



# AMDA NEWS

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## EDITORIAL

*This is the third of six issues of AMDA NEWS programmed for 2005 for dissemination of information to our members and other professional organizations on varied urban issues.*

*In this issue in the first section of policy and strategy the focus is on how to meet the Millennium Development Goals in urban areas and also on the thrust given on infrastructure development across the sectors. A brief note is incorporated on Indian Heritage Tourism – as a major economic driver and on decentralized management plans for mega cities in solid waste management. Some relevant aspects of the national electricity policy, national civil aviation policy, and national mapping policy is included along with a note on the National Advisory Council's focus on financial and administrative empowerment of Panchayati Raj Institutions.*

*In the section on state initiatives, we present the efforts of the Government of Madhya Pradesh for slums development; and of the Government of Himachal Pradesh to involve Panchayats in their Health programmes to improve effectiveness. Initiatives of Uttar Pradesh Government to constitute an Industrial Development Authority to entice investments in the state and the Municipal Corporation of Delhi's effort to introduce heritage legislation in NCTD have also been reported.*

*In the city initiatives section, reports on the use of GIS for mapping municipal solid wastes (MSW) in Guwahati city and also to find suitable alternatives for MSW disposal has been included. Reports on increase in Delhi's green cover; clearance to Delhi's first cable stayed bridge on Yamuna River and the development of the outer ring road project in Hyderabad by the Hyderabad Urban Development Authority has found place in this section.*

*In the final section we highlight several news and facts from around the world on urban issues and of interest to readers.*

*We hope that this issue provides our members and readers with valid and useful information. We look forward to comments and suggestions in improving the newsletter. In particular we seek news items to share with other members and subscriber of the AMDA newsletter.*

*The AMDA NEWS is a publication of the Association of Urban Management and Development Authorities - an apex body active in providing information and capacity building support to its members.*

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## 1. POLICY AND STRATEGY ISSUES

### 1.1 HOW TO MEET THE MILLENNIUM DEVELOPMENT GOALS IN URBAN AREAS

How to meet the Millennium Development Goals (MDGs) in urban areas – both in the informal settlements where those needs are concentrated and at city scale. A large and growing proportion of those with unmet needs for water, sanitation, health care and schools live in urban areas. Addressing this will require local governments that are more competent, accountable and able to work in partnership with urban poor groups and their organizations. A growing number of precedents show how this can be done, including:

#### I. Where are the Local Changes on which meeting the MDGs depend?

In urban areas, it is locally applied government rules and procedures that determine whether low-income households can send their children to school and afford to keep them there; whether they can get treatment when ill or injured; whether they are connected to water sanitation and drainage networks; whether their neighbourhoods have street lights and electricity; whether they can build homes legally on safe sites; whether they can avoid eviction; whether they can vote and have access to politicians and civil servants; whether they are protected from violence and crime (including corruption) by a just rule of law; whether they can influence development projects. The performance of local schools, health care centres and water and sanitation providers determines whether many of the MDG targets are met. The success in meeting most of the MDGs depends on more effective and accountable local governments, and local offices of higher levels of government.

#### II. The Scale of Need

The scale of deprivation in urban areas has long been underestimated, in part because of inappropriate poverty definitions – especially poverty lines set without regard for the cost of non-food needs. The urban population in low and middle-income nations has increased by 1.5 billion, while the rural population increased by 770 million. A very large proportion of this much-expanded

urban population lacks provision for schools, health care, water and sanitation.

### III. Making Local Governments less Anti-Poor

Local governments are important for their capacity both to reduce poverty and to increase it. This is illustrated by recent events in Mumbai where, since December-2004, the municipal corporation has been implementing a very large forced evictions and slum demolition programme. Yet this is the same municipal government that is working with federations of slum and pavement dwellers on projects to house more than 50,000 of the poorest households. It is also the city where the police commissioner has been working with committees of slum residents to set up police stations in slums. This is the city that pioneered new forms of resettlement for thousands of low-income households who had to move to allow improvements in infrastructure, but who were fully involved in the planning and management of the resettlement. These evictions in Mumbai are an example of how not to meet the MDGs.

Every year, millions of people are forcibly evicted by “development” projects, leaving them homeless, and entrenching patterns of poverty, discrimination and social exclusion. Governments justify evictions as being for ‘the public good’: to support city regeneration; to improve health and safety or to reduce crime; to develop needed infrastructure. But those whose homes are bulldozed also want improved health and safety, better infrastructure and a more successful economy; most also want the rule of law. Many would be happy to move, as they live on land at risk of floods or landslides or on pavements – as long as they can help determine to where, when and how. A real engagement with urban poor groups can allow land to be freed up for improving infrastructure or urban regeneration, but in ways that also benefit the urban poor. So meeting their needs is also part of the “public good”.

### IV. How to Meet the MDGs in Urban Areas

#### a. Another way to do urban development

There is another way to plan, implement and manage urban development: with local governments listening to and working with urban poor households and their organizations. There





are good examples of this going back more than three decades, but they have become more common in the last 10-15 years and have demonstrated their capacity to “go to scale”. In part, this is because for more urban authorities have elected councillors and mayors than 30 years ago. But perhaps as importantly, in increasing numbers of nations there are representative organizations of the urban poor that want to work with urban governments in addressing their members’ needs. The combination of more pro-poor local governments and more organized urban poor groups is one of the keys to meeting the MDGs in urban areas.

In Thailand, the *Baan Mankong* (“secure housing”) programme channels infrastructure subsidies and housing loans direct to poor communities, who plan and carry out improvements. It is unusual in that it is a national programme that supports locally driven solutions in which urban poor communities have a central role. A focus on supporting urban poor households to obtain legal housing is important not only for improving living conditions, but also for the MDG targets.

**b. Land: getting tenure or land for new housing for low-income groups**

Informal settlements are the result of people being priced out of legal land and housing markets. The population has incomes that are too low to allow them to spend much on housing or on land on which they can construct their own housing. Government measures can help increase the supply and reduce the cost of land for housing through expanding infrastructure networks and changing standards and procedures. But in most cities, governments do not do this. The MDGs will not be met unless those living in illegal settlements can get tenure and infrastructure, and unless a higher proportion of lower-income households can enter official land-for-housing markets.

City politicians and civil servants often claim that there is no land available for housing for urban poor groups – but many detailed surveys

have shown this to be untrue. Large amounts of vacant land are to be in public ownership – although much of it may be owned by national rather than by local government agencies as, for example, in Mumbai, by the railway, port and airport authorities and the military.

**c. Financing alternatives to “slums” for low-income groups**

Complete, legal houses are too expensive for most urban households. The only way that most can afford new housing is to build it themselves, incrementally, on land occupied or developed illegally. Finance systems can spread up the process, as shown by a range of institutions in different Central American nations that provide loans to low-income families to improve or expand their homes or build new ones. In some nations, grants were provided to local governments for infrastructure and services, as long as communities participated in the decision-making and implementation process. Most community-driven initiatives try to minimize unit costs – for housing construction or improvement and for all forms of infrastructure – because this reduces the gap between what can be provided and what poorer groups can afford.

**V. How to Meet the MDGs at Scale; the Importance of City-Wide Action**

Step one in any city-wise programme is to build an information base on the conditions in all of the areas with poor quality housing. In Thailand and in many other nations, community organizations and their networks or federations have shown how to do very detailed “slum surveys”, in ways that fully involve the inhabitants. This provides the information base for a city-wide programme and:

- develops linkages between all the urban poor communities;
- makes apparent the differences between the many “slums”, and what causes these. This allows solutions to be tailored to each group’s needs and circumstances – instead of the usual “standard” upgrading package that governments try to apply to all settlements; and





- allows urban poor communities to help choose which settlements will be upgraded first.

Step two is pilot projects. If pilot projects are planned within the city-wide processes involving urban poor organizations, they are centres of experiment and learning that becomes precedents and catalysts for action elsewhere. City-wide consultations, data gathering and pilot projects strengthen the horizontal linkages between urban poor communities.

