

*(Source: Education Research Paper by All India Institute of Local Self Government.)*

# Camlin

CAMLIN CELEBRATES

PLATINUM JUBILEE

75 YEARS

75 years of Corporate Excellence

Camlin is a diversified corporate group with over 1000 trusted products. Established in 1931, Camlin is a multi-location, multi-product company with state-of-the-art manufacturing units. It is a pioneer and leader in art materials and stationery range of products in India. All Camlin products adhere to the highest quality and safety standards with the 'colour range', the 'back to school range' and 'markers' complying with the ACMI and EN-71 standards making them absolutely safe for children to use. Goes to prove that we have been providing the highest standards of excellence for the last 75 years. And we pledge to do so in the future.

## Our Range of Products :

• Artists' Range • Back To School Range • Hobby Range • Office Stationery • Writing Instruments
• Markers • Adhesives & Glues


Camlin Limited, Hilton House, 48/2, Central Road, MIDC., Andheri (East), Mumbai - 400093. India. Tel No.: +91-22-28360302 / 28366011
Fax: +91-22-28360014 Email: info@camlin.com Website: www.camlin.com


MOSAIC

# The perfect balance of Fixed and Floating interest.

## Get the benefits of both in our 2-in-1 Home Loans.

Uncertain whether to opt for a floating or fixed interest rate loan? Presenting 2-in-1 Home Loans from HDFC – it lets you split your home loan into a combination of fixed and floating interest rates. So, you benefit from both and hedge against future risks. Come find the balance you've always wanted.

**Home Loan Protection Plan:** Insurance Cover on your Home Loan for assured repayment.#

Talk to us today | **SMS: HDFCHOME to 6767** **www.hdfc.com**

HDFC HOME LOANS

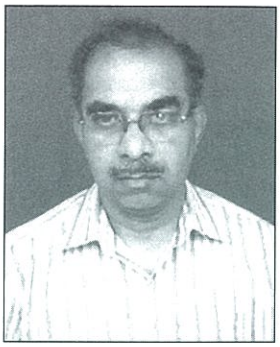
WITH YOU, RIGHT THROUGH

# Insurance Cover brought to you by HDFC Standard Life Insurance company Limited.
• Insurance is the subject matter of the solicitation • Form No. SN14. • Conditions apply.

**MUMBAI/NAVI MUMBAI • HDFC Home Line** 66636000. **Branches at: • Mumbai** Ambarnath*, Andheri (E)*, Andheri (W). (Mon & Wed - Sat, 12 noon - 8 pm), Andheri-Kurla Road (Mon & Wed - Sat, 12 noon - 8 pm), Borivli*, Chembur*, Churchgate, Dombivli*, Kalyan*, Malad*, Mulund (W)* (Paanch Raasta), Parel, Virar (Tue - Sat, 12.30 pm - 8.30 pm) • **Navi Mumbai:** Belapur (Tue - Sat, 11 am - 7 pm), Koparkhairane (Tue - Sat, 11 am - 7 pm), Nerul*, New Panvel*, Vashi. • **Thane:** Gokhale Road*, Vikas Complex (Mon & Wed - Sat, 12.30 pm - 8.30 pm). (Mon - Fri, 9.30 am - 5.15 pm, except mentioned otherwise).

# Some facets about Mumbai and Air Pollution

Dr. Rajiva Prasad



Today's Mumbai city originally was a cluster of seven islands, which were gifted in dowry to the British king in 1661 by the Portuguese king. Historians opine that the name of Mumbai came form a fisherman who was instrumental in the construction of Mumba Devi temple located in the heart of the city. In course of time these islands were joined together to give shape to the present day Mumbai. The city has rich natural resources such as lakes, coastal water, forests, saltpans and mangroves. Mumbai, located on the west coast of India is easily accessible by airways and sea transportation. The census of India (2001) indicated that Greater Mumbai's population as 11.91 million residing in an area of around 603 $km^2$ resulting a population density of 19751 persons/$km^2$. Densities are exorbitantly high in some wards of the city. The annual population growth rate of the city, which hovered around 4 percent, some fifty ago has now reduced to 2 percent. Mumbai city has a long history of influx of people i.e. migration. Migration has been a constant force for rapid increase in Mumbai's population. It is perhaps the first city in India, which experienced economic, technological and social change associated with capitalism's growth. During the partition days in 1947 millions of refugees were settled in different parts of the city. The Asia's biggest slum is located in Mumbai only where half of the city's population resides in a filthy condition. Mumbai, the capital of Maharashtra state is also the financial capital of India. It is one of the fastest growing cities witnessing a phenomenon growth in industries as well as in business centre.

