

Managing Committee - 2005

The responsibility of the management is vested in 9 Managing Committee Members and 30 Executive Committee members representing different ULBs, UDAs and Institutions in Karnataka. The Association is supported by highly qualified and experienced professionals in Urban Planning and Management. These professionals work with partner organizations and consultants.

CMAK Managing Committee Meetings were held on 6th August 2005 & 3rd September 2005.

The Managing Committee Members:

Designation	Office Bearers	Name of Present Incumbent
President	Commissioner Bangalore Mahanagara Palike	Mr. K.Jothiramalingam, IAS
Vice President 1	Commissioner Bangalore Development Authority	Mr. M.N.Vidyashankar, IAS
Vice President 2	Managing Director, Karnataka Urban Infrastructure Development & Finance Corporation,	Mr. Jawaid Akhtar, IAS
Vice President 3	Managing Director, Karnataka Urban Water Supply & Drainage Board	Mr. B. Srinivasa Reddy B.E. M.I.E., F.I.W.W.A
General Secretary	Joint Managing Director, Karnataka Urban Infrastructure Development & Finance Corporation	Mr. M. Maheshwar Rao, IAS
Joint Secretary	Finance Member, Bangalore Development Authority	Mr. M. N. Sheshappa, KSAS
Joint Secretary	General Manager (Urban Affairs), Karnataka Urban Infrastructure Development & Finance Corporation	Mr. Ashok D. Jain, KMAS
Joint Secretary	Commissioner, Belgaum City Corporation	Mr. K. D. Birje, KAS
Treasurer	Deputy General Manager (Accounts), Karnataka Urban Infrastructure Development & Finance Corporation	Dr. J. V. Vandana Kumar, KSAS

Be a supporter of CMAK by

- Paying your institutional dues
- Participating fully in CMAK's activities
- Donating generously
- Organising events on behalf of CMAK at your Institution
- Being a proactive member

Remember CMAK is your Institution

City Manager aims to stimulate debates and create a learning forum for exchange of ideas on various themes / issues related to urban planning management & governance. We invite individuals, officials of local bodies, experts, professionals and those interested in urban development to share information & their perspectives through this forum.

The CMA movement is being supported by ICMA, USAID, USAEP, NIUA, FIRE

Please send your articles/information to:
The Editor

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This issue is compiled by Ms. Deepti Nanawati, Ms. Devi Kalyani, J. Mr. H. G. Nandish, Ms. Sapna. N, Ms. Prathana Rao & Dr. Veena U M
For Internal Circulation Only

22nd Aug' 05: Delegates from Sri Lanka visited CMAK to study the "BEST PRACTICES IN URBAN SECTOR OF KARNATAKA". CMAK shared information related to 'Solid Waste Management' and 'Best Practices Documentation and Replication in Karnataka' with the team.



Delegates from Sri Lanka at CMAK

23rd Aug' 05: CMAK had organised an interaction session on "LANDFILL FOR MUNICIPAL SOLID WASTE". Mr. Sampat Kumar, Consultant, SWM, explained various solid waste disposal methods, stages involved in designing, data required & development of the site with few case studies. Assistant Executive Engineers, Environmental Engineers, Health Officers and Executive Engineers from various ULBs across the state participated in the session.



Interaction Session on "Land Fill Sites"

29th Sep'05: A workshop to share various initiatives in urban and rural areas of Karnataka was organised by Infrastructure Professional Enterprises as part of international study tour on behalf of UNDP Bangladesh on "RURAL GOVERNANCE IN INDIA". A team of 18 members comprising elected representatives and Senior Govt. Officials from Bangladesh visited India. CMAK was invited to disseminate and share information on good urban practices in Karnataka. The session on Urban sector was held under the chairmanship of Mr. Nilaya Mitash, Additional Secretary (Municipal Reforms), UDD.



CMAK affiliates with ICMA at Minneapolis

18th-30th Sept'05: CMAK signed an affiliation with ICMA at the International Reception held on 25th September 2005 at the 91st ICMA Annual Conference held at Minneapolis, Minnesota, U. S.



The Indian delegation at ICMA Annual Conference

Mr. Jothiramalingam, President, CMAK and Ms. Deepti Nanawati Coordinator, CMAK represented CMAK at this event and attended the two week Study tour and Conference. They were part of the Indian delegation which consisted of participants from the states of Gujarat, Karnataka, Madhya Pradesh and Orissa. The ICMA Conference was attended by 3000 City Managers from different countries across the globe.



