Town Planning at Crossroads: Crisis in Urban Development and Governance

URBAN CRISIS

Over the years, the quality of life in cities all over India has deteriorated. Urban India is faced with master plan violations, congestions, cramming of residential layouts in unauthorized and unplanned areas, and crumbling or inadequate infrastructure delivery systems, resulting in degradation of sanitary and environmental conditions. The stark reality is that the development authority and para-statal agency model adopted in the country for master plan preparation, implementation and enforcement have failed to achieve their objectives. Serious doubts are now being raised in various quarters about the efficacy of the current town planning and urban governance practices. Many see these practices themselves as the main culprit responsible for the current urban crisis, and feel that our town planning process is at the crossroads.

Over the last three decades, there has been a modest pace of urbanization in the country. A significant feature of this urbanization is the increase in Urban Agglomerations (UAs) comprising continuous urban spread of towns and adjoining outgrowths.

A session in progress at the Seminar

THE WHITE PAPER

With a view to deliberating this important issue, a group of veteran development professionals, assembled by STEM, in early 2007, brought out a ***White Paper*** entitled *Town Planning at Crossroads: Crisis in Urban Development and Governance?*. This document was an attempt at thinking aloud on the subject, drawing lessons from the urban development approaches adopted by four cities – Bangalore, Chennai, Delhi & Coimbatore.

According to the White Paper, over the last three decades, there has been a modest pace of urbanization in the country. A significant feature of this urbanization is the increase in Urban Agglomerations (UAs) comprising continuous urban spread of towns and adjoining outgrowths. Most metropolitan cities are multi-municipal consisting of Municipal Corporations, Municipalities and other notified towns. Analysis of proportion of population in core (main Municipal Corporation) areas and peripheral areas in the four cities, namely Banglaore, Chennai, Delhi & Coimbatore, provides a significant insight into the growth of their spatial patterns.

The manifestation of urban growth along the periphery of UAs is thus the critical component for spatial expansion and, thereby, for spatial planning.

On the one hand, urban planners have the option to follow the Development Authority Model, which is not in sync with the demand-driven, competitive, market-oriented approaches of the present era of economic liberalization. On the other, they can choose the route of decentralization and devolution of powers, as envisaged by the 74th Constitution Amendment Act, which vests the responsibility of preparation, enforcement & implementation of urban development plans with the ULBs.

However, urbanization policies at the national level are still influenced by the perception that it is rural distress that is causing exodus to urban areas.

Factors Impacting Master Plan Approach

According to the White Paper, there are some factors impacting the Master Plan Approach in urban development in the country. These are:

- Lack of co-ordination between Urban Development Authorities (UDAs) and parastatal agencies, often leading to violations of Zonal Plans and Development Control Rules (DCRs), and culminating in unauthorized developments, mixed land use and further congestion;
- Plan violations and changes in planning percepts leading to flouting of building byelaws & DCRs and misuse of premises in core municipal areas;
- Want of specific provisions for housing for the poor leading to mushrooming of squatter settlements and unauthorized slum colonies;
- Constraints on urban mobility and transportation management on account of the proliferation of unauthorised settlements & private vehicles and the relatively high cost of Mass Rapid Transport System (MRTS);
- Impact on spatial aspects thanks to densification of core areas as also population increase and manifestation of economic change in UAs;
- Corruption, inequity or indifference in urban governance inviting judicial interventions for planned development; and
- The 74th Constitutional Amendment Act, the consequent devolution of powers, and the new roles being assigned to Metropolitan Planning Committees (MPCs), District Planning Committees (DPCs) & ULBs.

Some time ago, on behalf of the Ministry of Urban Development, STEM had carried out a study of the master plan process and its implementation, in the states of Karnataka, Madhya Pradesh, Rajasthan & West Bengal. The study found that the process was perceived more as a *development control mechanism* and not as a *tool for resource generation & socio-economic development*. The study also identified the *absence of a co-ordinated mechanism for implementation* as the major cause of the inefficacy of the process.

Citing the above findings, the White Paper observes that Town Planning in India is at the crossroads. On the one hand, urban planners have the option to follow the Development Authority Model, which is not in sync with the

demand-driven, competitive, market-oriented approaches of the present era of economic liberalization. On the other, they can choose the route of decentralization and devolution of powers, as envisaged by the 74th Constitution Amendment Act, which vests the responsibility of preparation, enforcement & implementation of urban development plans with the ULBs. One crucial point is that, in case our planners go in for the second alternative, it is imperative that they first capacitate the ULBs in the various aspects of development planning - technical, financial, social and environmental.

The White Paper points out that the correlation between Urban Governance and Urban Development should also be clearly understood. The paper goes on to emphasise that, if Urban Governance is to provide sustainable city development and good living conditions, it has to relate itself mainly to three significant aspects: (i) Town Planning, (ii) Town Development, and (iii) Town Governance, as illustrated in the *figure* on page 4.

Municipalities need to mobilize funds for project consultancy, monitoring & planning and training. Sources for such funding have to be identified so that systems could be improved and mindsets could be changed.

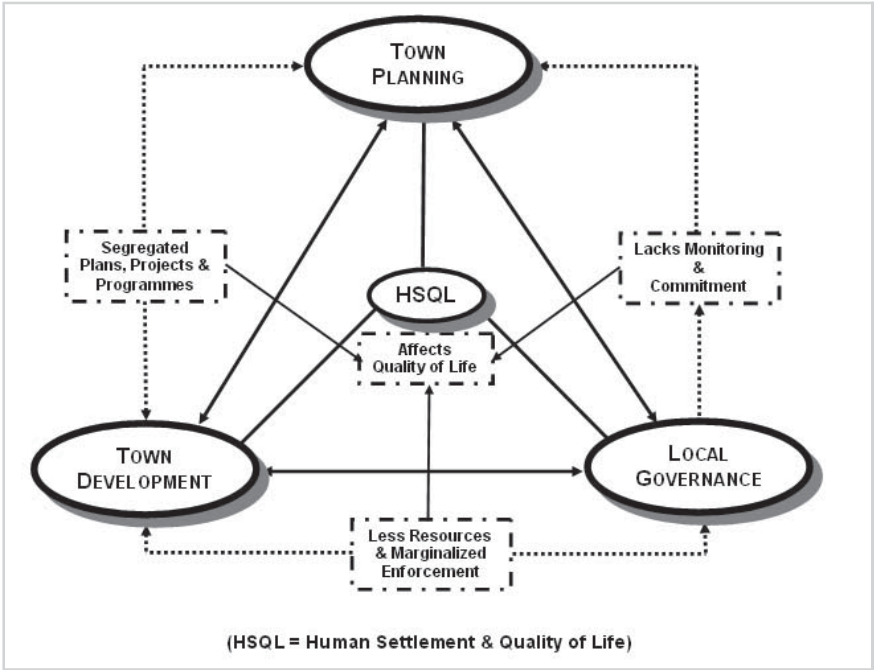
THE SEMINAR

The White Paper was adopted as the theme document for a Seminar, ***South Meet on Town Planning***, held at Bangalore, on September 22, 2007. The seminar discussed key aspects such as the impact of Town & Country Planning on regional and urban development over the past 50 years; social equity and ecological balance in the context of town planning; periodic reviews of master plans to facilitate a healthy response to the new demands of economic liberalization; impact of decentralization on the town planning process; future of urban governance in the face of the failure of development authority and parastatal agency models; and the new roles for the stakeholders in the town planning and urban governance processes, namely, the planners, the bureaucracy, the polity and the public. The event was jointly organized by STEM, Bangalore Metropolitan Region Development Authority (BMRDA), Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC), Karnataka State Planning Board (KSTPB) & Bangalore Development Authority (BDA).