One needs air to breathe to stay alive. If we breathe dirty air we are more likely to develop heath problems and become ill. A lot of things that make our lives more comfortable such as transport vehicles (cars, scooters, trains, buses etc.) create bad gases that make the air dirty. The car exhausts eject a lot of gases, which create air pollution. These gases are very dangerous. Although fuels are becoming cleaner, it will not be making that much difference because there are many more cars. The problem of air pollution started with the burning of coal in the homes and the factories/ industries and release of new bad gases. Air pollution is what we say to describe all bad gases in the air that we breathe are dangerous for us. But all gases are not bad. This air pollution also can cause acid rain.

Mumbai and Mumbai suburban area is highly urbanized. Many industrial units ranging from textiles, dyes, chemicals, thermal power, oil refineries and pharmaceuticals- large, medium and small are located in the different parts of the city. The small units (SSI) such as engineering, chemical, electronic and electrical etc. are located in the industrial estates. Of 7850 industries in Mumbai and its suburban areas only 1.54 percent are large- scale industries, less than one percent being of medium type and the rest small scale industries. It is worth mentioning that more than half of the industries are of green category. These units in one-way or the other can pollute the atmosphere/ environment by releasing the gas i.e. polluting the air we breathe in or discharging waste products in the sea or river i.e. polluting the water. To stop and avoid further deterioration of the environment and quality of water/ air in use Maharashtra government decided to ban establishment of new polluting units in Mumbai and Mumbai suburban areas. After the enactment of the law banning expansion in the Mumbai area and recession of textile units, many dyes and drug units have shifted to the near by areas such as Thane and Raigad or some other district or closed down the units.

Majority of large, medium and small- scale industrial units have adopted industrial pollution and control measures. They have adopted full- fledged treatment facilities and treat water according to Mumbai pollution control board standards. To name a few, M/s Rashtriya Chemical Fertilizers (RCF), Chembur by treating the sewage in their treatment plant recycles/ reuses the treated effluent to the maximum extent possible. M/s Asian Paints also obtains sufficient amount of sewage from Mumbai Municipality, treats them in their sewage plant and

* *The Author is an Associate Professor, International Institute for Population Sciences, Deonar, Mumbai 400 088.*

reuses them further. M/s Bharat Petroleum (BPCL) has provided improved treatment system and thus by recycling the treated effluent by 70 percent. Maharashtra pollution control board estimated that there are around 250 hazardous polluting industries, 691 air polluting and 658 water polluting industries in Mumbai and Suburban Mumbai. These industries are regularly monitored for its emission of gases and other effluents. The estimated quantity of industrial effluent is about 240 MLD. The ambient air quality (AAQ) is regularly monitored at Sion, Mulund and Chembur through a mobile van. During 2004-05 the level of $SO_2$ (Sulphur dioxide, ug/$m^3$ mainly released by power stations and causes acid rain when mixed with water) in Sion was almost twice the amount of Mulund (12.7 ug/$m^3$). Similarly the level of NO (Nitrogen oxides, mainly released by cars and trucks, which is more during rush hours) in Chembur and Mulund was very much the same (40 ug/$m^3$) but in Sion it was very high (253 ug/$m^3$), almost 10 times .It should be noted that during the same reference period the emission load of Mumbai city was 145 tonnes per day through domestic sources compared 51 tonnes per day from industrial sources. Transport vehicles run by petrol and diesel present a different picture, where it was found that in case of diesel run transports the amount of CO (Carbon monoxide, mainly released by cars and other vehicles) was 14 tonnes per day where as for petrol run transport it was more than 250 tonnes per day. Around two lakh vehicles are added to this city every year. It is anticipated that vehicular pollution is a major factor causing air pollution in the city environment. It has been found that 60% of air pollution in the city environment is caused by vehicles, which run on the roads of Mumbai. To control air pollution due to automobiles conversion to CNG and LPG, PUC tests etc, has been initiated. Normally the gases mix with the air, sometimes go up very high and do not cause discomfort but in certain seasons smoke/ gas and fog together create smog. Air pollution really becomes a problem when the weather is foggy. With foggy conditions and light winds the smoke or air pollution covers the city. During the months of December-January temperature inversion is quite common in Mumbai and the city gets a foggy/smoggy when the pollutants are unable to move high up in the atmosphere due to cold weather.