A Training Session at ICMA Annual Conference

Message to CMAK Members...

City Managers have a major responsibility of managing and maintaining a city. Discipline within the various levels of City Managers will surely help to improve the circumstances which would make a way towards better city and state. City Manager has to first follow and implement the most basic practice which will bring in efficiency within a system.

1. What are objectives of KUWS & DB?

- The Board aims to provide adequate Water Supply from assured and safe sources and proper sanitation facility to all the urban areas. The two main objectives of KUWS & DB are,
- Implementation of Water Supply and Under Ground Drainage schemes in all the Urban areas of the State except Bangalore city.
 - Implementation of these projects and transferring the projects to the concerned Urban Local Bodies for operation and maintenance.

2. What is the status of urban water sector in Karnataka with respect to surface water as source and supply in Ipcd?

Water sources have largely been shifted from ground water source to surface water source. Out of 226 ULBs in Karnataka, 201 Urban Local Bodies' water source has been shifted to surface water. Urban Local Bodies under Bangalore Urban, Tumkur and Kolar districts are yet to be covered. KUWS & DB tries to meet the standards prescribed by Central Public Health Organization as per which per capita water supply should be:

- Upto 20,000 population : 70 Ipcd
- 20,000 to 1 lakh population : 100 Ipcd
- Above 1 lakh : 135 Ipcd
- For ULBs in Rural areas : 55 Ipcd

The standard per capita water supply is very well maintained at the bulk point but due to distribution losses the same standards could not be met at the distribution point.

3. Please brief us about your state of art project monitoring system.

KUWS & DB has set up an Electronic Data Base Management System linking all its divisional and sub divisional offices in the state. All the inward and outward file movement are centralized and hence tracked to avoid the delay. All the file related to any project will be moved online including noting sheet and attachment. In case any file is retained at any level for more than three days the file automatically gets forwarded to the next higher level, thereby fastening the process.

4. Please brief us about the rain water harvesting initiatives undertook or supported by the board.

The rain water harvesting is being implemented in the state on a smaller scale. As because of unscientific ways of ground water recharge, the ground water is getting polluted. So the board is assisting the Local bodies to utilize efficient low cost filters which would prevent the ground water from further pollution.

5. What are unique initiatives taken up by KUWS & DB?

The Board has taken up many initiatives not only in implementing the projects, but also in management field. They are,

- The board is the first in the state to have ISO 2000 certification.
- Introduced Management Information System.
- Introducing e-tendering to increase transparency in tender process from 1st Oct 2005. Letter of Credit and requisition will be done online. All the payments are credited through bank accounts.
- Biometric attendance system
- Personality Development Training for grass root level workers to bring in commitment and better efficiency.
- Construction of a Theme Park at Yelahanka. This is inspired from a similar model in Mexico. The work will be taken up in phase wise manner.

6. What is the extent of private sector participation in this sector in the state?

The board has many joint ventures involving private sectors. Many of the urban water supply schemes handled by the board have a private operator taking care of the operations & maintenance.



Mr. Srinivasa Reddy,
Managing Director,
Karnataka Water Supply
& Drainage Board

Interviewed by Mrs. Sapna N and Ms. Devi on 8th August 2005

Karnataka Municipal Information System

The project "Status of Human Resource in Municipalities" has been renamed as "Karnataka Municipal Information System". In total, around 40 analytical reports, under four modules, namely MIS, FIS, PIS and MINDS have been uploaded on the internet. A state level meeting with all the Project Directors was held in the month of August 2005 highlighting the discrepancies in the data submitted (Form A and 4 MIS reports) and were instructed to resubmit the accurate data. So far 8 out of 27 districts have submitted the corrected reports and 23 ULBs have submitted the corrected Form A - Municipal Profile.

The software for web based application of Personnel Information System (PIS) and Financial Information System (FIS) is being developed and will soon be uploaded on the web. Short research papers are being written based on the analysis of the compiled data to identify potential areas of re-engineering and also to formulate strategies for improvement of Municipalities. The data base created is also being shared with other agencies. Recently in the month of September 2005, Municipal profile of 7 CMCs and 1 TMC around Bangalore was shared with ICMA and ICRA for performance measurement of the various services given by the ULBs.