Table 1: Percentage of UA Population in Core and Pripheral Areas of Selected Cities

City	2001		1991		1981		1971	
	Core	Periphery	Core	Periphery	Core	Periphery	Core	Periphery
Bangalore	75.4	24.6	64.4	35.6	84.8	15.2	92.6	7.4
Chennai	66.2	33.8	70.8	28.4	76.4	22.8	81.2	18.0
Delhi	76.7	22.3	85.6	13.3	87.8	10.7	90.2	8.3
Coimbatore	63.7	36.3	74.2	25.8	76.5	23.5	76.8	23.2

Source: Census of India 2001, Series..1, Final population totals.

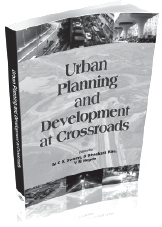


If Urban Governance is to provide sustainable city development and good living conditions, it has to relate itself mainly to three significant aspects: (i) Town Planning, (ii) Town Development, and (iii) Town Governance.

Mr Suresh Kumar, Minister for Urban Development, Govt of Karnataka, hands over copy of *Urban Development at Crossroads* to Dr H. P. Kincha, Vice Chancellor, VTU. Looking on are Mr V. M. Hegde, Adviser, STEM and one of the authors of the book, and Prof. S. Nagendra, Dean (Programmes), MINDS

THE BOOK

Drawing mainly on the theme paper and the issues and recommendations that came up during the Seminar, STEM brought out a book entitled *Urban Planning and Development at Crossroads*. The book, published by Books for Change, a Bangalore-based development publisher, was released at a special function organized at MINDS on October 31, 2008. In conjunction with the book release, a panel discussion on the theme **Growth and Development of Bangalore: Experiences & Expectations** was organized. The panelists included Dr A. Ravindra, IAS (Retd.); Ms Madhura M. Chatrapathy, Trustee-Director, ASCENT; Dr. S. Satish, Sr. Social Development Officer, The World Bank; and Mr Muralidhar, President, FKCCI.



URBAN PLANNING AND DEVELOPMENT AT CROSSROADS

Edited by

M. C. K. Swamy, B. Bhaskara Rao & V. M. Hegde

ISBN 978-81-8291-062-1, Price: Rs.250.00

Published by

BOOKS for CHANGE

www.booksforchange.net

Experiences in Sanitation & Hygiene Promotion

by **Deepanjali Bhas***

India suffers from a huge sanitation related disease burden with 30 million persons in rural India suffering from sanitation-related diseases accounting for high mortality and an estimated annual loss in productivity of 120 million man days. Experiences in Sanitation and Hygiene Promotion (SHP) from rural Karnataka show how communities were motivated towards behavioural change.

BACKGROUND

In most villages in India, you would be hard pressed to find a household toilet. With a dismal 22 per cent houses having individual household latrines (HHLs) in rural India, as per Census 2001, and poor hygiene practices, the sanitation-related disease burden is high. On an average, 30 million persons in rural India suffer from sanitation-related disease, 5 of the top 10 diseases among children under 4 years are related to water and sanitation and 0.7 million children die of diarrhoea annually[1].

Though government estimates put the current figure of rural household latrine coverage at close to 45 per cent, this is an official estimate, and sector experts maintain that many toilets are built and not used as toilets, but instead as storage sheds or attractive structures for display.

Lack of safe, sustainable drinking water supply and sanitation facilities contributes to a very high incidence of morbidity and mortality. This, in turn, translates into less productivity among farmers and an estimated loss in 120 million man days annually due to sanitation related diseases[2].

Experiences from a project in Karnataka (November 2002-March 2005) highlighted the challenges in promotion of sanitation and hygiene among rural communities, and the importance of community participation.

JAL NIRMAL PROJECT

Karnataka, despite its high industrialization levels, has one of the lowest sanitation coverage among the states in India, at around 22 per cent. The World Bank-assisted Second Karnataka Rural Water Supply & Sanitation Project, the "Jal Nirmal Project," that took off in November 2002, had Sanitation and Hygiene Promotion (SHP) as a major sub-component under the main component of Community Development at Gram Panchayat (GP) level. SHP was implemented in 1,400 villages of 11 contiguous districts in North Karnataka (Bagalkot, Belgaum, Bidar, Bijapur, Dharwad, Gadag, Gulbarga, Haveri, Koppal, Raichur and Uttara Kannada).

*Deepanjali Bhas was IEC Specialist in the Sanitation & Hygiene Promotion (SHP) Management Consultancy undertaken by STEM, for Jal Nirmal, the second World Bank-assisted Rural Water Supply and Sanitation Project in Karnataka. The consultancy was executed on behalf of the Karnataka Rural Water Supply and Sanitation Agency (KRWSSA), between November 2002 and March 2005.

[1] Central Bureau of Health Intelligence, Ministry of Health and Family Welfare, 1998-99 (from *Total Sanitation Campaign for All - 2012*)

[2] *Ibid*

SHP COMPONENT

The SHP component envisaged a focus on promoting behavioural changes among the project communities to prevent water and sanitation-related morbidity.

- Daily routine activities like collection, storage and handling of water, relieving oneself, handwashing before eating and after ablution as well as proper disposal of household solid and liquid waste were crucial in this regard.
- The short-tem objective of SHP was to capacitate the community, especially women, to start analyzing the health and sanitation situation in terms of three distinct elements: personal hygiene, household hygiene and community environmental sanitation.
- The long-term objective of SHP was to promote a 'Total Health' perspective to achieve sustainable and equitable health and hygiene benefits across the community through improvement in water and environmental sanitation services.

In the light of decentralization post-1993 with the 73rd Constitutional Amendment Act, the realization grew that supply driven programmes as was previously the norm, could not ensure sustainable results. Hence community participation began to be seen as critical to progress at the grassroot level.

At a micro-level, the SHP experience showed that it is only sustained effort that can yield results, and that community ownership of a project is crucial. The human resource effort on the field in SHP was focused and sustained, continuously trying new ways to get more community members to get involved.

SHP ACTIVITIES

The start-up phase of the project involved baseline studies, participatory healthy home surveys, training and capacity building of stakeholders.