In Mumbai large number of persons suffer from throat and eye irritation and skin ailments that are caused by air pollution. Asthma and bronchitis is common disease among industrial workers. Long hours of work near a blast furnace or a boiler is likely to cause many more ailments. Certain chemicals if released untreated e.g. cyanides, mercury, and polychlorinated biphenyls are highly toxic and exposure can lead to a disease or death. Some studies have indicated that excess of exposure to hazardous waste causes cancer.

Now that with the speed of modernization and urbanization new industries are coming up, more human heads are moving to this glamorous city. To make the life easier and comfortable new, modern, more and better transport facilities have become the demand of day to-day life. And to coop up with this new situation some new big, medium or small industries and power stations t will definitely come up in the days to come.

Education, education, education alone! Traveling through many cities of Europe and observing in them the comforts and education of even the poor people, there was brought to my mind the state of our own poor people, and I used to shed tears. What made the difference? Education was the answer I got. Through education comes faith in one's self, and through faith in one's own self the inherent Brahman is waking up in them, while the Brahman in us is gradually becoming dormant.

**Vivekananda, Swami**

# Sir Shapurji Billimoria Foundation, Mumbai

In Maharashtra, the education of children with disabilities has been mostly in special schools; there are about 600 special schools. Government initiatives in Maharashtra include Janshaala, IEDC and SSA. The Sir Shapurji Billimoria Foundation in Mumbai is an example of an innovative teacher development initiative.

Sir Shapurji Billimoria Foundation was registered in 1998 with the aim of training general teachers to meet the needs of children with disabilities. The objectives of the organization are as follows:

- To humanize education by promoting awareness, acceptance and feasible techniques for inclusive education.
- To conduct professional training courses in inclusive education for teachers and allied professionals as well as needs-based workshops for parents.
- To conduct research and documentation in inclusive education and related educational issues. To promote inclusive education by networking with educationists and organizations in India and a broad.
- To influence educational and social policy on inclusive education at local, national and international levels.

**Training course**

The organization has conducted three three-week training courses for in-service teachers in Mumbai. Teachers felt that there was a need for more such courses as it helped them in their classroom practice. Since teachers could not be away from school for long, it was suggested that weekend training modules could be implemented. The organization also conducts research in education, learning styles and allied educational issues that include documentation. The research into teacher training led to the development of a B.A. in Integrated Education, a three-year course for students who had passed the Class 12 examination.

This course recognizes that all children are special and may have variations in capacities and talents, pace of learning, extent and limits to learning, and inputs needed for their learning. It was considered necessary to adopt a unitary approach to education, where teaching and training fell within the same organizational system and structure to incorporate the planning of schools and the professional development of teachers. The course addresses the educational needs of children as well as the professional needs of teachers.

**The innovative features and thrust areas of the course include the following:**

- Knowledge of diverse needs, disabilities and giftedness.
- Skills to develop appropriate programmes for diverse needs.
- Adoption of an eclectic approach to ideologies and teaching methodologies.
- Ability to teach at elementary level in multiple settings.
- Integration of different disciplines—medical, paramedical, therapeutic, social sciences,
- psychology, human development and related professions.
- Development of resource centres in each school (for course material, project material,
- reference material, books, journals, etc.).
- Emphasis on individual learning, group assignments, self-study and discovery learning.
- Inculcation of humanism, sensitivity, inquiry and creativity.
- Raising of critical concerns and issues, and relating them to contemporary needs.

The course deals not only with pedagogical aspects but also with human development, in general, including physical and psychological development from birth to old age. Diversity in development and resultant needs are discussed. Theoretical perspectives in education, subject proficiency,integrating educational methodologies, organization and management, and policies and programmes are other modules. The teacher training programme, which follows the above curriculum, ensures that teachers are able to facilitate the learning of all the children in the

classroom. The principles of inclusion are followed, and practical experience as well as exposure to

various methodologies is emphasized along with participatory learning. The course is evaluated, reviewed and revised periodically.

## Training outcome

The expected outcomes for teachers are as follows:

- They have knowledge of diversities in children and acquire skills to develop programmes that meet diverse needs.
- They develop a new pedagogy.
- They develop resource centres in schools.
- They are equipped to teach in multiple settings.
- They are humane and sensitive to children.

