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SHP MANAGEMENT CONSULTANCY FOR 'JAL NIRMAL'

Spearheading Sanitation & Hygiene Promotion (SHP) in Rural Karnataka

In November 2002, the Karnataka Rural Water Supply & Sanitation Agency (KRWS&SA) appointed STEM as Sanitation & Hygiene Promotion (SHP) Management Consultants for 'Jal Nirmal', the World Bank- assisted Second Karnataka Rural Water Supply & Sanitation Project. The short-term objective of the Consultancy, carried out by STEM over the next 29 months, was to capacitate the community, especially women, to start analyzing health and sanitation in terms of three distinct parameters: (i) personal hygiene; (ii) family hygiene and (iii) community environmental sanitation. The following is an overview of how STEM went about the consultancy, the objectives of which were to be achieved through a four-phase strategy.

INTRODUCTION

'Jal Nirmal', the World Bank-assisted Second Rural Water Supply & Sanitation Project, is being implemented in Karnataka's 11 northern districts, over a period of six years from January 2002 to December 2007. The key objectives of 'Jal Nirmal' are:

- Increasing rural communities' access to improved and sustainable drinking water and sanitation services, and
- Institutionalising decentralisation of rural water supply and sanitation (RWS&S) service delivery through Gram Panchayats (GPs) and User Groups.

The project is expected to benefit nearly 4 million people, about

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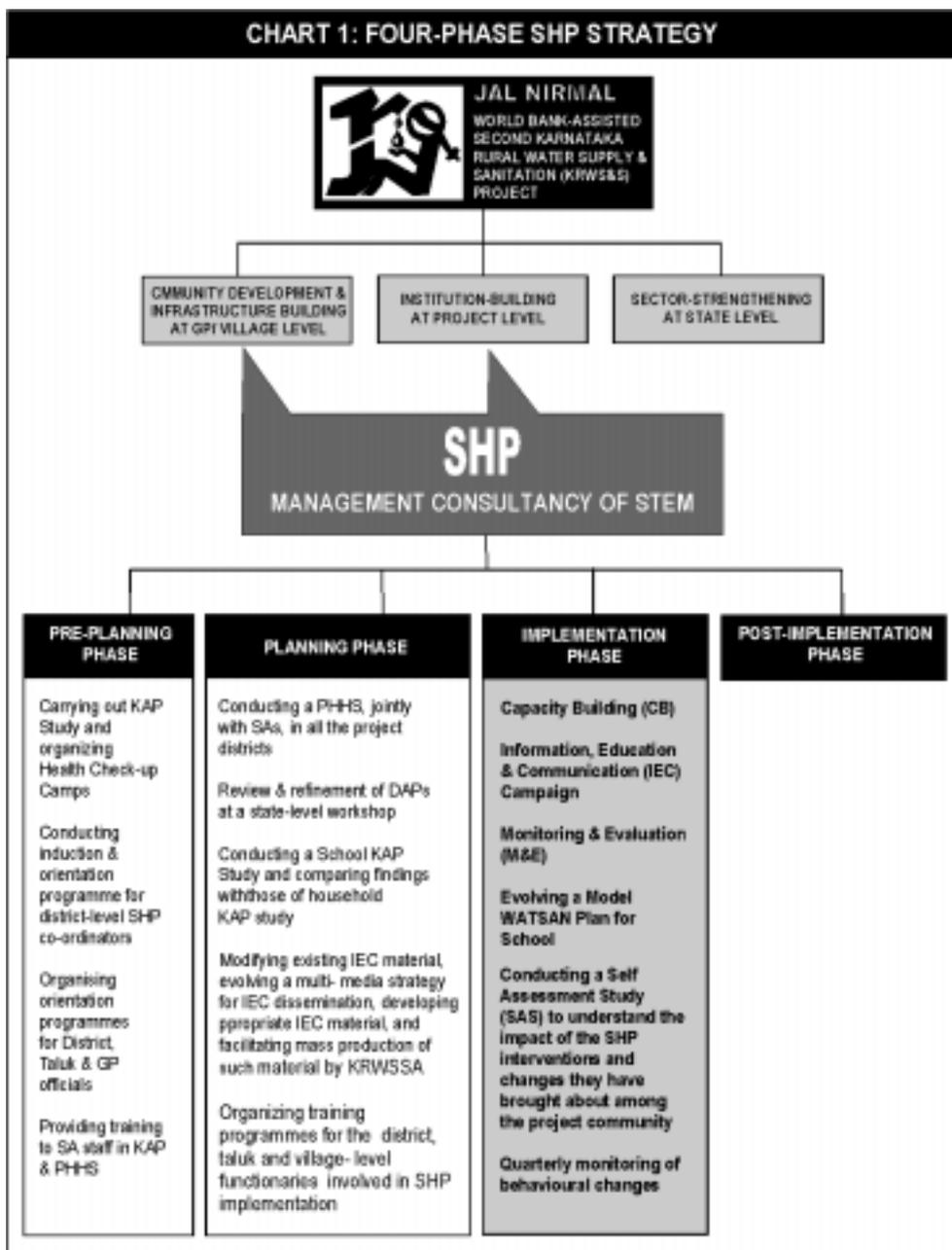
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11% of the state’s rural population. In addition, 'Jal Nirmal' specially targets 1.5 lakh Lambanis and Siddis living in 400 tribal habitations under the Indigenous People’s Development Plan (IPDP). Broadly, the project components are:

- Community Development and Infrastructure Building at GP / village level,
- Institution Building at Project level, and
- Sector strengthening at State level

Each of the above components has several sub-components. Sanitation and Hygiene Promotion (SHP) is a major sub-component under the main component of 'Community Development & Infrastructure Building at GP/ Village Level' and 'Institution Building at Project Level'. In November 2002, the Karnataka Rural Water Supply & Sanitation Agency (KRWS&SA), the nodal institution for the implementation of 'Jal Nirmal', appointed STEM as SHP Management Consultants for the project.



STEM’s SHP Management Consultancy (SHP-MC) for Jal Nirmal focussed on promotion of behavioural changes among the project communities, spread over 1429 villages in 436 GPs of the 11 project districts, with a view to preventing water and sanitation-related morbidity. The activities under the Consultancy were initiated in the first batch of eight districts in December 2002. The Batch I districts were Bagalkot, Belgaum, Bijapur,

Dharwad, Gadag, Gulbarga, Haveri & Uttara Kannada. During April 2003, the Consultancy was extended to the Batch II districts: Bidar, Raichur and Koppal. (See map above)

OBJECTIVES OF SHP-MC

The SHP-MC was carried out between November 2002 and March 2005. Essentially, the **short-term objective** of

the assignment, as spelt out by the Terms of Reference (ToR), was to

- capacitate the community, especially women, to start analyzing health and sanitation in terms of three distinct parameters: (i) personal hygiene; (ii) family hygiene and (iii) community environmental sanitation.

The **long-term objective** was to

- promote a ‘total health’ perspective to achieve sustainable & equitable health and hygiene benefits across the community through improvements in water and environmental sanitation services.

SERVICES PROVIDED BY STEM

The objectives mentioned above were to be achieved through a strategy that encompassed four phases: (a) **Pre-planning**, (b) **Planning**, (c) **Implementation** and (d) **Post-implementation**. The services provided by STEM, under each phase, are shown in **Chart 1**. The specific tasks under the Implementation Phase were classified into: (i) Capacity Building (CB), (ii) Information, Education & Communication (IEC) and (iii) Monitoring & Evaluation (M&E). The various sub-tasks carried out by STEM, under each of these tasks are shown in **Chart 2**.