Participatory Healthy Home Survey

The Participatory Healthy Home Survey (PHHS) is a PRA-based participatory assessment approach involving the active participation of the resident community in assessing their health and hygiene status. This was carried out in the Planning Phase between June and October 2003 in which over 58,000 households participated.

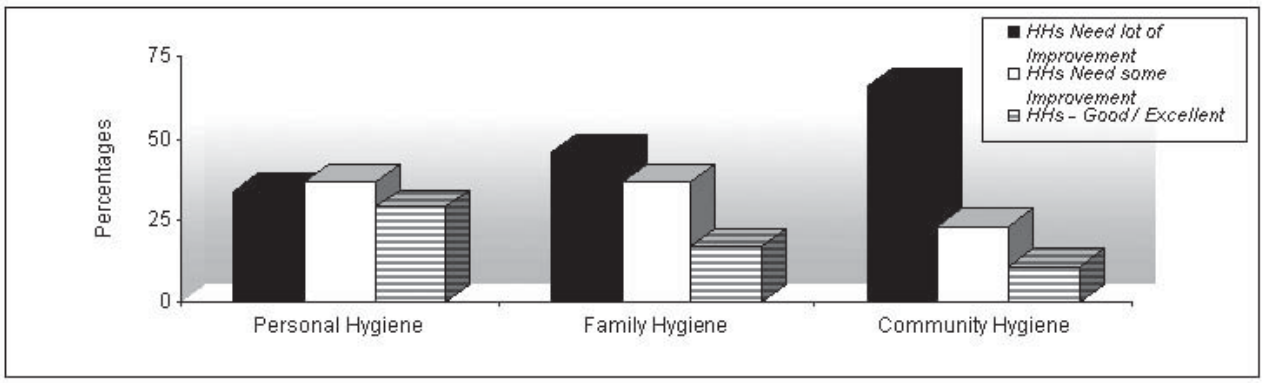
Key Attributes

- *Personal Hygiene* - Washing hands with soap after defecation and before eating, bathing and brushing teeth
- *Family Hygiene* - Cleaning the house & kitchen daily, keeping cooked food covered, keeping the premises of the house clean and using latrines
- *Community Sanitation* - Keeping the water collection points clean, having a proper drainage system and using latrines for defecation.

Salient Findings

- Most of the households across all districts were in the "need lot of improvement" category for all the three attributes, i.e. Personal Hygiene, Family Hygiene and Community Sanitation.

- In the Community Sanitation category 89 per cent of the households needed improvement as against 83 per cent in Family Hygiene and 71 per cent in the Personal Hygiene category.
- Gulbarga district had the maximum number of households "Needing lot of improvement" in the three categories of Personal Hygiene, Family Hygiene and Community Sanitation, followed by Bijapur, Gadag and Belgaum.
- Uttara Kannada district was ahead of all other districts in all the three categories of Personal Hygiene, Family Hygiene and Community Sanitation with only Bagalkot not far behind.



Summary of PHHS Exercise

Knowledge, Attitude & Practice Study (KAP)

The KAP Study was undertaken during the planning phase to assess the level of knowledge, the attitudes and the extent of practice by the user community on various parameters like project components, sanitation & hygiene habits, etc.

- About 70 per cent of the respondents were aware that cholera, diarrhoea / gastroenteritis, typhoid, jaundice and malaria are water and sanitation related diseases. However, the awareness of fluorosis as a water-related disease was only a mere 28 per cent.
- About 57 per cent of the respondents were aware that hands should be washed with soap after defecation to prevent diseases but only 38 per cent were practising the same.
- Though more than 60 per cent of the respondents were aware of the advantages of latrines, only 35 per cent of them used latrines for defecation. Open-air defecation was still very rampant in the project districts.
- The awareness on personal hygiene practices was quite good and about 64 per cent women took a daily bath.
- The practice of disposing children's faeces in the open was quite popular with more than 40 per cent of the respondents following this unsafe practice.
- About 37 per cent men and 35 per cent women used footwear while going out of the house.

The findings from both studies and health check-up camp data was used to analyse the health, hygiene and sanitation situation before

project interventions. The data showed that though there was a good awareness among the target group on the various components of hygiene and sanitation, the same was not reflected in the practices being followed.

SHP TOOLS

Sanitation programmes usually focus on promoting the construction of HHLs, with little attention paid to its post-construction status, but SHP focused on promoting the usage of toilets and hygiene practices - personal as well as safe disposal of child excreta.

Owing to the strongly ingrained practice of open defecation, there was strong resistance at the community level, to begin with. This resistance as a factor, could not be brushed away but had to be strongly addressed and then the emphasis on promoting toilet usage, though a slow process, began to show results.

In order to build the Total Health perspective, creating demand for sanitation facilities and promoting their use as well as daily hygiene practices is vital. Indoor air pollution in households due to smoke from burning wood for cooking was identified as a contributing factor to various respiratory illnesses. The use of Smokeless Chulhas (SLCs) was also promoted in the community.

Concerted efforts in SHP were initiated at the village level through the following tools:

- More than 2000 **Capacity Building programmes** for various stakeholders - GP members, masons, folk artistes, community members, NGO personnel, etc - were held.
- Anganwadi workers were appointed as **Village Health Functionaries (VHFs)** to leverage on the personal rapport they had with households
- **Village Water Supply and Sanitation Committee meetings** on SHP were conducted to increase awareness and emphasise their participation in project implementation. Nearly 16,500 such meetings were held in the project period.
- **Orientation programmes** were conducted for Community based Organisations (CBOs) so that they could be more involved
- **Mothers'/Women's group meetings** were emphasized since women are primary movers of change. Over 45,000 such meetings were held.
- **Health check-up camps** were organized with the support of local doctors to disseminate SHP messages. Fortyfour such camps were held.
- **School Sanitation & Hygiene Education (SSHE)** was carried out, covering the children with access to sanitation facilities right from an early age to motivate them, as children are seen as key behavioural change agents
- Special campaigns like **Summer Camps** were organized to boost youth participation. *Saptahas*, with week-long activities co-inciding with important dates, involved school children.
- Over 4,200 *shramadanas* and village cleaning drives were organized at regular intervals to create a sense of ownership of the project by the community

- **IEC materials** that were context-specific were used extensively. These included wall paintings, folders, book labels, tele-films and audio cassettes.
- **Rural Sanitary Marts** that distributed necessary sanitary material, were established in 28 project villages in order to strengthen the supply chain delivery system.

The most encouraging feature observed during project implementation was the impact of grassroot level motivation and how even the most unwilling in the community got involved in effecting sanitation and hygiene behavioural changes, as the project progressed.