## VI. Upgrading Relationships as well as “Slums”

Real slum and squatter upgrading changes urban poor groups’ relationships with city authorities and politicians, shifting from conventional patronage-based relationships with political parties and local governments to relationships that are more transparent and accountable.

The changed relationships also depend on urban poor groups becoming organized and developing the confidence to make demands, to negotiate solutions

that suit them and to do things themselves. Urban poor groups and their representatives also have to change their relationships with each other – rather than seeing other poor settlements as competitors for resources, they become allies and co-learners, working with each other.

## VII. Can International Agencies Support Pro-Poor Local Organizations?

There is a huge physical, conceptual and institutional distance between those facing serious deprivation and these agencies; decision-making processes and management. This can be resolved by channelling funding through intermediary institutions located in recipient countries, which can work in partnership with low-income groups and their organizations – for once, with donors having to be accountable and transparent down to poorer groups as well as up to the governments that oversee them.

*Source: Environment & Urbanization, Vol. 17, No. 1, April, 2005, IIED, London.*

### *As Cities Boom, Mother Earth Suffers Silently*

*On World Environment Day on June 5, the UN Environment Programme gave the following facts about cities:*

- *The world is becoming more urban. In 1950, fewer than one person in three lived in a town or city. Today, nearly half the world’s population is urban and by 2030 the proportion will be more than 60 percent.*
- *Fastest growth in the next 25 years will be in urban areas in developed nations. In 2000, there were more than 400 cities with more than one million inhabitants.*
- *‘Mega cities’ – urban areas with more than 10 million inhabitants – include Tokyo/Yokohama, Mexico City, Seoul, New York, Sao Paulo, Mumbai, New Delhi and Los Angeles. In 1950, New York was the only city with more than 10 million people.*
- *In developed countries, 75% of the population is urban, with lower percentages in poorer regions.*
- *Urbanization in rich countries has largely coincided with economic growth, a trend not matched in poor regions.*
- *At least one billion people, or one sixth of humanity, lives in slums and squatter settlements, mainly in Asia, Africa, and Latin America. The figure could double by 2020.*
- *One target of the UN’s millennium goals is to ‘significantly improve the lives of at least 100 million slum dwellers by the year 2020.*
- *Unsafe water, inadequate sanitation and air pollution are among threats in slums.*
- *Power generation, industry and transport, now mainly associated with towns and cities in the developed world, are responsible for most emissions of carbon dioxide, the main greenhouse gas blamed for global warming.*
- *Climate change could swamp low-lying coastal towns and cities as a result of a rise in the sea level, and cause more frequent and severe storms.*
- *Municipalities can spend as much as 30% of their budget on waste disposal, mostly on transport.*
- *An average North American city with a population of 650,000 requires 30,000 sq km of land to service its needs. By contrast, a similar sized but less affluent city in India requires just 2,800 sq km.*
- *A city of 10 million people – such as Manila, Cairo or Rio de Janeiro – imports at least 6,000 tonnes of food every day.*
- *Managed well, cities can support growing populations. Examples include tree plantings and setting aside green spaces, the use of so-called ‘grey water’ to flush toilets, low-polluting vehicles and efficient public transport systems, low-energy lighting and waste recycling.*

*Source: The Times of India, June 6, 2005, New Delhi edition.*





## 1.2 INFRASTRUCTURE CONSTRUCTION – Sector Specific Opportunities

The bulk of India's construction business – more than 60 percent – arises from the thrust on infrastructure development across sectors such as power, oil and gas, telecom, ports, roads, railways, airports and urban infrastructure. Given high GDP growth and sound economic fundamentals, the infrastructure sector seems poised for major growth. A brief look at each key segment:

### Power

Power generation projects, be they in coal, gas or hydro are extremely capital intensive. The government has laid down three targets for the sector: power availability for all by 2012, electrification of all villages by 2007, and access to electricity for all households by 2012.

The installed capacity addition target by the end of the Eleventh Plan is 65,000 MW. There is a renewed thrust on hydro generation, under the 50,000 MW Hydro initiative by 2012, which aims at developing 162 schemes. The preliminary feasibility reports have been completed. Hydro projects, especially dam-based projects, require a lot of construction activity as it involves rock blasting, tunneling and dam-related works.

### Oil and natural gas

The deregulation of the oil and gas sector has opened up new opportunities for investment. Exploration and production are on the rise with the government awarding more blocks under successive rounds of the NELP and increasing foreign and private participation. The government has offered 20 blocks under the fifth round of the NELP.

The construction of pipelines for carrying petro products, crude oil and gas is also proceeding at a fast clip. Reliance is proceeding with its announced petro product pipelines and gas pipelines.

Similarly, GAIL and GSPL are also setting up infrastructure for gas transmission and distribution. IGL and MGL are expanding their gas distribution networks in and around Delhi and Mumbai respectively.

### Civil aviation

In civil aviation sector it is expected that domestic and international passenger traffic would grow at 12.5 percent and 7 percent per annum over the next decade

while domestic and international cargo traffic would grow at 4.5 percent and 12 percent respectively. Greenfield projects at Bangalore and Hyderabad are being developed with financial arrangements tied up. The former project will be executed by a joint venture company called Bangalore International Airport Limited and the latter is being developed by GMR, Malaysia Airport Holdings, the Andhra Pradesh government and the AAI. Both airports are scheduled for completion by 2007.

The Kochi international airport has also progressed. The joint venture partner for the Mumbai and Delhi airport restructuring project is to be selected by 2005 end. Besides, the government has ambitious plans to restructure the Chennai and Kolkata airports as well as upgrade 22 non-metro airports. These present huge investment opportunities in the sector.

### Ports

India's strategic position includes a vast coastline of 6,000 km. There are 13 major ports, controlling over 75 percent of traffic. Increasing globalisation implies that there will be a growing volume of international trade through Indian ports. Thus, the upgradation and expansion of ports will be key.

Four major ports – JNPT, the Mumbai Port Trust, Kochi Port Trust and Kandla Port Trust – have drawn plans to add a container terminal each. P & O Ports has taken over the Mundra international container terminal and plans to expand the capacity of the terminal. Also, the Union Budget 2004-05 assigned high priority to the international container transshipment terminal at Vizhinjam and the Sethusamudram project. The states are increasingly seeking private participation for the development of minor ports.

There is also a proposal for the establishment of a dedicated freight rail corridor – a “spinal corridor” which would link some major ports across the country. Through the scope of the erstwhile Sagarmala has been reduced, the new “National Maritime Development Programme” will offer tremendous opportunities for the construction sector.

### Roads and bridges

This sector is also seeing a lot of construction activity. The Golden Quadrilateral (GQ) (5,846 km) and the North-South-East-West (NSEW) corridor (7,300 km) projects are moving towards completion, albeit with



some delays. The GQ project has a new target deadline of December 2005. In the Union Budget 2005-06 it was stated that the third phase of the NHDP would be launched in 2005-06. The phase would target selected high-density highways which do not form part of the GQ and NSEW projects.

The Rs.600 billion Pradhan Mantri Gram Sadak Yojana, seeking to connect habitations with populations of over 500, is also in full swing. Around 62 percent of the work is complete. But the target deadline has been extended from 2007 to 2010-11. The NHDP is seeing participation from international contractors. Several states including Madhya Pradesh, Tamil Nadu, Karnataka, Kerala and Maharashtra have begun road development initiatives through enabling legislation and encouragement of private road projects.

#### Railways

Demand for rail services has grown in tandem with economic expansion, quickly outstripping the supply capacity. As a result, important infrastructure deficits have appeared. Therefore, the Indian Railways is implementing priority projects such as the GQ and port connectivity projects under the National Rail Vikas Yojana. Works for all the sanctioned projects under the scheme have been handed over to Rail Vikas Nigam Limited. The prestigious Delhi Metro Rail Transport Service has also been extended while metro projects are already under way in Hyderabad, Mumbai, Bangalore and other cities. The Mumbai Urban Transport Project (MUTP) has also got a fillip with the sanction of a World Bank loan. MUTP envisages investment in suburban railway projects, local bus transport, new roads, bridges, pedestrian subways and traffic management activities.