*(Source: Unicef Website and Letter sent to Bombay First)*

Mumbai is the financial capital of India and according to the 2006 census, its official population is 1.20 Crores. The demographic profile of Mumbai city shows that out of the total population only 28% live in South Mumbai, 29% in Eastern Suburbs and 43% in western suburbs. The distribution of health care delivery systems however, is not proportionate to the demographic profile of the city.

In the island city there are 4 medical tertiary care hospitals with medical colleges i.e. J.J. Hospital, Nair Hospital, K.E.M. Hospital and Sion Hospital. All these hospitals are run by Municipal Corporation. The tertiary care services which are provided by private sector are like a necklace on Mumbai city i.e. from Bandra to Marine Lines and from Marine lines to Bandra-kurla Complex. Starting from Banda to Marine lines and from Marine Lines to Bandra - Kurla Complex. Starting from Bandra is Holy Family, Lilavati, Hinduja, Jaslok, Breach Candy, Cumbala Hill, Bhatia Hospital, Harkisandas Hospital, Bombay Hospital, Saifee Hospial, Prince Aly Khan Hospital, Mehta Hospital and Asian Hear Institute at Bandar-Kurla Complex.

In the Eastern suburbs there are secondary care hospitals run by M.C.G.M i.e. rajawadi Hospital (Ghatkopar), Savarkar Hospital (Mulund - E), Sant Muktabai (Ghatkopar), Kannamwar Nagar (Vikhroli), Centenary Hospital (Govandi), Maa Hospital (Chembur), M.T. Agarwal Hospital (Mulund) and K.B. Bhabha Hospital (Kurla). There is onlyone tertiary care hospital i.e. Wockhardt General Hospital in Mulund (W).

The same scenario prevails in the Western suburbs where 43% of the population lives. Here the secondary care hospitals being managed by M.C.G.M i.e. Bhabha Hospital, Cooper Hospital, Bhagwati Hospital, V.N. Desai Hospital, Siddarth Hospital, S.K.patil Hospital, Centenary Hospital, M.W. Desai Hospital and here also there is only one tertiary care hospital run by private sector i.e. Nanavati Hospital at Vile Parle.

Key Considerations to enhance the Education Quality

Education loan should be available to all the students selected by the college

The terms should be not burdensome and requiring minimum documentations. Suggested that

- A longer time frame for repayment - from 7 - 10 years
- A reasonable lower interest rate of 5 - 6 percent during the period of study considering that this type of education and infrastructure build actively.
- The repayment amount may vary with the earning potential of the individual

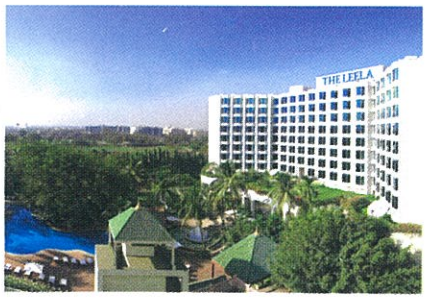
Money would be transferred directly to the college

The responsibility for repayment will rest on the students themselves. ' Burden on Beneficiaries"

If a student wishes to pursue postgraduate education, their loan should be suitably restructured.

# Paradise on Earth

The Leela, Kempinski Kovalam Beach, Kerala



THE LEELA

PALACES & RESORTS

*The Essence of India*

Initiated by

BOMBAY first

cag
CITIZENS' ACTION GROUP

# BOMBAY FIRST

## VISION

Bombay First – an organization dedicated to improving the economic and social infrastructure of the city, making it globally competitive and improving the quality of life of its citizens

## MISSION

Bombay First is an initiative to make the city a better place to live, work and invest in. It aims to serve the city with the best that the private business can offer. It will achieve this by addressing the problems of today and the opportunities of tomorrow, through partnerships with government, business and civil society.

4th Floor, Y.B. Chavan Centre, Gen. J. Bhosale Marg, Nariman Point, MUMBAI 400 021
Tel. : 2281 0070 / 71 • Telefax : 2281 0072
E-mail : mumbaifirst@yahoo.com / bombayfirst@bombayfirst.org • Web: www.bombayfirst.org

***Registered Office:***

Bombay Chamber of Commerce and Industry, Makinnon Mackenzie Building,
Ballard Estate, Mumbai 400 001.
Phone : (91-22) 2261 4681 • Fax : 2262 1213
E-mail: bcci@bombaychamber.com • Web: www.bombaychamber.com