INNOVATIVE APPROACHES

Information, Education, Communication (IEC)

- Subtly **shifting the communication strategy** in the implementation phase to a more motivational one since awareness on SHP components had already been generated in the planning phase.
- **Social marketing:** The emphasis was on the target group to actually build HHLs and SLCs, by creating a felt need and desire making it an aspirational goal to reach. The community was segmented into different groups and communication and IEC activities tailored to meet these needs, for eg: women's sanghas, mother's groups, shramadanas conducted by school children, summer camps organised by youth clubs, etc.
- Intensive **four-month media campaign plan** for SHP was worked out for the period July to October 2004.
- **Focus:** The focus of this campaign was elimination of open defecation, construction and use of HHLs and ensuring hand-washing practices.

Community Mobilisation

- Exhibition-cum demo of HHL & SLC models in Kilharatti in Bijapur with a total of 800 participants from all project districts. This helped provide an interface between project staff and sanitaryware manufacturers and made the project staff and community aware of the various models available.
- *Saptahas,* which targeted the community through school children. These were week-long activities coinciding with important days like Independence Day, Gandhi Jayanti, etc., during which *jathas* and *shramadanas* were conducted by children and community.
- Involving school children and youth in summer camps to promote SHP activities, as schools / colleges are closed during summer. This helped in improving sanitation situation at water points, increasing demand for household latrine, reducing water-borne diseases, increasing youth participation in the community, and boosting community understanding and consolidation of SHP interventions.

BEHAVIOURAL IMPROVEMENTS IN SANITATION & HYGIENE

As the project implementation phase progressed, distinct improvements began to be seen among community members in sanitation

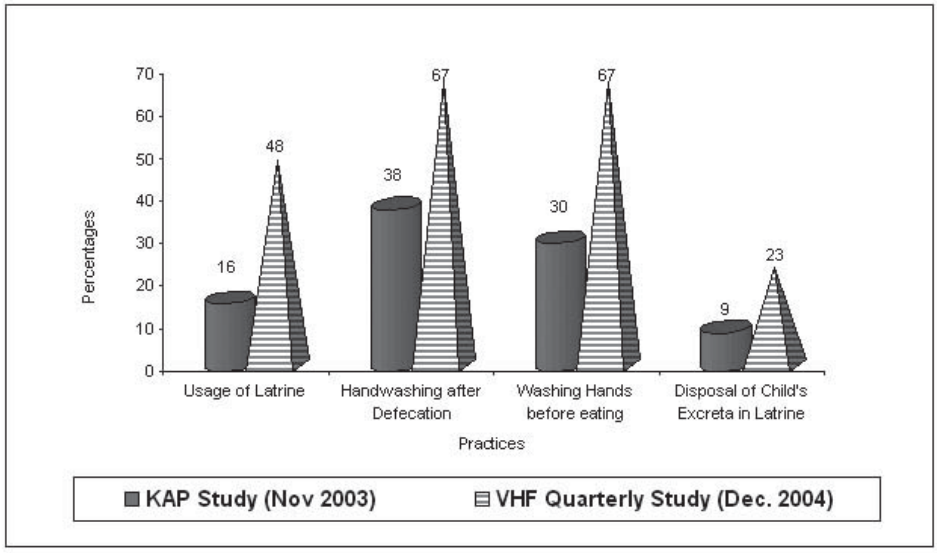
and hygiene practices. Village Health Functionaries or *anganwadi* workers collected data on a quarterly basis during the project implementation period, covering key indicators like usage of latrines, handwashing practices and disposal of child excreta. Data was compiled from these reports in December 2004 and, when compared to the KAP study conducted in October 2003, an improvement in sanitation and hygiene practices on these criteria, was observed.

Usage of latrines increased from 16 per cent to 48 per cent while handwashing after defecation and before eating were practised by 67 per cent of the respondents.

Sanitation Not a Priority for Community Members

Right from the early stages of the project, several community members were resistant to behavioural change, chiefly shifting from the practice of open defecation to using a toilet. This was despite a satisfactory level of awareness among community members on the importance of sanitation and hygiene. This practice was so ingrained that even affluent community members did not see a reason to change.

Most community members were employed in agriculture for whom the priority was cultivation. This affected their attendance in group meetings or events as doing so would affect their daily earnings. For several others, space was a constraint as many houses in the villages did not have enough space around them to construct HHLs.



Comparison - KAP Study and VHF Quarterly Report

KEY OBSERVATIONS

Despite the progress achieved, there were some constraints which impeded activities on the ground. On a positive note, women and children played a strong role in increasing the involvement of members in their families and the community at large. The following are a few key observations:

Many also felt that sanitation and hygiene interventions are more a need of the government and that the government is duty-bound to provide sanitation services free of cost.

Gap in Conceptual Clarity

Implementing sanitation at village level involves coordination among various project officials at state, district and GP / village-level. Poor co-ordination at all levels hampered the process of creating a sense of shared responsibility. There was a lack of common understanding among officials on the project objectives due to which communication with the community and grassroots workers was affected.

Further, most officials perceived target accomplishment in terms of number of toilets constructed - a quantitative indicator - as being more important than the more qualitative aspect of behavioural change. This gap in conceptual clarity led to short-term numbers being the goal, rendering the process individual than community focused.

Synergy between hardware (toilet construction materials suppliers, masons, etc) and software (community mobilization, IEC) is critical to achieving best results. This was not seen to the level desired.

Involvement of Women and Children

Most people in rural India, unfortunately, view the need for toilets as a "female" problem, owing to modesty issues among women. Men were often the most difficult to persuade (and this, of course, is true across most of India). Women were active participants in SHP. A positive fallout was an increased sense of assertiveness among them after participating in project activities and taking on a role as change agents in the community.

One of the highlights of SHP was the involvement of women in women's group and mothers' meetings, a trend that steadily increased during the project period. Successive VHF Quarterly reports showed that women effected more behavioural changes in themselves than men.

Women were also successful in influencing their family and fellow community members to construct and use latrines. In some villages, women took on leadership roles to implement sanitation and hygiene promotion activities. Self-Help Groups of women played a crucial role in the project, especially in the promotion of rural sanitary marts.

Children too were effective in spreading the message of sanitation and hygiene. The SHP project showed that children are key behavioural change agents and focusing on them has a positive impact.

POST-SCRIPT

The SHP experience offers lessons that go beyond the state of Karnataka. Community participation is key to improving sanitation and hygiene in rural India and it is only sustained efforts in this regard that can ensure results.

Infrastructure Planning: STEM further consolidates its Domain Expertise

Over the past two decades since its inception, STEM has executed more than 200 Research & Consultancy Assignments and several Capacity Building Programmes pertaining to an array of developmental sectors. More than a quarter of these assignments were of direct or indirect relevance to Infrastructure - Physical, Social & Economic. This experience, in particular, constitutes the intellectual assets of MINDS, the Management Education & Training Wing of STEM. Here are some of the Infrastructure-related Research & Consultancy assignments that STEM has been busy with, during the past few months.