#### Telecom

The service-oriented telecom sector sees limited construction activity compared to other physical infrastructure sectors. The construction activity is in the form of laying the network for providing fixed line services and cellular services, setting up mobile switching centres, and relay towers, the laying of optic fibre cable, both underground and undersea. Opportunities exist in building converged networks for voice, video and data as well as wireless local area networks.

#### Urban Infrastructure

The urban infrastructure sector includes urban housing, sanitation, water supply and waste water/sewerage

management. It also covers special economic zones and software parks. The housing sector boom continues due to cheap, easily available housing finance and the urban reform process.

Several states are promoting special economic zones to promote trade and industry. The Maha Mumbai special economic zone project and the Navi Mumbai are proceeding on schedule. Similar projects are also being developed at Chennai, Delhi, Indore, Kochi and Visakhapatnam.

Source: *Indian Infrastructure*, Vol. 7, No. 8, March 2005

### 1.3 INDIAN HERITAGE TOURISM

India's strongest tourism resource lies in its antiquity, heritage and culture, a factor that has always exercised the most powerful pull over tourists. The Government of India, which has positioned tourism as a major economic driver for the country's growth, is looking to its historical heritage and cultural wealth as powerful resources for attracting tourists. However, despite the fact that India has 126 centrally protected monuments to showcase of which 26 are recognized as world heritage sites by UNESCO, only very few of these command the attention of international tourists.

#### *Drivers for Sustainable Development*

*JG Speth, currently Dean at the School of Forestry and Environmental Studies at Yale University, describes "drivers of global environmental deterioration": such as i) population growth; ii) affluence of some; iii) poverty of many; iv) environmentally unfriendly technology; v) market failure to price goods like air, water and land; vi) policy and political failure to correct such price distortions; vii) scale and rate of economic growth; viii) consumerist culture and values; and ix) globalisation.*

*Affluence in the developed world is marked by environmentally unsustainable consumption encouraged by 'perverse' subsidies in agriculture, energy, water, fisheries etc. The roadmap to environmentally sustainable development is marked by "eight transitions": i) empowering women; ii) halving the number of world's poor; iii) gradual increase in share of renewable sources of energy and demand regulated through price mechanism; iv) setting environmentally honest prices that reflect value of Earth's supporting system; v) reorienting consumers' choice towards green products and services; vi) corporate accountability; vii) spread of environmental literacy and awareness at all levels of citizenry; and viii) effective green governance.*

Source: *INTACH VIRASAT Vol.1 No.3 Jan-March 2005*



Typically “heritage” tourism or cultural tourism would refer to the showcasing of the historical, cultural, religious and social features of a country is linked to its socio-cultural evolution and history. It would encompass the development of places, which are of historical, archaeological and religious significance, as tourism attractions.

#### **India’s heritage potential lies dormant:**

Statistics reveal the dismal lack of interest that foreign tourists show even to internationally recognized monuments. The Taj, which is celebrated as one of the “seven wonders of the world” receives less than 10 percent of the foreign visitors coming into India, while the other declared world heritage monuments attract less than 1 percent of the foreign tourists visiting the country.

#### **India’s tourism prospects underline the need to exploit heritage for tourism:**

The World Travel and Tourism Council’s (WTTC) forecast suggests that most of the growth in tourist arrivals over the coming years is expected in South Asian countries. WTTC projects India’s travel and tourism demand to achieve an annualised real growth of 8.8 percent upto 2014, much above the expected growth in the world aggregate level. This scenario provides an excellent opportunity to position the country and calls for an aggressive positioning of India’s most distinct and unique offerings on the tourism menu.

#### **Heritage tourism presents a development challenge:**

By its very definition, heritage tourism projects revolve around places of historical or religious antiquity, which have great artistic, cultural or archaeological significance. The major issues of developing these places for tourism purposes arise from the following aspects:

- Most archaeological monuments are ancient, dating back to thousands of years. Consequently the archaeological structures, or parts of such structures, are often in a state of ruin or disrepair, extremely fragile and threatened by environmental factors.
- Many historical sites have religious significance and sanctity where strong religious sentiments prevail.
- Many of the sites are an Archaeological Survey of India (ASI) site, a world heritage site or additionally included as “a world heritage site in danger” by UNESCO. Such sites have important statutes protecting them.

All these facts make it critical that the development of these places for heritage tourism be approached with extreme caution and sensitivity.

#### **CRISIL’s framework for heritage tourism development:**

The appropriate framework for developing heritage tourism would address the critical aspects of such development while focusing on the demand for a fine balance. The approach should essentially consist of a two-pronged effort. The core development should focus on the protection, preservation and renovation of the monuments themselves. The critical aspect of development would underline the need to:

- Integrate development strategy with the sanctity of the site.
- Maintain authenticity and religious/historical/cultural/archaeological integrity.
- Ensure spatial synthesis between existing monuments, the landscape and proposed development; strengthen ecological features.
- Ensure balance between religious sites, secular features, visitor amenities and other features.

The objective of the development would be:

- To highlight the beauty of the core attraction and create concepts that would enable the tourist to understand, enjoy and appreciate its beauty to the maximum.
- To create attractions that would serve as a “pull” for the visiting tourist and make him spend quality time there.
- To create a “leisure place” that would combine antiquity with modern offerings to create a unique aura.

#### **Key issues in implementation**

Successful implementation of the various components of the strategy would require several issues arising at various stages to be resolved. Broadly they will include:

- **Several developmental restrictions** - Heritage sites are most often “protected” sites, with statutes governing the extent, nature and kind of development, demanding critical approvals from concerned authorities. Hence the development requires careful planning taking into account all restrictions and adhering to the spirit of such heritage tourism.





- **Multi-agency issues** - Where the monuments are centrally protected, the core site with land demarcated will be under the jurisdiction of the union government while the surrounding land will belong to various state government authorities. This leads to multi-governmental/multi-agency involvement. Provision of support services (water supply, sewerage, lighting, roads, etc.) would require investment from local bodies. While the core development would have to be undertaken by the government, the peripheral development would be able to attract private sector involvement towards tourism infrastructure such as hotels, restaurants, and tour and travel services.
- **Sources of funding** - Developing heritage sites especially where monument renovation and protection works arise would demand huge budgetary resources. Given the resource constraints, the extent of government financing vis-à-vis other sources would need to be examined, including investment from international bodies that work towards heritage preservation, the independent state governments and local bodies benefiting from the tourism development supported by private sector participation where suitable.
- **Negative experiences** - Many of the heritage sites today are unknown and lack the international destination positioning which is essential for attracting tourists. Even when unconventional tourists manage to reach these areas, they face the problem of deficiencies in travel and tour support services. Tourist-related issues, from arrival to their travel, stay and sightseeing till their departure, would need to be identified and addressed. Appropriate linking of heritage sites with other better-known attractions into well-designed tourism circuits would address this issue.
- **Design issues** - As emphasized above, designing heritage tourism products requires a sensitive approach and would relate to integrating the development in harmony with the core attraction. The development should avoid any conflict that may arise on account of a cultural, religious or historical anachronism or conflict. All development would need to keep in focus the central theme of the core monument or attraction.

## Strategic funding sources:

### 1. World Heritage Fund

The World Heritage Fund of UNESCO provides international assistance for heritage development covering the following:

- Preparatory assistance, provided for the preparation of properties suitable to inclusion on the World Heritage List.
- Technical cooperation, that is, assistance for the conservation and management of sites inscribed on the World Heritage List through technical studies concerning the protection, conservation, presentation and rehabilitation of the cultural and natural heritage.
- Training assistance, provided for the training of staff and specialists at all levels in the field of identification, protection, conservation, presentation and rehabilitation of the cultural and natural heritage;
- Emergency assistance provided for drawing up “emergency plans” or measures for safeguarding world heritage sites.

### 2. Government of India Assistance

The revised Central Finance Assistance (CFA) scheme of the Governments of India (GOI) provide financial assistance for two types of tourism projects – one of the components of the assistance pertains to integrated destination development while the other component pertains to the identification of six tourist circuits in the country on an annual basis to develop them to international standards. The objective of both these components is to identify large projects, the development of which would have quick and significant impact.