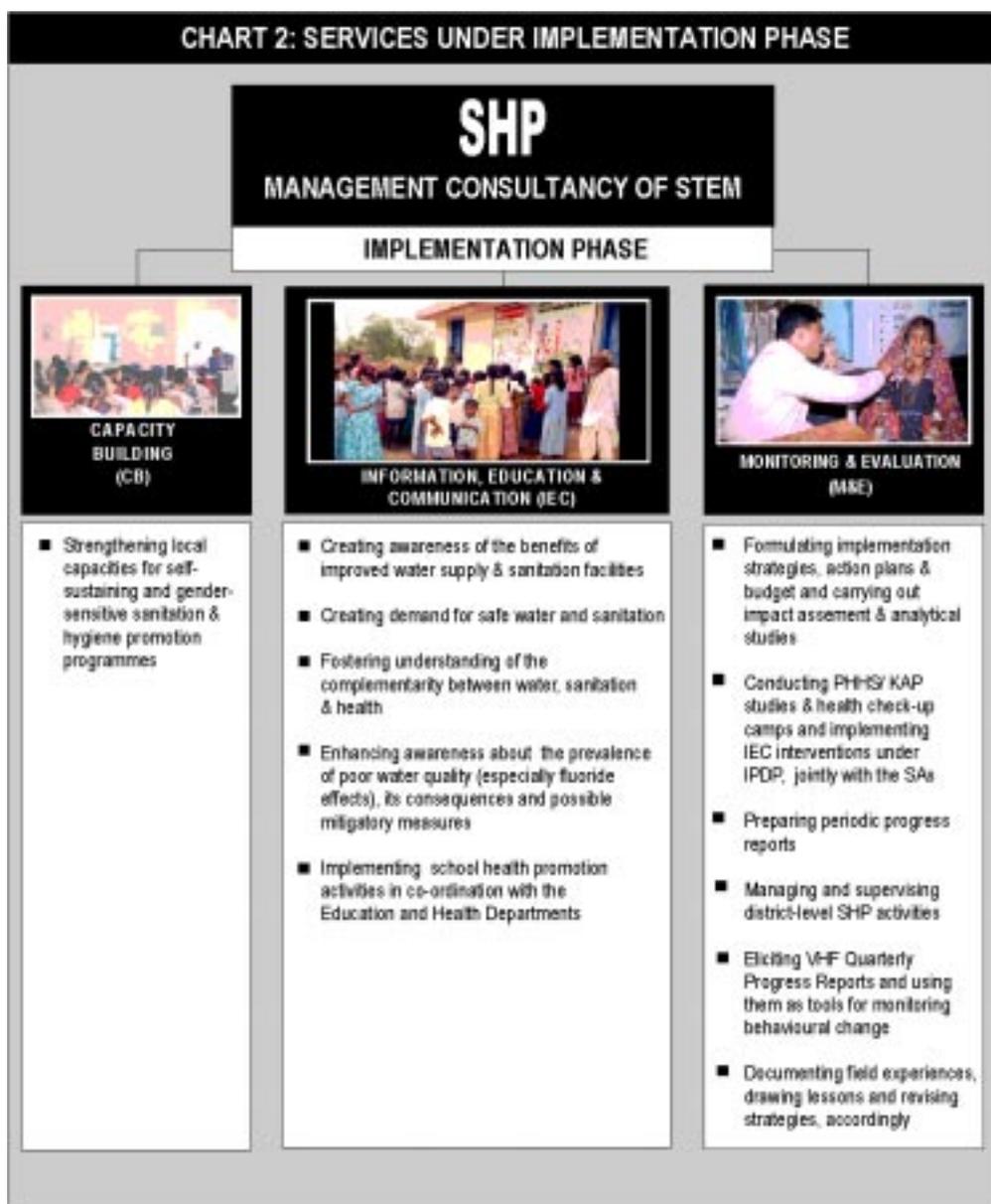


TABLE 1: CAPACITY BUILDING PROGRAMMES

Nature	Number
Training Programmes on conducting PHHS and KAP	34
Training Programmes for VHFs	219
Training Programmes for VWSC Mmembers & GP Members	2090
VWSC Reorientation Programmes	16
Total	2,359

TABLE 2: SURVEYS, STUDIES & CAMPS

Nature/ Type of Activity	Number
PHHSs	1437
KAP Studies	1507
Health Check-up Camps	44
Total	2,988

TABLE 3: CONSTRUCTION ACTIVITIES

Type of Construction	Number
HHLs	69335
Group Latrines	11
Institutional Latrines	173
Community Latrines	10
Smokeless Chulhas (SCLs)	53323
Biogas Plants	206
Total	1,23,058

Capacity Building Programmes

Over a period of 27 months (from November 2002 to March 2005), STEM organized as many as 2,359 capacity building programmes in the project districts. Details of the various training programmes are presented in **Table 1**.

Information, Education & Communication (IEC)

As part of the IEC campaign, a large number of video film & cable shows and audio programmes were organized. Project-related folders & brochures were widely distributed and wall paintings were mounted. A substantial number of awareness, *shramadan* & school sanitation programmes, and meetings

DEFINING THE PARAMETERS.....