Preparation of Interim Master Plan (IMP) for Kanakapura Local Planning Area (LPA), and Incorporation of Objections & Corrections in IMP for Kanakapura LPA

Sponsor: *Office of the Commissioner, Bangalore Metropolitan Region Development Authority (BMRDA)*

The first part of the consultancy involved the preparation of an IMP for the Kanakapura LPA for the period 2006-2021, in accordance with the approved Structure Plan for the Bangalore Metropolitan Region (BMR) and the relevant statutes & orders, including those pertaining to environmental protection, of the Karnataka Town & Country Planning Act 1961. The second part of the consultancy was by way of further refinement of the IMP by subjecting it to detailed public scrutiny prior to finalizing the blueprint.

Preparation of General Town Plan for the Towns of Karimnagar, Nizamabad, Guntakal & Kurnool

Sponsor: *Andhra Pradesh Urban Services for the Poor (APUSP) Project (DFID-funded)*

The consultancy was in the form of preparation of town-wide Master Plans (General Town Plans) of the four towns. The study area covered the municipal limits and immediate surrounding villages/ influence areas.

Consultancy for the Preparation of Detailed Project Report (DPR) and Tendering Assistance for Development of Lakes

The STEM study team visiting a site near one of the lakes

Sponsor: *Bruhat Bangalore Mahanagara Palike (BBMP)*

The assignment involved preparation of DPRs for development of lakes as per the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) and National Lake Conservation Programme (NLCP) guidelines and tendering assistance for 10 lakes, falling under BBMP Jurisdiction.

Preparation of Detailed Project Reports (DPRs) and Tendering Assistance for Comprehensive Development of Yelahanka Old Town

Sponsor: *Bruhat Bangalore Mahanagara Palike (BBMP)*

The broad objective of the consultancy was to provide prepare a DPR for comprehensive development of high quality upgraded road and

STEM'S FIRST OVERSEAS ASSIGNMENT

Sector Study of Water and Sanitation in The Sudan

On the strength of its sectoral accomplishments at home, STEM was recently awarded its first ever RWS&S sector assessment consultancy abroad.

The study, sponsored by UNDP, covered three regions of Sudan, in North Africa: Southern Sudan, Darfur and South Kordofan. These areas are the recipients of the largest quantities of aid funding for humanitarian, recovery and development activities, through the 2006 and 2007 Work Plans of the United Nations and its partner organisations like PACT, DFID, USAID & others.

The main objective of the study, conducted by way of a sectoral review, was to provide a greater insight into the achievements *vis-à-vis* the Work Plan objectives, and an understanding of variables affecting performance, including the effects, if any, of the Work Plan process on co-ordination mechanisms, implementation, institutional linkages and community participation. In conjunction with the consultancy, STEM organized workshops at Khartoum and Juba to provide a forum to all implementing partners/ NGOs for sharing their experiences, and deliberate upon the key findings from the sector assessment exercise.

A scene at one of the water collection points

The STEM study team holding discussions with a group of stake-holders

drain network with required civic amenities in conformity with Jawaharlal Nehru National Urban Renewal Mission (JNNURM) guidelines.

Consultancy Work for Evolving a Model for Earmarking 20-25% Land for LIG/ EWS Category

Sponsor: *Karnataka Urban Infrastructure Development Finance Corporation (KUIDFC)*

The broad objective of the study was to evolve a model for increasing the affordable housing stock for EWS/ LIG in Karnataka.

Consultancy Services for Social, Environmental and Communication Components for KMRP Road Development Works

Sponsor: *Karnataka Municipal Reforms Project (KMRP), Bruhat Bangalore Mahanagara Palike (BBMP)*

A STEM study team member talking to some of the persons affected by the road development works

As part of the assignment, STEM provided a variety of services, including (a) provision of technical advice to the BBMP to ensure compliance with the Resettlement & Rehabilitation (R&R) policy; and (b) working closely with the engineering consultants to ensure that the roads are designed and constructed, respecting the concerns identified in the Environmental Management Plan (EMP).

Performance Evaluation of Andhra Pradesh Rural Water Supply Schemes

Sponsor: *Andhra Pradesh Rural Water Supply & Sanitation Project (APRWSSP)*

The study had a three-fold objective: (i) undertake a performance study of existing water supply schemes; (ii) evaluate the performance at consumer end in terms of quantity, quality, reliability and equity of service provided; and (iii) list out lessons from past experience for fine-tuning the project design.

Consultancy for Preparation of Rajasthan Urban Database Indicators (RUDBI) under Rajasthan Urban Infrastructure System (RUIS)

Sponsor: *Dept of Information Technology & Communication, Govt of Rajasthan*

The consultancy, now in progress, is by way of extending Urban Planning & Management related domain expertise in designing and developing customized GIS application packages for RUDBI and their integration with RUIS datasets. The customization process is being carried out in compliance with National Urban Data Bank & Information (NUDB&I) standards and in consultation with the primary stakeholder departments.

Technical Assistance for European Commission (EC)-assisted State Partnership Program in the State of Rajasthan

Sponsor: BCEOM Societe francaise d'lngenierie

As co-contractors, STEM has been providing long-term technical expert services in the following areas (i) Public Financial Management, (ii) Project Monitoring, (iii) Legal Affairs and (iv) Information Technology.

Preparation of City Level Investment Plans (CLIP) Reports for 15 Towns in Karnataka

Sponsor: Karnataka Urban Infrastructure Development Finance Corporation (KUIDFC)

The CLIPs are being prepared in the form of 25-year perspective plans, spelling out an infrastructure development strategy and investment programme to match the developmental needs of the 15 ULBs.

Consultancy Service for the Work of Survey and Preparation of DPR including Planning, Design, Estimation, Tender Documents, etc., for Formation of IT/ BT Park in Bangalore Urban District

Sponsor: Karnataka Industrial Areas Development Board (KIADB)

The consultancy is in progress and involves: (i) block-level survey of the area using latest technology and preparation of a detailed contour map; (ii) preparation of the layout plan of the proposed industrial area, as per the guidelines of the Town Planning Authority and directions of the KIADB; and (iii) furnishing of detailed estimates for the comprehensive development of the proposed industrial area, based on the prevailing Schedule of Rates recognized by various government agencies.

Rapid Environmental Impact Assessment (REIA) of Proposed Mini Hydel Projects (MHPs)

The rapidly increasing industrial activities as well as consumer needs have resulted in a substantial increase in power demand in various states. In order to develop a renewable, economical, inflation-free and environmentally benign source of energy with short gestation period, state governments have begun placing great emphasis on quick development of micro, mini and small hydropower resources. As a sequel, the construction of mini hydel stations are being awarded to private entrepreneurs. Some of these entrepreneurs have been approaching STEM for carrying out the REIA of their proposed projects. The objective of these REIA studies was to identify, predict and evaluate the likely environmental impacts of the hydel stations during their construction and operational stages. They were also aimed at developing an appropriate Environmental Management Plan (EMP) for mitigating the adverse environmental impacts of the proposed projects, if any. Over the past seven years STEM has handled as many as 16 REIA assignments, 14 in Karnataka and two in Orissa.