Under the CFA for destination development, the GOI will assist state governments in the integrated development of a key tourism destination defined as “among the first 10 most visited sites in the state or a recognized heritage monument”. The assistance would include all activities ranging from preparation of master plans to implementation of the master plans, with GOI bearing 90 percent of the cost up to a maximum of Rs.50 million. The CFA scheme for circuit development would assist towards providing within the identified circuit all infrastructure and facilities required by the tourist and also ensure a “convergence of resources and expertise”, with GOI bearing 100 percent of the



project capital cost of a maximum extent of Rs.80 million.

#### Way forward for state governments:

The strategy for state governments would be to evolve a workable development framework for each heritage monument/site along the lines set forth above in a manner that would enable the project to be suitably structured so as to be eligible under one of the CFA schemes. This would take care of the infrastructural aspects. International assistance under the World Heritage Fund may also be explored, where suitable, to take care of the core heritage developmental aspects.

Source: *Indian Infrastructure*, Vol. 7, No.5, December 2004

### 1.4 SOLID WASTE MANAGEMENT - Decentralised Management Plans for Mega Cities

The generation of municipal solid waste (MSW) is the inevitable fallout of rapid urbanisation. As cities grow, they prepare their master plans, which provide for the necessary infrastructure required for transportation, office and residential space, communication, water, power supply,

However, the crucial aspect of MSW management is ignored in most cities. It is only after intervention by the judiciary as a result of public interest litigations (PIL), that this important sector is receiving some attention. As quoted in various studies, the MSW generation in Class I cities has reached a level of 48 million tonnes per annum (TPA) already. Five points are noteworthy:

- Urban population is growing in terms of absolute numbers,
- Its share in total population is rising,
- Per capita income in cities is rising,
- Urban lifestyles are changing, leading to higher per capita waste generation,
- Increasing consumption of ready-to-consume food, of which packaging is an integral part.

As a response to the judgment in the PIL filed, the Ministry of Environment and Forests issued the Management and Handling (MSW) Rules, 2000, which bring discipline in the MSW management sector and uniformity among the urban local bodies of India.

#### Problem of mega cities

Apart from the usual problems of budget constraints and competing use of funds and lack of expertise, mega cities like Mumbai and Delhi face increasing pressure on available land. As a result, the treatment and disposal of MSW faces severe constraints. There is resistance from the population for the string of dumpsites. Moreover, the transportation of MSW from individual wards to the dumpsite itself puts pressure on the already critical road transport network in these cities.

#### Decentralised approach

In the above situation, and in the light of heavy expenditure on the transportation of solid waste, it is imperative for administrations of mega cities to adopt a decentralised approach, which is based on the "treatment closer to generation" concept. Under this approach, in each city, five to six contiguous sanitary sections could be clubbed into smaller manageable blocks of required size. In all the wards of the city, door-to-door collection and segregation at source can be organised.

The segregated organic waste would be transported to the treatment plant located in the block itself. These facilities could be based on different technology options

#### **Forest Rights of Scheduled Tribes - unsettled**

- Recognition of unrecorded forest rights of scheduled tribes dwelling in forests for generations, including access, use and disposal of forest produce.
- The bill recognizes rights of communities that have occupied land before October 25, 1980 (when the Forest Conservation act, 1980 was passed).
- The right shall be heritable, but not alienable or transferable (to ensure that the land is not appropriated by others).
- The title shall be registered jointly in the names of husband and wife.
- The right is for "bonafide" livelihood needs but not for exclusively commercial purposes".
- The gram sabha (village council) shall settle claims. Appeals can be made to higher bodies against its decisions.
- The communities' duty to protect biodiversity is balanced by their rights to manage their traditional forests.
- Unsustainable use of forest or forest produce invites a fine of Rs. 1,000. if the offence is repeated, the violators stand to lose their forest rights.

Source: *Down to Earth*, Vol. 14, No. 1, May 31, 2005





including waste-to-energy through biomethanation, gasification or composting or vermi-composting. Viable size for such projects is estimated at 60 TDP of segregated organic waste. A biomethanation project of this size could cost in the range of Rs.20.30 million, whereas composting could cost Rs.2.3 million. It is suggested that a city adopt several such options so that the products and services generated could be marketed easily.

### Preparatory steps and precursors

Prior to implementing the decentralized system, it is essential to implement projects for door-to-door collection and source segregation in the city. This could be done through NGOs or private operators. The latter could be more performance oriented but may cost more. In the segregation, citizens' involvement must be solicited, though gradually. The NGOs could be provided with appropriate equipment like containerised cycles, auto carts, uniforms, identity cards, health facilities, etc. Another essential preparatory step will be the introduction of monthly solid waste collection charges from all category of waste generators. A share of this could be given to the NGOs responsible for door-to-door collection and segregation.

### Institutional arrangements

The integrated decentralised MSW system will be operated through a combination of public and private participation. In the case of an NGO or CBO the area could be limited to a single sanitary ward, whereas if it is awarded to a private operator, the entire block can be awarded. The transportation of the different components, such as biodegradable components to the treatment facility in the block, and debris and inert materials to the respective reuse/landfill sites will be contracted out to private operators. The organic portion could ideally be transported by the treatment facility operator so as to ensure synchronisation of his operation. In view of the land scarcity in mega cities, the landfill operation would continue to be conducted in the same fashion as prevailing at present.

### Monitoring

With the participation of the private sector, the job of the municipal corporation would become a lot easier. The only aspect of the system that it has to control is regular and daily monitoring of the contractors' work. With a view to make sure that the system is efficient, all the contracts with the private sector should be performance oriented.

### Advantages

From the foregoing, it is obvious that the decentralised system offers many benefits to the city administration. Some major advantages are cited below:

- Reduced load on the transport system as only 40 percent of the material has to be transported long distance.
- This will reduce fuel expenses almost 60 percent and improve the environment.
- The waste treatment projects being of smaller size will become more manageable, and result in better value creation.
- Increased life of the landfill as only a small portion of waste has to be disposed of.
- Income generation for NGOs and local groups, which could enable the organisation of ragpickers. The health standards for the hitherto uncovered segment could be improved.

### Applicability

Since this concept is modular it is applicable to any city of a population of around 400,000 or multiples thereof, as this corresponds to 150 TPD of mixed garbage per day (@ 0.4 kg solid waste generation per capita per day).

### Demonstration pilot project

The advantage with the decentralised approach is that it is modular in nature and can be easily implemented in stages. We therefore suggest that a demo project on a pilot basis can be taken up in one such block of Mumbai. Under the demo project, all the subsystems of MSW management could be tested and its performance will provide valuable learnings for citywide implementation. CRISIL Infrastructure Advisory will be glad to provide support to the local and state governments.

Source: *Indian Infrastructure, Volume 7, No.10, May 2005*

### **National Urban Renewal Mission**

*The demographic trends in the country indicate a rapid increase in urbanization. India needs urban facilities of satisfactory standards to cope with the challenges. If the cities are not renewed, they will die. The National Urban Renewal Mission is designed to meet this challenge. It will cover the seven-mega cities, all cities with a population of over a million, and some other towns.*

*The Mumbai Metro Rail Project, the Mumbai Trans Harbour Link, the Mumbai Western Expressway Sealink and the Bangalore Metro Rail Project are examples of projects, which could be supported through the mission.*

Source: *Transport Track, Vol. 5, No. 1*



## 1.5 NATIONAL ELECTRICITY POLICY

The year 2005 heralded the New Electricity Policy (NEP) aimed at making power available to all households in the next five years. Under the policy, by 2012 power will not only be available to all but also peak shortage will be eliminated. In February 2005, the National Electricity Policy (NEP) was declared. While the Electricity Act, 2003 was a vision paper providing an enabling framework for the sector; the NEP is aimed at turning that vision into a reality. It is intended to answer critical questions pertaining to the nuts and bolts and setting a clear agenda for the sector. It establishes priorities for all the stakeholders, most importantly, for the regulators who are actively seeking advice and direction.