- **Personal Hygiene:** Washing hands with soap after defecation/ child's excreta disposal and before cooking/ eating, bathing daily, brushing teeth and wearing footwear.
- **Family Hygiene:** Clearing the house & kitchen daily, storing drinking water/ cooked food covered in elevated areas, keeping the premises of the house clean and using latrines.
- **Community Sanitation:** Proper disposal of solid & liquid wastes, developing composting pits and proper use & maintenance of village sanitary facilities.

SUPPORT AGENCY (SA) SERVICES

'Jal Nirmal' envisages a significant departure from the conventional method of supply-driven intervention to a demand-driven one, as a sustainable development approach. The project, therefore, emphasizes on the need for a change in thinking as well as in implementation. To bring in this change and optimize benefits, substantial management development efforts are required to sensitize and capacitate sectoral stakeholders at all levels. Capacitating Gram Panchayats (GPs) and village-level user groups called Village Water & Sanitation Committees (VWSCs) are critical, since all decision-making related to planning, procurement, construction, operation and maintenance rests exclusively with them. The KRWS&SA has, therefore, commissioned some consultants, including STEM, to provide Support Agency (SA) services for 'Jal Nirmal'. The Support Agencies are responsible for providing planning, design, technical & community development support for implementation of the water supply and sanitation works.

STEM has been assigned a group of 111 project villages -- 19 in Bagalkot and 92 in Raichur. Most of the field activities under SHP-MC, namely, (i) capacity building programmes, (ii) surveys, studies & health camps, (iii) construction of latrines, smokeless chulhas, biogas plants, etc., and (iv) IEC campaigns, were carried out in tandem with the support agencies.

Participatory Healthy Home Survey (PHHS): An Analysis

One of the major activities under SHP, during the Planning Phase, was to assist the Support Agencies (See **box alongside**) in conducting the Participatory Healthy Home Survey (PHHS) in the project villages. PHHS is a participatory assessment approach to involve the community in learning and assessing their hygiene status with respect to Personal Hygiene, Family Hygiene & Community Sanitation and make necessary plans for improving their current status in this regard. A PHHS was thus conducted in the eight Batch I districts, between June & August 2003. Well over 40,000 people, of whom nearly 68% were women, participated in the exercise. More than 8,000 houses were visited and assessed. STEM carried out an analysis of the findings from the PHHS. The highlights were

- More than 70% of the households assessed in the eight districts needed improvement with regard to personal hygiene.
- Nearly 80% of the assessed households needed improvement in family hygiene practices.
- Only 20% of the households in the eight districts practised good/ excellent family hygiene habits.
- Community sanitation practices were very poor in all the districts, with almost 86% of households needing improvement.
- Only 14% of the households practised good/ excellent community sanitation habits.

School KAP Study

Between November 2003 and March 2004, a KAP Study was undertaken across high schools in each of the project districts, to record the prevalent sanitation and hygiene practices among children. The study focussed on the behavioural practices followed by children rather than gauging their knowledge or awareness levels with respect to hygiene and sanitation. The study covered more than 250 schools across all the project districts. About 11,470 students in classes 8, 9 and 10 were selected to participate in the study.

The findings from the School KAP Study were analysed by comparing them with those obtained from the general household KAP Study, conducted at the start of the planning phase. The comparison revealed that there was considerable improvement in the hygiene practices among school children in terms of (i) use of latrines for defecation; (ii) washing hands with soap *after* defecation; (iii) washing hands with soap *before* meals; (iv) brushing teeth every day; (v) bathing practices; (vi) wearing clean clothes; (vii) clipping nails regularly; and (viii) using footwear. **One significant revelation from the study was that, since most school children learned healthy hygiene habits from their mothers, educating mothers on safe hygiene and sanitation habits could bring about a behavioural change in children and the entire family.** The School KAP Study also pointed to the need for formulating a detailed implementation plan for School Sanitation and Hygiene Education (SSHE).