Ms. Prarthana M. Rao, Architect, Environmental Planner, Research Associate (HR), CMAK

Center for Performance Measurement

The filled data formats have been collected from 6 ULBs. Data collection template has been sent to another 2 ULBs i.e. Hubli-Dharwad CC and Chikkanayakanahalli TMC to facilitate the Benchmarking and Rating of ULBs. Comparative data matrix has been developed to check the validity of the data. Based on the matrix as well as filled data template, the list has been prepared where the validity of the data needs to be checked. The list has been sent to selected ULBs i.e. Belgaum, Gulbarga, Shimoga, Bijapur, Dasarahalli, Bommanahalli and Tiptur for further clarification through respective district Project Directors in the review meeting held at DMA on 15th September 2005.

To conduct Citizen Perception Survey, CMAK invited EOI in which three agencies have been short listed. The short listed agencies have been issued with the RFP documents. The last date for submitting filled RFP documents was 29th Sept. 2005. An Evaluation Committee has been set up to select the consultant to conduct the citizen perception survey. Technical and financial evaluation formats have been developed. The technical proposals are under evaluation.

Mrs. Veena U.M, Phd in Agriculture, Research Associate (CPM), CMAK

CMAK Research

Solid Waste Management

The action plans for SWM of 37 ULBs have been finalized. The funds are released for 31 ULBs. A CD titled "Documents under Nirmala Nagara Yojane version-2" was finalized along with DMA and circulated to all the ULBs, Project Directors and Deputy Commissioners.

CMAK assisted Assistant Executive Engineer, Assistant Engineer, Health Inspectors of Gokak, Bommanahalli and Yelhanka CMC in preparing the action plan. A workshop for newly transferred Commissioners and Assistant Executive Engineers is planned to be held in the month of October in association with DMA, KUIDFC and IDeCK. In this workshop, state policy on ISWM, Action Plan and tender documents will be explained.

Mrs. Sapna N, Environmental Engg, Research Associate (SWM), CMAK

Best Practices Transfer Program

CMAK has worked out modules for the transfer of initiatives. They are as follows:

Module 1

The initiatives can be directly transferred to the surrounding towns / cities through the process of mutual learning.

Advantages

- This module is advantageous because the exchange of ideas can happen frequently as it is easy to travel and see what the neighboring town / city is doing.
- 3 to 4 towns can also be targeted together (keeping distance as a criterion).
- Modifying the initiative as per contextual needs will be easier as the learning city would be in the same boundary / jurisdiction / similar context.
- It is anticipated that due to the above reasons transfer may be faster.

Module 2

A brief on each of the initiatives has to be sent to all the ULBs in Karnataka, asking for their feed back to understand the priorities of the ULB to identify suitable Best Practices. This Process is more time consuming.

Module 1 & 2 will be applied depending on the type of Best Practice and the response received by it from the ULBs.

Ms. Devi Kalyani J, Architect, Urban Designer, Research Associate (BPP), CMAK

International Days

- 1st Saturday of July: International Day of Cooperatives
- 11th July : World Population Day
- 12th August : International Youth Day
- 8th September : International Literacy Day
- 16th September : International Day for the Preservation of the Ozone Layer



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Mokshda Green Cremation System (MGCS) -A Novel Way to Protect Environment

Death is a universal truth. Cremation of a dead human body is a traditional custom since the beginning of the Indian culture. Nearly 50 - 60 million trees are consumed annually as firewood leading to deforestation of about 1500 to 2000 sq.km of forest/tree cover for burning dead bodies. This method also results in the emission of about 7.6 billion kg of Carbon Dioxide/annum thereby adding to global warming.

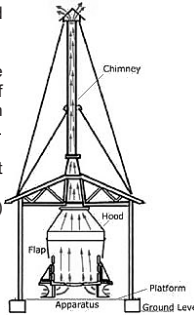


In a normal crematorium, 22 Kg of firewood is required for the complete cremation of a dead body, but practically 400 to 600 kg of wood is consumed for this purpose. Therefore, the need for an improved system with the focus on maximizing the combustion efficiency and minimizing water and air pollution was strongly felt. Through consistent and dedicated efforts, the NGO has come up with an environment friendly, technically sound and user acceptable improved wood based cremation system namely 'Mokshda Green Cremation System'.