### NEP - HIGHLIGHTS:

- Power for all by 2010
- Subsidized power for consumers below the poverty line
- Attract private participation in power sector
- Ensure greater competition in generation, transmission and distribution
- Increase the scope of Rural Electrification
- Increase per capita consumption to 1,00Kws per annum
- Captive power whether in public/private sector can be sold to local consumers.

Under the policy, the SERCs have another challenging deadline - to frame guidelines for open access in distribution by June 2005. The policy also directs the state regulators to establish transmission charges under open access by June 2005. Plus, all states have to install IT-based systems by June 2006. The NEP notes that the real challenge of reforms lies in an efficient distribution system. It states that adequate transition financing support is necessary for the utilities to undertake reforms. It asks the union government to assist the states in developing a clear roadmap for a turnaround and in arranging transition financing. The SERCs need to publish regulations for open access in distribution by June 2005. And open access must be provided January 2009.

The NEP encourages the development of competitive power markets that will provide alternatives to both generators and consumers. In the long run, such competitive markets would lead to reductions in tariffs and improvement in quality.

Source: *Indian Infrastructure, Volume 7, No.10, May 2005 and Transport Track, Vol. 5, No. 1, 2005*

## 1.6 NATIONAL CIVIL AVIATION'S POLICY INITIATIVES

The Union Cabinet has cleared a plan to develop a string of 80 major and minor airports with an investment of Rs. 40,000 crore over the next five years. Among the first beneficiaries will be the Delhi and Mumbai airports modernization and expansion and expansion work will commence by mid-2005. Work on Bangalore and Hyderabad Greenfield airports will begin simultaneously. Next in line will be the development of Chennai and Kolkata airports. It has also been decided to upgrade the Chennai airport on the lines of Delhi and Mumbai and build five more Greenfield airports at Goa, Navi Mumbai, Pune, Kanpur and Nagpur, which could be designated new international hubs.

Aware of the capacity constraints, the Ministry of Civil Aviation has allowed private carriers to fly international routes under its 'open sky policy'. Simultaneously it has also permitted the overseas airlines operating in India to increase the frequency of their inbound flights. Though this is disadvantageous for Air India, which cannot fully use its bilateral due to capacity constraints, the policy makers think that the private domestic private airlines would fill the gap. It is encouraging to note that both Sahara and Jet Airways are acquiring new generation fleet to fight competition and also profitably utilize the jettisoned International routes.

Source: *Transport Track, Vol. 5, No. 1*

## 1.7 'NAC' TO FOCUS ON PANCHAYATI RAJ EMPOWERMENT

After having given thrust towards ensuring greater allocation for social sectors in the Union budget, the National Advisory Council (NAC) wants to shift its focus to financial and administrative empowerment of Panchayati Raj Institutions in the country.

**Reforms needed:** The NAC members were of the opinion that while the 73<sup>rd</sup> and 74<sup>th</sup> Amendments empowered Panchayati Raj and Zila Parishads politically, there was a need to improve governance, put in place an efficient delivery system and carry out the much-needed reforms in the cooperative sector.

It was felt that the Constitution left the issue of degree of empowerment and devolution to the State





legislatures and in most States, local governments continued to be weak. The move was to examine the possibilities of Union intervention through constitutional, fiscal and procedural steps so that local governments could be empowered.

The view in the NAC was that administrative decentralization was yet to take place even though political decentralization had taken place in India over a decade ago. It was felt that financial decentralization was necessary to carry it forward.

One of the suggestions was to innovate delivery system by enlisting the support of non-government organizations. However, care would be taken to ensure that the politically oriented NGOs were kept out of it while effort should be made to encourage and associate work-oriented NGOs. For instance, the RGF Task Forces had recommended that a nation-wide information technology network be put in place for all panchayats. Similarly, the need for reforms in the cooperatives was also felt. The idea was to see how modern structures could be put in place and reduce political interference to the minimum.

*Source: The Hindu,, New Delhi Edition, March 9, 2005.*

## 1.8 NATIONAL MAPPING POLICY

The new National Mapping Policy okayed by the Union Cabinet on 19 May 2005 will revolutionise of mapping. Two series – Defence Series Maps for the forces and Open Series Maps for the citizens are on the anvil.

The Defence Series Maps (DSMs) would be for exclusive use of defence forces and authorised government departments. The Defence Ministry would determine the policy regarding the use of DSMs.

The Open Series Maps (OSMs) would be the responsibility of the Survey of India and Department of Science and Technology. Private Parties can reproduce the maps, though under a specific agreement with the Survey of India. Such partners may undertake independent surveys but the final products will have the certification of the Survey of India as an authentication of its trademark. Digital maps of physical features, resources, roads, bridges, dams, fauna and flora would be made available to the public.

Only 55 percent of India's land mass is covered by the present mapping system. It excludes border areas and coastal regions. The new digital mapping would be for the whole country except for some installations and locations linked to the country's security. But this would be a very small area.

The longitudinal and latitudinal components along with heights and troughs of the nation's mapping were going to revolutions house and road building, erecting fly overs, laying down railway tracks and setting up of dams. Using a digitally propelled computer, one can draw exact contours and specifications of all these dream projects.

*Source: Hindustan Times, New Delhi Edition, May 20, 2005.*

### ***Cartosat: Mapping the Country***

*India's first mapping satellite Cartosat-1 and Hamsat for enhancing communication for ham operators, were placed in polar orbit 18 minutes after PSLV-C6 lifted off on May 6, 2005 from Indian Space Research Organisation (ISRO). The satellite will mark a huge step for India in the domain of satellite mapping and remote sensing. Cartosat-1 can generate 2.5 metre resolution 3-D maps, meaning clear three-dimensional images of anything that is longer than 2.5 metres. That is, the satellite image can tell the viewer what car is parked in front of a house, but the resolution is not sharp enough yet to read the license plate from the stratosphere.*

*The estimated time period for the completion of mapping of the country would be 18 months. After which, the maps would be constantly updated. The data from Cartosat will be used for large-scale mapping and give inputs for rural and urban development, land and water resource management and disaster management.*

*Source: The Times of India, May 4, and Hindustan Times, Delhi Edition, May 6, 2005*





## 2. STATE INITIATIVES

### 2.1 SCHEMES FOR SLUMS DEVELOPMENT IN MADHYA PRADESH

The State Government of Madhya Pradesh has selected 258 urban slum areas under Ayodhya Basti Scheme. The scheme has been launched to ensure allround development in slum areas. Similarly, it has embarked upon the Gokul Gram Yojana to improve the conditions of the 51,000-odd villages of the State.

The scheme aims at providing better education, sanitation, health, drinking water, irrigation facilities, besides preserving the environment and ensuring efficient administration by putting to optimum use locally available resources in the village under the scheme. The scheme includes attending to five slum areas in each big city and one each in small city. Further, 2000 slums will be provided basic amenities in four years.

*Source: IIPA Newsletter, Vol. XLIX, No.5, May 2005.*

### 2.2 PANCHAYATS TO BE INVOLVED IN HEALTH PROGRAMMES IN HIMACHAL PRADESH

In Himachal Pradesh, to improve the effectiveness of the 13 health programmes being implemented by the State Government, the Department of Health and Family Welfare will involve members of Panchayati Raj Institution with focus on need based micro planning.

Being part of the proposed reform programme in the health sector, the Department will prepare information kits called 'PARIKAS' to educate the masses about health issues and the 13 programme being run by the government. The PARIKAS will be given to Panchayati Raj members; health workers and block medical officers who will further carry the message to the people.

In the first phase workshops and sensitization meetings will be held for Panchayati Raj members. It is with the help of the Panchayati Raj members that community mobilization will be done, as people will be informed about basic health issues like immunisation and sanitation. Another important aspect of this programme is to empower panchayats through devolution of power. Instead of involving policy-makers in chalking out

programmes for various regions, panchatyats will be asked to submit need-based programmes for a particular area.

It is being felt that giving need-based services and more importantly entrusting responsibility for smooth implementation, Panchayati Raj members will make the programme more effective and the health staff more accountable. The Health Department has started training Panchayati Raj members and information kits 'PARIKAS' are being printed.