Model WATSAN Plan for School

As part of the Total Sanitation Campaign (TSC), KRWSSA has been promoting School Sanitation & Hygiene Education (SSHE) in the rural areas of the State. It is expected that by introducing SSHE in schools and anganwadis, children will be exposed to the best practices in sanitation & hygiene early in life. During August 2004, STEM evolved a 'Model Water Supply & Sanitation (WATSAN) Plan' for 'Jal Nirmal' Project village in Raichur district. The WATSAN Plan was prepared taking into account the following factors:

- *Location & Accessibility:* Must be possible to reach facilities at all times and all weather conditions. The toilet must have easy access.
- *Privacy & Dignity:* Facilities must offer privacy while entering and using the sanitation services.
- *Safety:* Children must feel 'safe' when going to visit the facilities and they must also be at hearing distance and/or have visual contact with the school to get assistance, if needed.
- *Cost:* Cost-effective, efficient solutions should be arrived at.
- *Child-friendly Design:* Height and proportions of children in the school as well as their gender and age-related needs must be addressed.
- *Supervision:* The school has to orient the students to proper use and maintenance of the facilities and be responsible for their upkeep during non-school hours and holidays.
- *Environmental Upgradation:* Facilities and necessary equipment should be in place to enable proper collection and disposal of waste and maintain a healthy environment.

involving VWSC/ GP members, *gram sabhas*, women's groups, mothers, CBOs & SHGs were also organized. In keeping with the mass media promotion strategy worked out earlier by SHP-MC, interactive phone-in programmes via satellite were also organized in the project districts.

Monitoring & Evaluation (M&E)

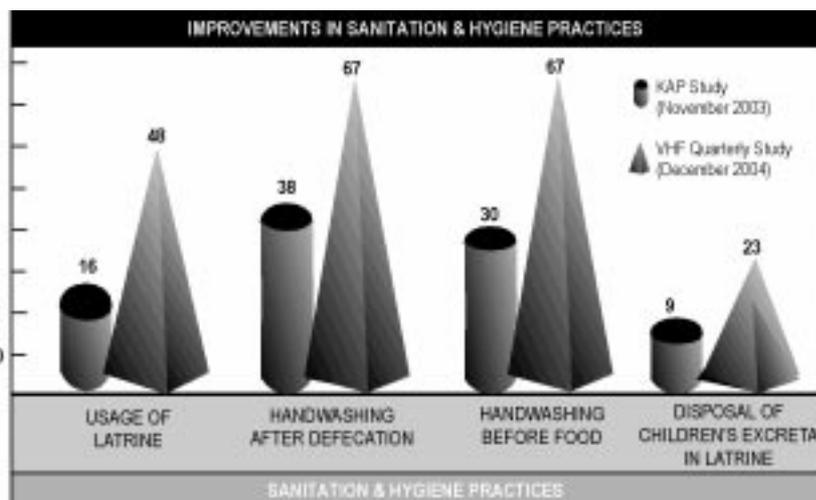
A large number of surveys, studies & camps were organized as part of the M&E component of SHP-MC. These are detailed in **Table 2**.

Promotion of Construction Activities

The SHP-MC also covered promotion of the construction of latrines, smokeless chulhas, biogas plants, etc. in the project districts. The details are presented in **Table 3**.

Assessing the Impact of SHP

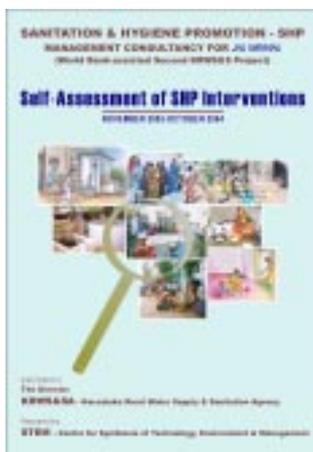
Anganwadi Workers (AWWs) as Village Health Facilitators (VHFs) are key functionaries in the 'Jal Nirmal' Project. The VHFs have been filing quarterly reports presenting the improvements in sanitation & hygiene behaviour achieved in the project area as a result of SHP interventions. A comparison, between the findings of the KAP Study conducted in



November 2003 and the VHF Quarterly Study findings of December 2004, made by STEM (see **inset**), indicated significant behavioural changes after the introduction of SHP interventions in the Planning Phase of the project. The assessment was

arrived at in terms of (i) usage of latrines; (ii) practices of hand-wash with soap, *after* defecation; (iii) practices of hand-wash with soap, *before* eating food; and (iv) disposal of child's excreta in latrine.