The Green Cremation System reduces the firewood consumption to about 150 kg (about 60% of the present average consumption of 400 kg) and is free of air pollutants like smoke and solid particulate matters (SPMs). Burning 60% less firewood helps in reducing an equivalent amount of Carbon Dioxide gas emissions and thereby minimizing the global warming effects. MOKSHDA has come up with this design after rigorous efforts & research for 12 years. The system has been evolved through 71 stages of modifications and with the approval & financial support of the Ministry of Environment & Forests, GoI. Practical problems on the ground have been addressed considering the traditional religious customs and sentiments of the community.

The system has been designed on the sound principles of thermal science to maximize the combustion efficiency and minimizing wastage of heat. This system works on the basis of **Natural air drafting effect**. In the picture on right, arrows depict flow of air from high pressure zone at ground level to low pressure zone at a height above ground level. Following points have been considered into Mokshda Cremation System

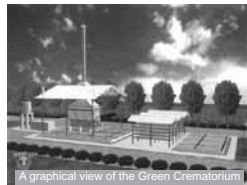
- Complete combustion of wood to give full heat energy by providing controlled & sufficient amount of air
- To control wastage of heat and maximize the utilization of heat (complete combustion)



Advantages of MGCS to the local bodies and the community are as given below.

- Saving in wood 60-70% (Tested)
 - Reduced air pollution 60-80%
 - Saving in cremation time 50-60%
 - Saving in money 50-60%
 - Provide clean environment of higher order
 - Electricity consumption and maintenance expenses are practically nil.
 - Life of the system is more than 20 years.
 - All rituals like Tarpan, Mukhagni etc. can be performed without any change
- Thus, user acceptability is good.

The total investment can be recovered in less than one year. The capital cost may vary from 20-30 lakhs. By adopting this system there is no recurring cost involved in O&M during its life span of about 20 years. Considering the merits of the system, the Global Environment Facility (GEF) under the United Nations has approved a Project Development Facility (PDF) for a Medium Sized Project (MSP) for promoting this environment friendly and energy efficient technology in 11 important cities of India namely; Mumbai, Chennai, Kolkata, Bangalore, Hyderabad, Ahmedabad, Nashik, Jaipur, Ujjain, Allahabad and Chandigarh. Since it is a new concept, Mokshda offers the system as a turnkey project to ensure its sustainability. The project is implemented in stages such as cover installation of the system, training of local groups and operators about the methodology of use, public participation and awareness etc. This package also includes the O&M of the system by the NGO for a period of one year from its commissioning. The operation is simple, requires semiskilled manpower only and even the current operators can be trained for this purpose. The MoEF supports this technology under its ongoing programme of the National River Conservation Plan (NRCP) and provides financial assistance equivalent to 70% of the project cost with the remaining 30% cost to be borne by the concerned local body.



For further information:

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Accounting Reforms in Karnataka

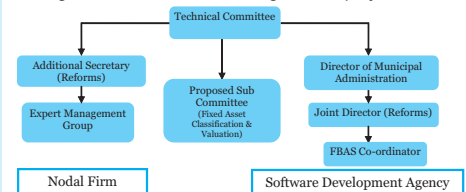
Government of Karnataka is undertaking accounting reforms in ULBs of Karnataka. Phase I covers 57 ULBs under Nirmala Nagar Programme assisted by ADB. Phase II covers 163 ULBs under Karnataka Municipal Reforms Project assisted by WB. These reforms are aiming at transition of current single entry cash based accounting system of ULBs to accrual-based double entry accounting system. The outputs are;

- Opening Balance sheet consisting of assets owned & liabilities owed by the ULBs since their inception.
- Statement of financial performance i.e. Income & Expenditure statements which would also reflect the operational efficiency of ULBs.
- Balance sheet at the year end showing financial position of ULBs on the last day of financial year.
- Budget statements, i.e. statement of receipts and payments showing appropriations in cash and other funds of ULBs during the financial year.
- Trained officials at various levels

Institutional arrangements at State level:

- Changes brought in Cadre and Recruitment Rules
- A consultancy firm has been appointed in Sep'04 to provide professional advice and act as technical secretariat to Government.
- A MOU has been signed with Software Development Agency (SDA) for development of Municipal Accounting Software.
- A Technical Committee has been constituted in Aug'04 to review and approve the various documents, reports and proposals made under accounting reforms project.