*Source: IIPA Newsletter, Vol. XLIX, No.5, May 2005.*

### 2.3 INDUSTRIAL DEVELOPMENT AUTHORITY TO BE SET UP IN UTTAR PRADESH

The State Government of Uttar Pradesh has taken up policy decision to constitute an Industrial Infrastructure Development Authority to woo investment in the State.

An Industrial Infrastructure Development fund has been proposed in the State, which have been given on leasehold basis, are being converted into freehold for the benefit of entrepreneurs. The government has proposed to provide residential units in the industrial townships. The government has proposed to provide residential units in the industrial townships. The government would provide special concessions to industry in 29 districts of eastern UP and seven districts in Bundelkhand. The small and cottage industry would get a special grant of up to five percent interest on loans from the government.

For quality control and purchase of machines to augment production, there would be a separate grant of five percent. ISO and ISI certifications would get 50 percent of total cost from the government as grants.

The government has also proposed to set up UP Small Industries Rehabilitation Parishad. A rehabilitation fund has also been proposed. The proposed UP Small Industries Rehabilitation Parishad would come out with measures to revive sick units, which would help boost the economy of the State, provide employment to local youths and attract entrepreneurs.

*Source: IIPA Newsletter, Vol. XLIX, No.5, May 2005.*





## 2.4 HERITAGE LEGISLATION IN NCTD

In the year 2004, Municipal Corporation of Delhi (MCD) introduced the Unit Area Method (UAM) and demolition of unauthorized colonies with public support of Residents' Welfare Association (RWA), and thereby earned better revenue by way of property taxes. The MCD has now adopted a new motto for the year 2005: *My Progressive Delhi* in terms of public-private partnership, introduction of new building bylaws etc. An advertising blitz is proposed in collaboration with INTACH, ASI, DDA, NDMC and other heritage groups. The Delhi Government is thinking over to amend the *Delhi Plastic Act*, and usage of biodegradable bags to be made compulsory.

The Delhi High Court has asked the ASI to file a detailed report about 180 protected monuments in the Capital, along with steps taken to preserve them. This is as a result of a three year old PIL filed by Heritage and Culture Forum. Similar public demand for greater transparency will bring all State Departments of Archaeology under greater obligation to preserve "protected monuments" under ASI jurisdiction.

INTACH submitted a list of 26 heritage zones to the Delhi Development Authority (DDA) for drafting the Delhi Master Plan 2021. Conservation architect AGK Menon clarified that besides the 6 "heritage zones" (Central Vista that is Lutyens Bungalow Zone, Civil Lines adjoining the Ridge, Shahjahanbad, Sultangarhi, Mehrauli, and Nizamuddin area including the Humayun Tomb), a new concept of "archaeological parks" will be introduced in the Master Plan. These comprise essentially open spaces like the Mehrauli and Sultangarhi areas having historical ruins, monuments, havelis, temple complexes or architectural remains of importance. The cohesiveness of both monumental heritage and the

### **Cultural Industries Defined**

*Cultural Industries are defined as those industries which produce tangible or intangible artistic and creative outputs, and which have a potential for wealth creation and income generation through the exploitation of cultural assets and production of knowledge-based goods and services (both traditional and contemporary). What cultural industries have in common is that they all use creativity, cultural knowledge and intellectual property to produce services and products with social and cultural meaning.*

*Source: INTACH VIRASAT, Vol.1, No.3, Jan-March, 2005*

people's lifestyle would be taken into account before any indiscriminate development is permitted in this area.

*Source: INTACH VIRASAT, Vol.1, No.3, Jan-March, 2005*

## 3. CITY INITIATIVES

### 3.1 GIS HELPS DETERMINE WASTE DISPOSAL SITES FOR GUWAHATI

A recent study mapping the municipal solid waste (MSW), produced and dumped in Guwahati, the chaotic capital of Assam, has shown that its waste disposal system is getting choked and the city needs to quickly find a scientifically determined alternative to get out of the mess.

The study used geographic information systems (GIS) based modeling to find suitable alternatives for MSW disposal. Rajasmita Goswami and her fellow students of the Geology Department of Guwahati University used existing ward maps superimposed with LISS III satellite images combined with toposheets to create a base of information. Over this base they created several layers of information reflecting parameters such as hydrology, landuse, drainage and demography. The researchers then screened out sites that fell too close to roads, habitations or water bodies. The research found that all prominent dumpsites failed to meet the most basic standards for safe disposal. The study was able to delineate two new sites, each covering more than one sq. km. that matched all laid down criteria.

Spread over 230 sq km, Guwahati is home of 1.5 million people. It generates about 500 tonnes of waste daily, which is dumped indiscriminately in low-lying areas in an unsorted form. The garbage thus disposed has become a serious geo-environmental problem for the state capital. The frequent floods that the city is prone to worsen the problem. The study shows that the city itself has not done anything to manage the waste. With increasing urbanization the situation could get worse if the issue is not looked at scientifically.

*Source: Down to Earth, Vol. 13, No. 24, May 15, 2005.*

### 3.2 WETLANDS OF BHARATPUR

The crisis of Keoladeo Sanctuary, Bharatpur is a classic case of Man versus Nature. Wetlands like this one are like "kidneys of the landscape for they act as purifiers". For the





first time in the Park's history, a demonstration by local people and wildlife enthusiasts held up traffic for want of water, vital for both migratory birds and local communities. Farmers however must be made aware that a parched sanctuary leads to decline in water table, which in turn affects their sources of drinking water. Ecotourism strategies for wetlands need to address issues like alternative employment, and incentives to ensure that farmers skip a crop if necessary in times of drought.

Source: INTACH VIRASAT Vol.1 No.3 Jan-March 2005

### 3.3 CITY OF LAKES - UDAIPUR

The erstwhile rulers of Udaipur developed an interconnected chain of artificial lakes, diverting the overflow of one lake to another. They also made strict rules and regulation to keep these lakes clean and healthy. Udaipur came to be known as the city of lakes.

J. C. Dubey, a hydrologist who has worked with the Rajasthan government says that construction was not allowed in the upstream area and catchments of the lakes were fully protected. Lake water was not allowed even for drinking purposes; only bavdis (step wells) situated downstream were allowed to be used for drinking purposes. But after independence, the ownership of these lakes was transferred to the state irrigation department that allowed their use for irrigation and drinking purposes. In 1985,

#### **Mahila Mandals Strike Again!**

The Mahila Mandal recently overcame a fraudulent scheme by refusing to be intimidated and taking their case to the officials. Each family in the Kanak Durga and Dr Ambedkar slums had been asked to pay 400 rupees with the promise that they would be given plots of land in future. This had happened previously in 1990 when residents had paid 135 rupees with the same promise but with no results fourteen years on. Many families presumed the scheme was genuine and paid the vast sum, equivalent to a week's wages. However, women from the Mahila Mandals questioned the authenticity of the schemes. They met to discuss whether or not they should support it. Together they concluded that they must take their case to the Slum Federation. The federation then approached the leader of the scheme who claimed authority from the Chief Minister of Delhi. On meeting with the Chief Minister, the women discovered that no such authority had been given and a complaint was made to the Economic Offence Wing. The women's vigilance and determination paid off and after being referred to the local District Commissioner of Police, a statement was made and the illegal scheme was brought to an abrupt halt.

Source: NEWS for friends of Asha, Issue 26, April 2005.

when the water of these lakes was banned for agriculture, the irrigation department lost interest in maintaining them. Now, 13 government departments use these lakes, and they are in a bad shape. In 1999, the state government created a Jheel Samvardhan and Jheel Vikas Society to manage the lakes.

Source: Down to Earth, Vol. 14, No. 1, May 31, 2005.

### 3.4 CABLE-STAYED BRIDGE ON YAMUNA

Delhi is set get an architectural landmark, with the state government clearing the design for the Capital's first cable-stayed bridge over the Yamuna in Wazirabad. The tourism department plans to finish the project in 30 months, subject to clearance from the Yamuna Committee and the Urban Arts Commission.