Self Assessment Study (SAS)



At the end of the SHP-MC, STEM conducted a snapshot assessment study to understand the impact of the SHP interventions in the project districts and the changes they have brought about among the project community. The Self Assessment Study (SAS) attempted to ascertain the level of knowledge among the people, their attitudes towards sanitation & hygiene, and the current situation, *vis-a-vis*

- *Core Sanitation & Hygiene Practices* in terms of measurable indicators like HHL usage, handwashing with soap *after* defecation and *before* eating, disposal of child's excreta in latrine, use of smokeless chulhas;
- *Personal Hygiene* in terms of brushing teeth daily, having bath daily, clipping nails, wearing clean clothes and chappals;
- *Environmental Sanitation* in terms of keeping drains, streets & water collection points clean, proper disposal of solid & liquid household waste;
- *Water Handling* in terms of proper storage & handling of drinking water;
- *Community Participation* by way of support for operation & maintenance of project facilities and satisfaction in terms of decision-making and performance.

GLOSSARY OF ABBREVIATIONS

- CB:** Capacity Building
DAP: District Action Plan
DSU: District Support Unit
GP: Gram Panchayat
HHL: Household Latrine
IEC: Information, Education & Communication
IPDP: Indigenous People's Development Plan
KAP: Knowledge, Attitude & Practices
KRWS&SA: Karnataka Rural Water Supply & Sanitation Agency
M&E: Monitoring & Evaluation
PHHS: Participatory Healthy Home Survey
RWS&S: Rural Water Supply & Sanitation
SA: Support Agency
SAS: Self Assessment Study
SCL: Smokeless Chulha
SHG: Self Help Group
SHP-MC: Sanitation & Hygiene Promotion Management Consultancy
SSHE: School Sanitation & Hygiene Education
TSC: Total Sanitation Campaign
VHF: Village Health Facilitator
VWSC: Village Water & Sanitation Committee
WATSAN: Water & Sanitation

SHP-MC: Highlights of Achievements

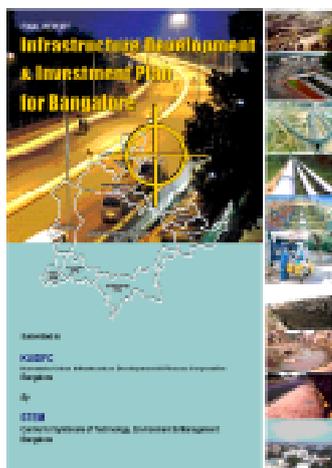
- 'Zero latrine villages' reduced from 452 at the beginning of the Planning Phase to 33 as of March, 2005.
- Significant and progressive behavioural improvements, with regard to sanitation & hygiene, as revealed by the VHF Quarterly Reports.
- Further improvements in Knowledge, Attitude & Practices *vis-a-vis* sanitation & hygiene, as revealed by the Self Assessment Study of October 2004, as compared to the KAP Study of 2003.
- Significant progress in the construction of HHLs (69,335 units) and SLCs (53,323 units) during the project consultancy period.
- Noticeable reduction in incidence of water-borne diseases in project villages in 2004, compared to the previous year.

Reduction in Incidence of Water-borne Diseases in Project Villages

The goal of any water-sanitation intervention is an improvement in the quality of life and total health of the local population by reducing the occurrence of water-borne diseases. Following the SHP interventions, there has been a reduced incidence of water-borne diseases in the 'Jal Nirmal' Project villages, as can be seen from the table alongside.

Disease	No. of cases in 2003	No. of cases in 2004
Gastroenteritis	2787	1596
Diarrhoea	15871	10880
Typhoid	2540	1288
Jaundice	685	465
Polio	1	1
Malaria	23120	17630

Note: Based on data collected through VHF's co-ordinated by SAs and DSUs



STEM completes Study on Bangalore's Infrastructure

STEM has prepared an **Infrastructure Development and Investment Plan (ID&IP) for Bangalore for the period 2005-30**. The Consultancy was carried out in conjunction with the centrally sponsored 'Mega City Scheme' under implementation in Bangalore city, since 1995. The formulation of the ID&IP also involved an assessment of

- current status of supply & demand of basic amenities and urban services in Bangalore Urban Agglomeration (BUA)
- financial capability of ULBs and implementing agencies in Bangalore; and
- benefits accrued from projects implemented under the Mega City Scheme

The Report has been submitted to the Karnataka Urban Infrastructure Development Finance Corporation (KUIDFC), the sponsors.