The figure below aptly summarizes the institutional arrangements made in accounting reforms project.



The Technical Committee being the apex body of accounting reforms is constituted vide a GO. The committee is headed by Additional Commissioner (Finance), Bangalore Mahanagara Palike. The committee reviews and vets various policy documents and action plans initiated under the accounting reform project. The other officers at various levels are the executing authorities of the project. They will not only implement the decisions taken by the technical committee but also pose the ground

level implementation problems before the committee, for enabling the committee to formulate the policies, which are most practical in nature. The officers have to act in tandem with various Government offices, Software Development team and consultants appointed for the project. The software development agency is a Non Government Organisation, with whom a MoU has been signed for development of Municipal Accounting Software. Consultants and executive officers of the project provide the Government Accounting domain knowledge to the software development team. Nodal firm is a professional consultancy firm appointed for the project. It supports the reform process by providing technical inputs and by developing various policy statements and manuals as per the decisions taken at the technical committee.

In order to imbibe the expertise of accounting reforms and develop the sustainable capacity to roll out these reforms in remaining ULBs of the state, an Expert Management Group has been constituted. It consists of officers of the rank of Dy. Controller, State Accounts Department and selected municipalities' accountants.

On ULB front: The newly recruited B.Com graduates through competitive exams will be trained to shoulder the additional workload during the transition phase.

Project Milestones: The entire project has been divided into 5 tasks which will be implemented either concurrently or in a phased manner.

- **Task-I: Policy Support** - Review of existing accounting systems and formulation of new accounting policies in compliance of recommendations of National Municipal Accounting Manual of MoUD, GoI.
- **Task-II: Software Support** -Developing software through co-ordination with Software Development Agency
- **Task-III: Training** - Familiarising and training ULB Employees and CA firms for implementation
- **Task-IV: Administrative Support** - Administrative and Technical support during the implementation
- **Task-V:** Pilot implementation of new accounting system in Mysore, Byatarayanapura and Maddur.

Conclusion:

The long-term objectives of these accounting reforms are not only to steer the ULBs to 'self-dependence status' by introducing transparency, accountability, financial controls and internal checks in the accounting systems of ULBs, but also implementing 74th Amendment to the Constitution in true spirit.

For further information:

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CRISIL Infrastructure Advisory

CRISIL Infrastructure Advisory is a consulting division of CRISIL since 1995. The organisation develops infrastructure through public-private partnership as a key focus area. The organisation has been working very closely with the Government both at Centre and State level, in structuring bankable projects and in managing the commercialization/privatization programme in a transparent, objective and time-bound manner. Its activities range from developing enable legislation and proactive sector policies to structuring concessions, undertaking complex feasibility studies, managing project procurement through global competitive bidding, assisting with fiscal and public sector reforms, and valuation & value enhancement through structuring.

Functions and Objectives

CRISIL Infrastructure Advisory's spectrum of activities includes catalysing economic development through creation of appropriate policy frameworks, sector reforms, regulatory support, project structuring and global competitive bid process management for large and complex projects.

Area of work

The organization blends the best global practices with analytical excellence and a deep understanding of the local environment to provide policy, regulatory and transaction level advice to government.

Some of the ongoing projects:

- Institutional and Reforms assessment for Ahmedabad Municipal Corporation
- Organizational Capacity Building of Maharashtra Pollution Control Board (MPCB)
- Financial & Economic Viability Assessment of the Saurashtra Branch (Main) canal of the Sardar Sarovar Narmada Project
- Tariff setting for BEAIL pipeline project, Gujarat
- Urban Finance Assessment & Framework Design for Karnataka
- Assistance to KUIDFC for facilitating preparation of Management Action Plans (MAPs) for sixteen towns
- Assessment of Financial Status and Debt Servicing Capacity of 17 ULBs of Karnataka (KMRP)
- Financial Assessment of UGD Sewerage project, Bangalore Water Supply and Sewerage Board and 8 Urban Local Bodies around the Bangalore city

The organisation provides consultancy services to the ULBs in the following field,

- Financial management systems
- Tax and revenue administration
- Organisation and management action plans
- Organisational planning and restructuring
- Enhancing service quality
- E-governance and IT strategy
- Training and capacity building
- Feasibility studies
- Project structuring
- Procurement and bid process management
- Contracts and negotiation
- Tariff studies

□ Project promotion and Legal and policy frameworks
CRISIL provides advisory and research services in Power, Oil & Gas, Ports & Roads, Airports, Urban Infrastructure, Water, Sewerage, waste and Tourism. In urban sector it undertake training of Municipal accounting and finance for the clients.