The design was shown to STOI in a presentation. Hanging from cables tucked into two towers in the centre, the bridge will be built 600 metres away from the existing barrage. It will have eight lanes, two cycle tracks and footpaths on both sides. The 150 m high twin towers will have bubble lifts looking into the river. The cables attached to the two towers will be in the centre of the roadway thereby giving commuters an unobstructed view of the river.

Source: The Times of India, New Delhi Edition, February 13, 2005

### 3.5 GREEN COVER IS GOING UP IN DELHI

The Capital is clean, beautiful and now a lot greener. High-tech forest surveys have revealed that Delhi's forest cover has increased by over 100 sq. km (66% increase) in two years from 2001-2003. The forest survey was done with the help of aerial photographs and mapping through satellites. Delhi's green cover has increased from 151 sq. km. in 2001 to 250 sq. km in 2004.

The environment department officials said that over 20 lakh saplings were planted in the years 2001-03. Of them, the average success rate had been about 60 percent. In dry areas like northeast part of west Delhi, the success rate has not been very high.

Following protest by farmers, Delhi government has banned plantation of eucalyptus trees in Delhi. It has also asked the Centre to amend the Forest Act to allow cutting of the trees. A large number of farmers have complained that land close to eucalyptus plantation has





### Why Do we Need Green Cities?

- More than one million people are moving to cities every week.
- Nearly 60 percent of world's population will live in cities by 2030.
- Cities consume 75 percent of the planet's natural resources.
- Cities discharge 75 percent of the waste.
- Poor Air Quality: Approximately 2 million children under five, die each year from acute respiratory infections.
- Unsafe water and poor sanitation: results in – poor environmental health and outbreak of epidemic.

Source: Hindustan Times, New Delhi Edition, May 5, 2005.

turned barren.

**Citywise greenery: Delhi: 14%, Mumbai 8%, Bangalore: 11% and London: 7%**

However, Delhi has lost its buffer zone drastically due to rapid development in satellite towns. A study United Nation Environment Programme (UNEP) on June 5, 2005 shows that “the loss of buffer zone in the western part of Delhi is showing its adverse effect during summers when hot winds from Rajasthan blow. The buffer checks the flow of wind to some extent. But now the winds hit the capital, and it results in sudden changes in weather.”

Source: Hindustan Times, Delhi Edition, May 18 and June 15, 2005.

### 3.6 HYDERABAD RING ROAD

The Hyderabad Urban Development Authority has announced a Rs.15 billion outer ring road project in Hyderabad. Work is expected to begin on August 15, 2005 and to be completed in three years. The road will have eight lanes and two service lanes. There will also be provision for a two-track railway line on the 159 km road. The ring road will have access control and be kept free of shops and other activities to ensure free traffic flows.

Source: Indian Infrastructure, Volume 7, No.10, May 2005

### 3.7 GROWING POWER NEED

The Delhi government is taking various measures to meet growing power needs. It has decided to explore the possibility of setting up a 1,000 MW gas-based unit at the Indraprastha power station. The chief minister has decided to speed up the 300 MW Pragati II unit at

Bawana and upgrade the Rajghat plant. Though the state government is ready to purchase power externally, it expressed concern over the growing dependence on external power sources. The government has also cleared the extension of the bilateral agreement with the Nathpa-Jhakri project to provide 150 MW till July,

Source: Indian Infrastructure, Volume 7, No.10, May 2005

## 4. NEWS IN BRIEF

### 4.1 MASONIC GRANDEUR

The majestic Chhatrapati Shivaji Terminus at Mumbai has found a place on the World Heritage List. According to the book Indian Railways Architectural Heritage by historian K.K. Khullar, of the nearly 7000 railway stations in the country, there are at least 40 which qualify for heritage building status because of their exquisite architecture. He mentions stations like Howrah, Sealdah, Chennai, Lucknow and even smaller stations like Churchgate, Byculla, Egmore, Solan, Shimla and Darjeeling among others that qualify. It is true that some Indians in the colonial days viewed railways as the “devil’s workshop”. Mahatma Gandhi however saw in it a great integrating role – even though some stations were described as a “sparrow’s nest” or “cow’s shed” because they were so small!

Source: INTACH VIRASAT, Vol.1, No.3, Jan-March, 2005

### 4.2 GREEN ARCHITECTURE

Green Architecture is an ecological concept that stresses coexistence of architecture and the environment, thereby saving around 25 percent of energy consumption, explains noted architect Abhymanu Dalal. Most designers think the use of more glass translates into more natural light. On the contrary it leads to glare on computer screens and defeats the whole purpose. An innovative way is to use ‘light shelves’. Architecture is at the crossroads today with focus on ambience of workplace or home that promotes social interaction – with better light, air, sound quality and ergonomics.

Source: INTACH VIRASAT, Vol.1, No.3, Jan-March, 2005.





### 4.3 POWER SUPPLY TO NATIONAL GRID

The power ministry is planning to tap captive generation to augment power supply to the national grid. The Central Electricity Authority (CEA) has estimated that about 41,000 MW of power can be added to the grid by tapping unutilised captive capacity. This is aimed at ensuring that captive plants maintain a certain level of capacity utilisation. This would ensure that coal linkages provided to plants are fully utilised and surplus power is supplied to the grid. This ministry has identified 19 plants with capacities of over 100 MW each and 27 plants with capacities between 50 MW and 100 MW, from which it hopes to draw surplus power.

*Source: Indian Infrastructure, Volume 7, No.10, May 2005*

### 4.4 RE-USE OF FURNITURE WASTE

Faced with tonnes of waste material from furniture manufacture, Moratuwa, on Colombo's southern outskirts, has come up with a unique solution. Municipal authorities have returned the problem to source, asking furniture companies themselves to develop a product using wood waste.

Moratuwa is home to Sri Lanka's best carpenters, with 4,000 furniture shops and timber merchants. And everyday, 20 tonnes of wood waste is dumped. With no dumping ground and transporting elsewhere too expensive an option, the waste is dumped anywhere – even thrown into the nearby ocean.

The furniture companies have welcomed the initiative and are keen to participate. Special machines, imported from Germany, sort and clean different sizes of waste. After the chipboard is made and then laminated for water-proofing, it's ready to be turned into any sort of furniture. Waste collectors are going around town and pick up waste wood at Rs.5 (five US cents) a bag, about 30 kilogrammes per bag. The factory now hopes to make 400 boards (4 feet x 8 feet) per day recycling 15 tonnes of waste wood.

Malindu is the first furniture-maker in Sri Lanka to manufacture chipboard using discarded wood chips, particles and wood dust. As a rule, chipboards are mostly imported from India, Indonesia and Malaysia. But with the new municipal initiative, it is likely that the local demand of 4,000 boards per day would be met locally.

*Source: Down to Earth, Vol. 14, No. 2, June 15, 2005*

## 5. BOOK REVIEW

### 5.1 WATER: RESOURCE AUGMENTATION, MANAGEMENT AND POLICIES

*Author: H. Sarvothaman*

*Asiatech, New Delhi 2004*

This book traverses a range of water related issues, from climate, rainfall and geomorphology to surface water and groundwater potential. H. Sarvothaman, expert in remote sensing technology in studies of water resources, and an avid trekker in the Himalayas, talks of glacial water resources of India, about how global warming affects the Himalayan glaciers and the climatic changes that cause droughts.

Shri Sarvothaman's proposed solutions for water resource management in arid regions and in draught control are common knowledge. These include surface runoff management, watershed linked rainwater management, management of locating water-bearing features, groundwater recharging and rainwater harvesting (RHW). But he also stresses the need to augment water resources through alternate ways like using desalination and wastewater treatment techniques, or catching rooftop rainwater in urban areas for improvement in local water levels.

The author does advocate, through, returning to sustainable agriculture instead of a continued exploitation of groundwater. Techniques like precision farming, using the Global Positioning System (GPS), fitted in a tractor linked to satellite, are also arrangements to provide information directly to farmers about the availability and need of water and soil nutrients.

The author finds big dams the ideal solution reviled by "ill informed but power-ful groups of the so called human activists". Nuclear power should run desalination and wastewater treatment, despite "resistance from ill-informed, biased environmentalists, general public and lop-sided propadganda in the media". Such simplistic answers permeate the book until it meanders to its weary end.