Training & Awareness Programmes

EDPs on Social, Environmental and Communication (SEC) Components of Road Rehabilitation Works

During the second quarter of 2008, STEM was commissioned by the Bruhat Bangalore Mahanagara Palike (BBMP) to undertake the consultancy for the Social, Environmental and Communication (SEC) components of the road rehabilitation works, involving about 130 km high & medium density corridors in Bangalore city limits, being implemented under the World Bank-assisted Karnataka Municipal Reforms Project (KMRP). STEM was mainly responsible for regular monitoring of the works, providing appropriate advice to the BBMP, and helping them ensure compliance with the Resettlement & Rehabilitation (R&R) policy. STEM also worked closely with the engineering consultants to ensure that the roads were designed and constructed, respecting the concerns identified in the Environmental Management Plan (EMP).

In conjunction with the consultancy, STEM organized a series of seven one-day Executive Development Programmes (EDPs), at MINDS, between April and November 2008. The objective of the EDPs was to create an awareness among the personnel of the BBMP and the private sector contractors, executing the Bangalore City road rehabilitation works, about the Social, Environmental and Communication (SEC) components of their domain. The resource persons included

Prof. B. Bhaskara Rao, President & Executive Director, STEM, lighting the lamp during the inauguration of the EDP series

- Dr. A. N. Yellappa Reddy, IFS (Retd), former Secretary, Dept of Environment & Forests, Govt of Karnataka
- Prof. M. N. Sreehari, Traffic & Safety Engineering Consultant & Trainer
- Dr. B. Nagappa, Deputy Scientific Officer, Karnataka State Pollution Control Board (KSPCB)
- Mr. Hittanagi, Deputy Labour Commissioner, Govt of Karnataka
- Mr. Suresh Heblikar, Environmental Activist and Chairman, Eco-Watch, Bangalore
- Dr. M. R. Rajashekhara, Professor, MINDS
- Mr. B. V. Suranjana Reddy, Consultant, STEM

The EDPs were inaugurated by Mr Putta Maligaiah, Project Director, KMRP Programme Implementation Unit (PIU). Mr. Linga Shettar, Executive Engineer, BBMP, and Prof. B. Bhaskara Rao, Executive Director, STEM, were also present on the occasion.

Professional Enrichment Programmes (PEPs) for In-service Infrastructure Personnel

During November-December 2008, MINDS organized a series of three national-level Professional Enrichment Programmes (PEPs), at Bangalore, on various aspects of Infrastructure Management. These two-day programmes, designed mainly for in-service infrastructure personnel, were supported by leading public and private sector infrastructure organizations. The details are shown in the chart below.

The hand-outs produced in conjunction with the PEPs

Date	Title	Programme Leads	Sponsor
November 6-7, 2008	Infrastructure Development and Investment Planning (IDIP) for Tier II Cities & Towns: A Five-Year Plan	Mr. V. M. Hegde, Adviser, STEM Prof. S. Jeyabalan, Faculty, MINDS	Karnataka Urban Infrastructure Development & Finance Corporation (KUIDFC)
November 20-21, 2008	Efficient Management of Water Supply and Waste Water in Tier II Cities & Towns	Mr. M. N. Thippeswamy, former Engineer-in-Chief, Bangalore Water Supply & Sewerage Board (BWSSB) Dr. P. V. Rao, former Chief Engineer, TCE Consulting Engineers Mr. S. Vishwanath, Founder, Rainwater Club - Bangalore Dr. B. S. Patil, Faculty, MINDS	Karnataka Urban Water Supply & Drainage Board (KUWSDB)
December 18-19, 2008	Project Management for Site Engineers and Executives	Mr. R. Richardson Asir, Adviser, Soma Enterprise Ltd. Prof. S. Nagendra, Dean (Programmes), MINDS Dr. M. R. Rajashekhara, Faculty, MINDS	Soma Enterprise Ltd., Hyderabad

In all, nearly a hundred personnel, comprising development planners, engineers and services providers from the public and private sectors, including some elected representatives of municipal and local bodies, attended the PEPs. The faculty consisted of senior consultants, researchers and academicians specializing in areas such as Local Self-Governance, Urban & Regional Planning, Institutional Development, Public Finance, Water Supply & Sanitation Engineering, Rain Water Harvesting, Integrated Water Management, Project Management, Health & Safety, Cost & Time Management, Contract Management and Human Resource Management.

Colloquium on Project Management for would-be Infrastructure Managers

MINDS organized a Colloquium on Prospects in Infrastructure Development & Project Management, at Bangalore, on February 14, 2009. The colloquium was meant for engineering students aspiring to a career in Infrastructure Management. A special feature of the programme was two interactive sessions led by sector specialists, Mr Seetaram Bhat, Head-HR, IDEB Projects and Mr. T. N. Narayana Gowda, DGM, Soma Enterprise Ltd. and an alumnus of MINDS. Mr Bhat gave a presentation on "Infrastructure Management and Opportunities in India" and Mr Gowda on "Project Management". These sessions were followed by a Panel Discussion on "Infrastructure Development & Project Management" by Prof. S. Nagendra, Dean, and Dr. M. R. Rajashekhara, Professor, MINDS. Individual students and teams from SDMCET-Dharwad, Vemana Institute of Technology, The Oxford College of Engineering, BNMIT, and Ghousia College of Engineering won prizes for their presentations on various aspects of infrastructure management. The topics included

Mr. T. N. Narayana Gowda, DGM, Soma Enterprise Ltd., and an alumnus of MINDS makes his presentation at the colloquium

Electronic Toll System, IT & Network Infrastructure, Intelligent & Integrated Transportation Systems, and Airport Modernization. Nearly 150 students from various engineering colleges and MINDS participated in the one-day event.

Follow-up Workshop on Change Management in RWS Sector

Between February 26 and April 15, 2007, STEM had organized a series of 24 EDPs on 'Change Management', at Hyderabad, for the benefit of RWS&S Engineers & Zilla Panchayat Officers of the Govt of Andhra Pradesh. The EDPs were sponsored by the Communication & Capacity Development Unit (CCDU), Government of Andhra Pradesh, and supported by UNICEF.