Institution

Study Tour to Shirpur

CMAK had organised study tour to motivate the Elected Representatives and City Managers from the State of Karnataka. Directorate of Municipal Administration decided to send 100 of them on a study tour to Shirpur which was adjudged the Best Municipality in its category in the State of Maharashtra during Sant Gadge Maharaj Swachata Abhiyan organised by Govt. of Maharashtra. City Managers' Association, Karnataka was assigned the task of organising this study tour. It is decided to organise 4 different tours one each from the four different divisions of our State: Bangalore, Belgaum, Gulbarga and Mysore. The tour would originate from the respective Divisional Headquarters.

Municipality Office: The team visited the Municipality Office and interacted with the personnel from different departments. The use of Muljet machines and modified auto rickshaws used for door to door solid waste collection were demonstrated.

Parks, Town hall & Gymkhana: The team had a look at the pay and use parks developed and maintained by the Municipality. It also visited the ultra modern Gymkhana developed by using funds raised from the public.

Water Supply Headworks and Treatment Plant: The team was taken to the W/S Headworks and Treatment Plant whose operations are completely automated.

Composting Plant: The team studied the mechanical composting unit set up by the Municipality. Here composting is done using EM (Bacteria) culture. The team also visited vermicompost unit which treats the green waste from the market to highly valuable compost. The team also studied the marketing strategy to sell compost.

Toilets: The team had a good look at the toilet complexes built and very well maintained by the ULB.

Hospital: The team went to the 80 bed hi-tech hospital run by the ULB.

Shopping Complex: The officials from the ULB escorted the team to the shopping complex built by them and also explained the procedure of letting the premises on rent.

Afforestation: The planting of neem saplings on a large scale in and around the town was shown to the participants.

The team also visited the various educational institutions, co-operative institutions and other manufacturing units in Shirpur which aids its economy. The team members had an opportunity to have a ride in aircraft and view the entire town.

Study Tour

The first batch from Bangalore Division undertook the study tour from 25th to 30th September 2005 for which the participants were as follows:-

- Mrs. Kalpana Shivanna, *President, TMC Magadi.*
- Mr. K.L.Harish, *President, TMC Kunigal.*
- Mr. P.N.Anjan Kumar, *President, TMC Pavagada.*
- Mr. G.N.Bettaswamy, *President, TP Gubbi*
- Mr. Naganna, *Councillor, CMC Ramanagaram*
- Mrs. Pramila Baliga, *Councillor, CMC R.R.Nagar*
- Dr. Prasanna, *Medical Officer of Health, BMP*
- Mr. Shivnanjegowda, *Chief Officer, TMC Tiptur.*
- Mr. Chandrashekar, *Chief Officer, TMC Sagar*
- Mr. V. Jayanna, *Chief Officer, TMC Hosadurga*
- Mr. J.K.Srinivas Murthy, *Chief Officer, TMC Mulabagilu*
- Mr. B.Hanumantappa, *AEE, CMC Shimoga*
- Mr. S.P.Ranganatha, *AEE, CMC Dasarahalli*
- Mr S.S.Biradar, *AEE, CMC Harihara*
- Mr. Manjunatha, *Jr. Engineer, TMC Sira*
- Mr. K.S.Chandrashekar, *Jr Engineer, TMC Vijayapura*
- Mr. Yerappa Reddy, *Jr Engineer, TMC Chikkaballapur*
- Mr. B.A Nagalapur, *Sr. Health Inspector, CMC Davanagere*
- Mr. S.I. Manjunatha, *Sr. Health Inspector, CMC Channapatna*
- Mr. Shivakumariah, *Sr. Health Inspector, CMC Tumkur*
- Mr. P Vasantha, *Revenue Inspector, TP Honnali*
- Mr. Ravindra Naik, *Asst Statistical Officer, DMA*
- Mr. Vinay Vijaydev, *Nodal Officer, DMA*
- Mr. Keshya Naik, *Research Officer, DMA*
- Mr. H.G.Nandish, *Joint Coordinator, CMAK.*