*Source: Down to Earth, Vol. 13, No. 24, May 15, 2005.*





## 6. FORTHCOMING EVENTS

- **XXII World Congress of the International Union of Architects (UIA) on Cities: Grand Bazaar of Architecture**  
Istanbul, Turkey  
3-7 July 2005  
For details visit:  
Website: [www.uia2005istanbul.org](http://www.uia2005istanbul.org)
- **International Workshop on Housing the Poor through the Private Sector**  
Bangkok, Thailand  
11-14 July 2005  
Organised by the Thai Appraisal Foundation and Thai Real Estate Business School  
For details contact:  
E-mail: [info@thaiappraisal.org](mailto:info@thaiappraisal.org)
- **The International Exhibition on: Infrastructure Facility Development in China**  
Sanghai, China,  
13-16 July, 2005  
Organised by ORBIT Tours & Trade Fairs Private Limited.  
For Details contact: Shri Neeraj Singh Dev, Head Sales and Marketing – Business Tours, ORBIT,  
E-mail: [born@orbit-world.com](mailto:born@orbit-world.com),  
Website: [www.orbit-world.com](http://www.orbit-world.com).
- **Three day CEP course on Urban Drainage Management – State of the Art**  
IIT, Mumbai  
18-20 July 2005  
Organized by IIT, Bombay  
For details visit: [www.iitb.ac.in/~cep/](http://www.iitb.ac.in/~cep/)
- **Short term course on “Earthquake Resistant Structures for Architecture”**  
Indian Institute of Technology, Roorkee  
8<sup>th</sup> to 12<sup>th</sup> August, 2005  
For further details contact: Prof R. Shankar, Professor and Head  
Department of Architecture and Planning, Roorkee  
Email: [shardfap@iitr.ernet.in](mailto:shardfap@iitr.ernet.in)
- **1<sup>st</sup> Brazilian – Portuguese Conference on Urban, Regional, Integrated and Sustainable Planning**  
Sao Carlos, Brazil,  
28-30 September 2005  
For details visit:  
[www.civil.umhinho.pr/planning/pluris.him](http://www.civil.umhinho.pr/planning/pluris.him)
- **The IAPEX 2005 on Architecture: Regional Identities in a Global Environment.**  
Karachi, Pakistan  
30 September - 2 October, 2005  
For details contact:  
E-mail: [iopex\\_conference@iap.com.pk](mailto:iopex_conference@iap.com.pk)
- **ISoCaRP Congress on Spaces for the Creative Economy**  
Bilbao, Spain  
17-20 October 2005  
For details visit: [www.isocarp.org](http://www.isocarp.org)
- **8<sup>th</sup> National Convention on “Development of Physical Infrastructure – Synergic Approach”**  
20-22 October 2005  
India Habitat Centre, New Delhi.  
Organised by: Construction Industry Development Council  
For details contact: Rajeev Jain  
Tel.: 91-11-26433709, 26489992  
Website: [www.cidcindia.net/](http://www.cidcindia.net/) [www.cidc.in](http://www.cidc.in)
- **XII International Rainwater Catchment Systems Conference**  
Vigyan Bhawan, New Delhi  
15-18 November 2005  
Organised by: Action for Food Production (AFPRO),  
For details visit:  
Website: [www.ircsa2005.org](http://www.ircsa2005.org)





## FACTSHEET

### ON FRESH WATER

The Tata Institute of Social Sciences (TISS), Mumbai, completed in March 2005 a household survey in seven Indian cities: Delhi, Kanpur, Ahmedabad, Kolkata, Hyderabad and Madurai. The objective was to understand how households consume water, and find the proportion of water-deficient households. The scope: all water-consuming activities – drinking, cooking, bathing, use in toilets, washing clothes and utensils.

- The study shows average per capita consumption is 91.6 literes, well below the standard, for India, of 135 liters per capita per day (lpcd). Delhi consumes only 78 lpcd (but the Delhi Jal Board, the city's supply agency, claims they supply on an average, 211 lpcd).
- Domestic per capita consumption in major cities worldwide is more than 130 lpcd. In Kolkata, this is about 115.6 lpcd, other cities uses far less per capita.
- Going by the Indian standard of 135 lpcd, 65 percent of Indian cities are water deficient. Only 35 percent of people are provided enough water. In Kanpur 75 percent of households are water-deficient; in Delhi 73 percent. Kolkata scores better, only 47 percent of households are water deficient
- Households with income below Rs. 3,000 per month suffer a lot. 72 percent of such households in all cities are water-deficient.
- Among water-consuming activities in each household, the main water-guzzlers are bathing and washing clothes. In an Indian household only 7 percent of the water a household consumes is used for drinking and cooking. The same freshwater is used for the rest of the (non-potable) activities.
- Water wastage is highest in washing clothes (82 percent), followed by bathing (52 percent) and washing utensils (49 percent). Households in Kolkata waste more water. 51percent of all water utilized is for bathing and washing clothes.
- The TISS survey recommends avoiding water wastage by using buckets for a bath, instead of showers, using good quality detergents to wash clothes shaves a lot of freshwater.

### ON POWER

- Electricity generation grew by almost 55 per cent over the past decade to over 587 billion units during 2004-05. The share of thermal generation has increased steadily to almost 83 per cent while the share of hydel has declined.
- State utilities account for almost 55 per cent of the total installed capacity in the country. Central generators account for about 36 per cent, IPPs account for about 5 per cent and private utilities account for about 3 per cent.
- In terms of fuel mix, thermal plants account for about 71 per cent of the total installed capacity while hydel plants constitute 27 per cent and nuclear accounts for about 2 per cent.

Source: *Down to Earth*, Vol. 13, No. 24, May 15, 2005 and *Indian Infrastructure*, Vol. 7, No.10, May 2005



## GUEST HOUSE AND CONFERENCE FACILITIES

AMDA has a Guest House in its building at 7/6, Sirifort Institutional Area, August Kranti Marg, New Delhi 49. The basic aim of running the guest house is to provide accommodation facilities to the officers of Member organizations who visit Delhi. The Guest House has 10 Air-Conditioned rooms i.e. 3 single bedded, 5 double bedded, 1 tripple bedded and 1 four bedded. All the rooms have attached bathrooms with 24 hour hot/cold water supply. There is one common sitting/dinning lobby where a Colour T.V. has been provided. The Guest House also has one Kitchenette to provide bed tea/ coffee to the occupants. Break-fast / lunch / dinner can be arranged on request. Good quality restaurants are situated at 5-minute walkable distance. The **REVISED TARIFF** for the Guest Rooms (w.e.f. April 1. 2003), is as under :-

S. No.	Category	Charges for rooms for each 24 hours or part thereof			
		Room with Single Bed	Room with Double Bed	Room with Three Beds	Room with Four Beds
A	Guests not on duty	500	700	800	900
B	Guests on duty from member Authorities and from ASRTU.	250	350	400	450

1. For Category B, a letter of authority for room allotment from the member organisation is required.

AMDA also has a Conference Room with a seating capacity of 25. The Conference Room is compact and provided with Overhead Projector and Slide Projector. It also has a dining lobby with small Kitchenette to serve lunch / tea / coffee etc. to the users of the Conference room. The tariff for Conference room is as under:-

- |                                       |   |                     |
|---------------------------------------|---|---------------------|
| 1. Full Day                           | : | Rs. 1200/- per day* |
| 2. Half Day (pre lunch or post lunch) | : | Rs. 800/-           |
| 3. For Members and ASRTU              | : | 50% of above rates  |

\*Sunday and holidays 15% extra.

For booking of the above Guest House and Conference Room facilities, requisition can be sent to Shri S.R.Kashyap, Administrative Officer at AMDA office.

## CURRENT PUBLICATIONS OF AMDA

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|---|---------------|
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Interested Organisations/Individuals/Professionals who wish to purchase publication(s) may send the Demand Draft drawn in favour of "Association of Urban Management and Development Authorities" adding postage charges of Rs.50/- inland and US\$ 12 for overseas per report to the Director at :



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