COURSE PARADIGM
- Change in Role of Engineers: From 'Provider' to 'Facilitator'
- Managing the Change: Technical Skills, Social & Communication Skills
- Pedagogy
- Knowledge, Information & Experience Sharing
- Participatory and Interactive Approaches
- Case Studies, Exercises & Video Films
- Open House Discussions
- Pre-Dinner 'Thought Sharing' with Veterans from the Field

THRUST AREAS
- Domain Knowledge
- Macro-view of the Sector
- Appreciation of Roles & Responsibilities
- Information Sharing
- Case Presentations, Participatory Exercises, Discussions, Games, etc.
- Experiences from other States
- Soft Skills Development
- Communication Skils Enhancement
- Working with Groups & Communities

KNOWLEDGE
- Overview of WATSAN Sector
- Change Management: Concept & Principles
- Role of Change Agents
- Understanding of Rural Society, Culture, Values, etc.
- Process of Democratic Decentralization
- People-centred Development Models
- Women as Major Stakeholders
- Development Communications
- Project Management by People

SOFT SKILLS DEVELOPMENT
- Participatory Methodologies: Principles, Approaches, Tools & Techniques
- Strengthening Leadership Qualities
- Understanding Groups & Group Dynamics
- Team-building Skills
- Motivating People for Change: Tools & Techniques

INTERACTION & INFORMATION
- Learning through Fun & Discussion: Case Analysis & Group Exercises
- Exposure to WATSAN Sector in other States
- Open House Discussions
- Pre-dinner 'Thought Sharing'

SOFT SKILLS DEVELOPMENT FOR EFFECTIVE CHANGE MANAGEMENT

The course framework adopted for the EDPs on Change Management, organized at Hyderabad during February-April 2007

The workshops had the sustained academic support of MINDS.

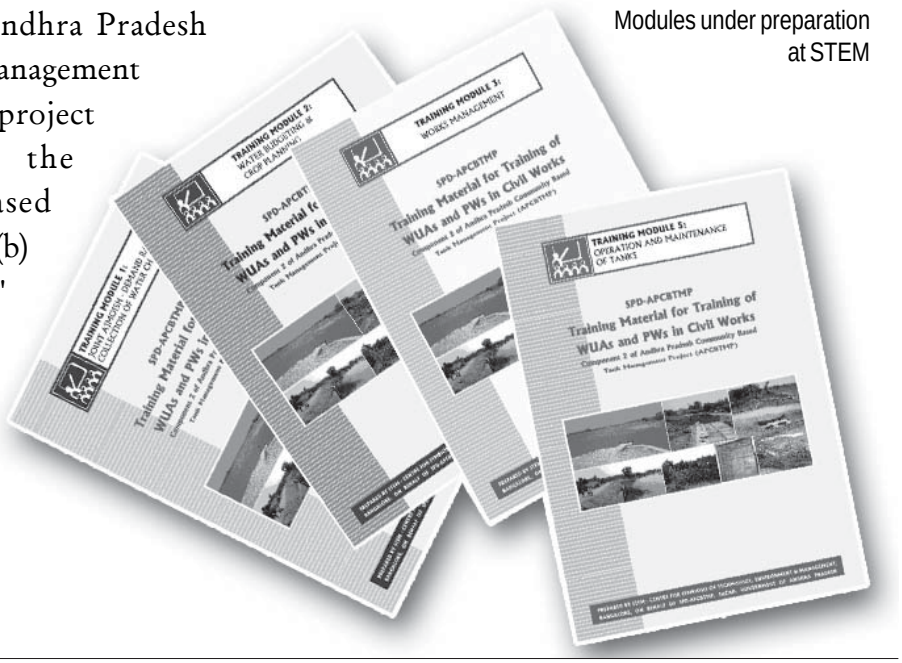
As a follow-up to the EDPs, STEM organized a one-day workshop on **Refine Strategy for Change Management within RWS for Soft Skills Development**, at Hyderabad, on October 23, 2008. The objectives were to (i) understand the impact of the Change Management programmes on the functioning of the participant RWS engineers and district officers; and (ii) elicit suggestions and feedback for refining and evolving a future strategy within RWS for skills development. As many as 48 persons, including RWS Engineers representing various districts and six *sarpanchs* participated in the workshop

Training of Trainers (ToT) for Community Based Tank Management

STEM has recently been commissioned as technical advisers to organize ToT Programmes in Community Based Tank Management in Andhra Pradesh. The programmes are being conducted in conjunction with a component of the World Bank-assisted Andhra Pradesh Community Based Tank Management Project (APCBTMP). The project seeks to (a) improve the productivity of tank-based agricultural producers; and (b) help Water Users' Associations (WUAs) manage the tank systems effectively. The ToT programmes will cover two aspects: tank systems improvements and participatory groundwater management. STEM has the responsibility to train selected Assistant Project Directors (APDs) and Support Organisation (SO) staff, as also WUA and farmer trainers.

The broad objectives of the assignment are to: (i) improve the effectiveness of the para-workers and WUA training modules and material prepared by the project for the relevant component; (ii) develop the ToT modules and training materials related to the training subjects identified by the project; (iii) develop and implement an assessment criterion to select suitable candidates, from among the SO staff, to be trained as 'trainers'; (iv) develop a system for monitoring the quality of the ToT modules; (v) conduct the training of the selected staff (to work with Trainers) based on the ToT modules developed; and (vi) provide a one-year consulting service to the project to monitor the quality of the training programmes for para-workers and WUAs, carried out by the trained trainers.

Some of the ToT Modules under preparation at STEM



Preparing For Global Assignments

by P. Ranganath Sastry*

As India strengthens its position in the international arena, Indian professionals are increasingly being involved in global assignments. Here are some tips designed to help you in your quest for handling global assignments successfully.

WHAT IS A GLOBAL ASSIGNMENT?

Does it have something to do with working abroad, away from home shores, or is it about working for projects or products that have an international relevance? Or is it about both?

The criterion for the classification as a global assignment is the project and its likely deployment. If the project you are working on is for an international customer, or it is a product that is proposed to be sold to both Indian and international customers, then it qualifies for this classification. It doesn't matter where you are stationed to work on that project.

A PARADIGM SHIFT

Most projects have been undertaken by developed countries, and while these countries still continue to dominate, a paradigm shift is taking place. Countries, which till recently had been hesitant in their approach, are now progressively opening their doors wide open for Indian professionals from all arenas, and are coming in with challenging projects incorporating the most recent technologies and expertise. No longer is it just USA - it could be the UK, Germany, France. Japan, South Africa, Australia, Singapore, Hong Kong. The Indian professional is now much sought after and welcomed everywhere.

WHAT DOES AN EMPLOYER OR CLIENT LOOK FOR?

What does a client look for when considering you for an assignment?

Personality

Personality is about how you come across as a total person. It is a reflection of a combination of three main attributes:

- *Attitude* - A positive outlook is a highly desirable trait. Such an attitude indicates that you will not give up In the face of adversity, and will always work towards success.
- *Your Values* - moral and ethical values that guide your actions
- *Communication* - how effective you are in conveying ideas and thoughts, whether verbal or non-verbal

Skills

- *Technical Skills* - how good you are in the various technical competencies mentioned in your CV.
- *Conceptual Skills* - your ability to conceptualize a problem and provide possible solutions

*Management Consultant & Trainer and adjunct faculty at MINDS

- *Communication Skills* - Your ability to explain the work you have done on your projects with clarity and logic.
- *Intellectual Skills* - Your capacity to listen, comprehend and understand

Learning Ability

In a fast-changing world, what is your ability to absorb new concepts in a short time and produce results?