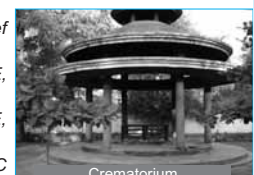
The host with the Guests



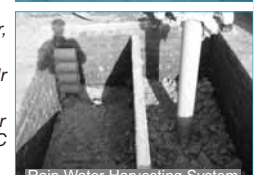
Water Supply System



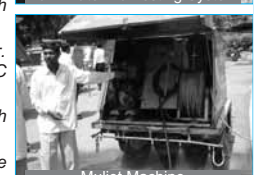
Compost Production Unit



Crematorium



Rain Water Harvesting System



Muljet Machine



Vermi Composting Unit



Mr. Narayanappa B.H., Municipal Commissioner, Davanagere City Municipal Council, Davanagere.
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e mail: bh_narayanappa@yahoo.co.in

Location: Davanagere city is located at 14°-28'N latitude and 75°- 55'E longitude at an altitude of 602.5m above the mean sea level.

Linkages: The city is situated in the heart of the Karnataka state. Davanagere is well connected to Pune, Bangalore, Shimoga and Hospet through rail and road network. The city is linked through NH- 4.

History

Davanagere is derived from the word "DAVANA KERE" which means "Village of Lake" This City has historical background, as this village was within the province of many kingdoms like Chalukya, Pandyas, Hoysalas, kings of Vijayanagara, local "Palyagars" of Chitradurga. This province was also ruled by Maratha Sardars as this town was given to Maratha sardar by Hyder Ali.

During 1997, Davanagere was bifurcated from Chitradurga District and made district head quarter consisting of six taluks. Davanagere City Municipal Council has come into existence during the year 1939.



Places of Interest

The city is well known for its educational institutions and textile industries which are the major cause for floating population. There are many temples, churches and lakes which attracts the tourist.

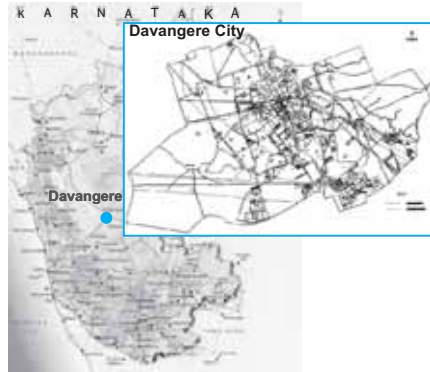
Vision of the City

The Vision for Davanagere city as envisaged by the Municipal Commissioner is to improve the service delivery levels of the ULB in terms of introducing Management Information System, opening of Zonal Offices and Citizen Service Centers. The CMC also aims to have scientific landfill unit, extension of UGD facility, installing meters for water supply and imposing service tax other than property tax.

Future Projects of the City Corporation

- Implementation of solid waste management action plan as per the State Policy for ISWM.
- ADB schemes
- Property tax computerisation under GIS scheme

City Profile



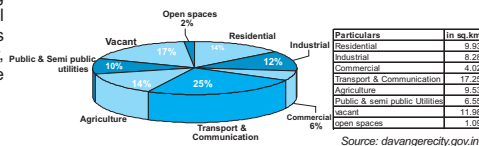
City Statistics

Area of jurisdiction	: 68.63 sq.km.
Population (Census 2001)	: 3, 64,523
Density	: 53 per Ha
Number of wards	: 35
Average Rainfall	: 680 mm
Average Temperature	: Max -42°C Min -20°C

Road Length	:488 km
Number of streetlights	: 12,845
Water source	: Thungabhadra river & Bhadra Canal
Per capita water supplied	: 90-100 lpcd
Garbage generation	: 99 tonnes per day
Garbage collection	: 61.6 tonnes per day
Number of landfill	: 2 nos.
Water treatment plant	: 3 nos.
Waste water treatment plant	: 1no.