Consolidating Sectoral Capability: STEM Forges Ahead

Since the early '90s, STEM has been actively engaged in **Research & Consultancy in Planning, Development & Management of Water Resources and Rural Sanitation & Hygiene** as also the implementation of related project components. The Society has undertaken nearly 20 such sectoral assignments to date. They were complex exercises that involved elaborate statistical sampling, diagnostic surveys, data analysis, monitoring & evaluation and, above all, building rapport with a variety of stakeholders at different levels.

As reported in the last issue of *STEM Reporter*, the Society was awarded three more RWS&S Sectoral Assessment studies, during the last quarter of 2004: (i) **Rapid Assessment for Rural Water Supply and Sanitation Sector in the State of Uttar Pradesh** sponsored by Directorate of Panchayat Raj, Govt of UP; (ii) **Consultancy Services for Rapid Assessment of Tamil Nadu Water & Drainage Board (TWAD) in Tamil Nadu** sponsored by UNICEF India Country Office; and (iii) **Rapid Assessment of Rural Water Supply and Sanitation (RWS&S) Sector in the State of Tripura** sponsored by Rural Development Department, Govt of Tripura. These Studies have since been completed.

As a means of redefining its relationship with the states in the RWS&S Sector, the Rajiv Gandhi National Drinking Water Mission (RGNDWM) has proposed Sector Assessment as an integral part of the MoU process. The three rapid assessment studies undertaken by STEM were thus, broadly, a quantitative and qualitative appraisal of the status of the rural water supply and sanitation sector across the states in relation to the existing reform agenda.

The studies paid special attention to (i) the impact of government RWS&S programmes, in terms of coverage, access, use and sustainability; (ii) the status of sector reforms pertaining to Augmented



Rural Water Supply Programme (ARWSP), Sector Reform Project (SRP), and Total Sanitation Campaign (TSC) and key lessons learned; and (iii) areas that need to be reinforced in order to institutionalise sector reforms vis-à-vis policies, institutions, financial systems, HRD, resources and empowerment of women & weaker sections for participation in decision-making. In this respect, issues of inequity and the impact of the programmes on marginalized groups were highlighted. The studies also identified and developed key issues for inclusion in the State Vision Statements.

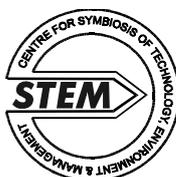
The methodology included desk reviews, follow-up interviews with key informants, and visits to first

generation villages in which SRP and TSC had been implemented. The field work consisted of meetings with members of village panchayats, VWSCs & women's groups, transect walks and tap stand surveys for measuring equity in water distribution.

During the first quarter of 2005, STEM was also entrusted with the responsibility of organizing a series of **Workshops on Change Management in Water & Sanitation Sector for Engineers in Andhra Pradesh**, as part of the ongoing sector reforms programme in that state. The consultancy is sponsored by the State Water & Sanitation Mission (SWSM), Panchayat Raj Department, Govt of Andhra Pradesh.

As part of its sectoral reforms agenda, the AP Government visualizes drastic changes in the state water and sanitation mission. Consequently, providing Change Management training to the engineers involved in the sector has become an imperative. A series of five-day workshops has, therefore, been proposed. Around 100 engineers, both men and women, representing all the 22 districts, are expected to benefit from the exercise. The topics planned to be covered by the workshop include: (a) participatory methodology & principles; (b) team work and components; (c) development models and approaches; (d) roles and functions in groups; (e) sanitation and hygiene promotion concepts & strategies; (f) group theories and processes; (g) change management principles & cases; and (h) modes of effective communication. The first four workshops in the series were organized at Hyderabad, during November-December, 2005.

Drawing on its more than two years' experience as SHP Management Consultants for 'Jal Nirmal', STEM has also prepared a **Training Module on Rural Sanitation & Hygiene** on behalf of the Karnataka Rural Water Supply & Sanitation Agency (KRWS&SA).



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