General Knowledge

This is the general knowledge about the relevant area. For example, if you have applied for an assignment in Planning for a construction company, what is your general awareness about the infrastructure industry in your country and abroad?

Ability to work in a Team

Are you a good team member with the ability to pool in your individual talent and skills for the success of the team, be adaptable to opinions and ideas of other members in the larger interests of the team?

Adjustability

Do you have the ability to adjust to new professional, social, and cultural environments?

GETTING PREPARED

You need to get prepared. You should

- Know how to present yourself to an international client
- Hone your technical skills
- Develop a wider knowledge base
- Know how to handle discussions - telephonic and personal
- Familiarize yourself with the appropriate etiquettes of the country/ culture to which the person that you have to deal with belongs
- Sharpen your communication skills and
- Make appropriate use of the technological and communication tools in your work

DOING YOUR HOMEWORK

- There is always a need for **constant preparedness.** Being unprepared when the opportunity comes can be an unnerving experience. Remember, opportunities are always around the corner, and you must seize them when you see them.
- Being **technically prepared** is important. Technical preparation is not merely the particular area you have worked on. You must know, in depth, a lot about the overall sector you have projected as your strength. Equally important is your knowledge in related areas. You may, for instance, be an expert in Project Management using PM Software, but that is not enough. Remember this - you are not just a Project Management professional, you are an infrastructure professional - which means you know quite a bit about handling large projects in general and MS Projects in particular. You also know about the many interfaces that are currently available in the

management of projects, and have some knowledge of the suitability of these interfaces. The principle here is, "A lot about something (depth) and something of everything (breadth)."

- Focus on **concepts** - this is what one really looks at. If your concepts are clear, you will definitely be good in the details. Remember, interviewers generally have just about an hour to evaluate you, so clarity in concepts is what they can judge in that time period.
- **Prepare an FAQ** for yourself - with outline answers. The FAQ should cover in depth your specialization and also provide for related technology areas.
- Be absolutely **familiar with your CV**- get a copy from HR
- For each of the projects you have carried out, either in your college or in work, prepare a **bulleted summary.** These summaries will be of great help to you in your initial discussions with clients and should cover
  - The main requirements addressed in the project - the domain
  - The main design features of the project
  - The technical components used in the project
  - Your role in the project
- You may not have used a technology to its fullest extent, but you must have some knowledge of advanced concepts in that technology.
- Even if you have not been involved in designing your project, you must be able to rattle off the technical design aspects of your project. You will create a very favorable impression when you talk of the design aspects with confidence.
- **Remember,** most clients plan their queries around what is there in your CV- the projects you have worked on and its components. Most queries on technical areas are around concepts - so your fundamentals must be strong.
- **Accent** does play a role in communication. On your side, learn to understand the accents of various nationalities. A good way to do this is to listen regularly to news reports on TV and radio channels - NDTV, BBC, CNN, CNBC Asia, and so on.

GATHERING INFORMATION

It may be necessary sometimes to have a second or third round of interviews with others in the company. This could be in the form of personal discussions. This may be a face-to-face discussion. However, with geographical distance between interviewer and interviewee no longer a problem, increasing use is being made of communication technology; so much so that the discussions could be over the telephone, video conferencing or a chat through the internet. Much of what follows is devoted to this aspect - preparing for discussions with prospective employers, since these meetings are

crucial for your entry into the global arena.

If you have to attend a personal discussion with a client, you need to gather the following information:

- Some **information on the company** with whom you may have to work. You can get such information from the company's website. In my experience, clients are very pleased if somebody has seen their website and can remember something from it, so, straightaway you earn bonus points.
- Some **information on the likely assignment** - type of project, domain area, role in the project, and so on. Normally, the person who sets up the discussion will be the right source for this information.
- **How many people** are likely to be working on the project - this gives you an idea about the size of the project. If it is a large project, then your role is likely to be more focused, and so the discussions are likely to be focused on some specific aspect. If it is a small sized project, you may have a wider role to play, and so your discussion may centre around aspects of a wider nature.
- What are the **skills required,** and at what level? Do they need the skills at an initial level or at an advanced level? For projects using well established and proven technologies, like MS Projects for instance, the depth required would be more. However, for relatively recent technology, in Computer Aided Design for instance, the requirement would be more at knowledge level or initial level.
- The **name or names of the persons** with whom you will have the discussions. If the name is a tongue twister, especially with foreign names, then it is better to practice the pronunciation to get it right. Nobody likes his or her name to be pronounced wrongly!
- Remember, while it is desirable to have all this information before the discussion takes place to give you an added advantage, it may not always be available. In such cases, don't get upset - you can always ask the client some of these questions during the discussions.

Before the Discussion

Here are some tips for the moments before you enter the meeting room or pick up the phone for a discussion:

- Keep your throat clear.
- Finish your washroom chores - some discussions could go even beyond an hour.
- Drink some water - a parched tongue can be uncomfortable especially at the beginning of the discussion
- Take some deep breaths, calm down, and enter!

The key to a successful discussion is **CONFIDENCE** - and that is the attitude that you have to portray.

VTU-MINDS PGDIM 2005-06, 2006-07 & 2007-08

Project Internships offered by

- Ashoka Buildcon
- Central Tibetan Administration - Mundgod (Karnataka)
- DTZ Global Real Estate Advisors
- Foundation for Revitalisation of Local Health Traditions (FRLHT)
- Gammon India
- Glopore IMS
- GMR Delhi International Airport Ltd
- GMR Hyderabad International Airport Ltd
- Gowri Ganesh Real Estate (GGRE), Bangalore
- Hubli-Dharwar Municipal Corporation (HDMC), Hubli
- IDEB Projects
- Infrastructure Development Corporation of Karnataka (IDECK), Bangalore
- Kristal Group, Bangalore
- Mahindra Gesco Developers, Chennai
- Mahindra World City Developers Ltd., Chennai
- Manasa Consultancy
- Reliance-Navi Mumbai SEZ
- Soma Enterprises Ltd., Bangalore
- Synergy Property Development Service
- Tamil Nadu Urban Development Programme (TNUDP), Chennai
- TCE Consulting Engineers, Bangalore
- UN Habitat, New Delhi
- Wipro Ltd, Cochin
- Wipro Technologies, Bangalore

Placements offered by

- Afcons
- Ashoka Buildcon
- DLF Infrastructure
- Foundation for Revitalisation of Local Health Traditions (FRLHT)
- Gammon India
- Glopore IMS
- IDEB Projects
- Infrastructure Development Corporation of Karnataka (IDECK), Bangalore
- IL & FS
- Kristal Group
- L & T
- Mahindra Gesco
- Manasa Consultancy
- Soma Enterprises Ltd
- Synergy Property Development Service
- TCE Consulting Engineers
- Wipro