Land Use



For further information:

Browse www.davangerecity.gov.in
Contact PRO at +91 8192 250684

Best Practices Transfer Program

Team Members

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Study & Analysis of Initiative from State of Madhya Pradesh (MP)

A. Rain Water Harvesting(RWH) Initiative by Indore Municipal Corporation (IMC)

Description of Initiative

The IMC established a RWH cell, which is an independent department with technical persons. All engineers at IMC were trained for this purpose. In turn these engineers conducted training for 200 plumbers. The IMC has 5 RWH experts for technical assistance and advice. 10 methods, for case to case application were identified and either each method or combination of these 10 methods are advised based on site conditions by the experts when citizen approaches them on a case to case basis. 5 Engineering firms have been short listed for project design and execution by IMC. The cell has a tie up with private agencies to print & distribute catalogues for sharing information. Kirloskar Pumps is one such agency the cell has roped in. A RWH information kit is provided in dual language along with its products. The cell organizes exhibitions in neighborhood, invites citizens through the residential associations to attend the exhibition.

RWH efforts by IMC intends to conserve water. In addition it helps in solving problems like local flooding & water logging. It helps in Beautification of the town

Approach to RWH

1. Allocating budget for RWH
2. In-house technical knowledge
3. Supervision of execution
4. Incentive system- 6% rebate on property tax and Rs. 1000 cash award
5. Bye-laws make RWH mandatory for building having G+3 floors and above



Team Visiting RWH Initiative

B. Pitra Parvat Scheme (An Innovative Plantation Scheme) by Indore Municipal Corporation (IMC)

Description of Initiative

Pitra Parvat is a very simple initiative which can be adopted as it is. A Corporation land is provided near a water station for plantation purpose; so that a water source is close by. The manpower (11nos) consists of people from horticulture background, garden workers, painter and for earth works labours are engaged on daily wages basis. The Corporation looks after the plantation and Rs. 251 is taken as maintenance charge from the tree planters. After desilting of water tank, silt is supplied to this area and this place serves as a venue for eminent visitors to have a memory with the city. Due to the emotional value attached, the Corporation has to ensure survival of the trees and maintenance of the area. 15000 trees stand in this land now.

Targetted Towns

Davanagere Municipal Corporation has already identified land for the implementation of Pavitra Vana with the help of Forest Department and Deputy Commissioner of Davanagere District.



View of Pitra Parvat

C. Public Private Partnership in development of roads by IMC

Description of Initiative

This is a comprehensive and extraordinary initiative because of its scale. 400 internal roads in various localities, across economic sections including lower middle class and slum area have come up for development of roads.

Suggestions:

The team felt that a part of this initiative could be replicable in the richer pockets of residential areas of Karnataka towns. If someone can instigate one locality to take up improvement by PPP and the Corporation highlights the efforts at various platforms and using media, a competition among localities can be created. The Corporation could force this by taking up improvements on priority for areas which pay up first. But this is subjective and depends a lot on local culture.

The advantage of this is that the Corporation can now focus more on common areas i.e. arterial and sub arterial roads where in internal roads are the responsibility of the residents. Now the Corporation is cashing on this effort done once for cost recovery for storm water drains, water supply, parks. In a way the Corporation now bargains with the citizens, by showing examples of local areas who are coming up for amenities and willing to pay for it.

Team Members

Mr. Pujar.B.C, Commissioner, Gokak CMC.
Mr. Srinivas, Environmental Engineer, Mandya CMC.
Ms. Devi, Research Associate(BP), CMAK.

1. Comprehensive disposal of Bio-medical waste generated at Belgaum

Action Taken: Some of the doctors from the Medical Association and Health Officer, Belgaum City Corporation in the year 2000 gave a serious thought on systemizing the process of collection and disposal of bio-medical waste. Even though the Municipality is not responsible for the disposal of bio-medical waste Belgaum City Corporation stepped forward to help, initiate this process which would in turn help the municipality, the doctors and the citizens.

Training programs for creating awareness

- The association conducted lectures, demonstrations and meetings specially to train the medical staff.
- Printed manuals were distributed during workshops.
- The association employees were also trained on segregation of wastes to ensure proper segregation and collection of bio-medical waste.

Innovations: Setting up of a system to treat bio-medical waste is an expensive affair. The major cost is required in fabricating the incinerator of desired capacity, shredder and mutilator. Belgaum has been very innovative in experimenting to fabricate these equipments locally for the required capacity and has been successfully treating the waste since 4 years. The cost is considerably low if the system is developed locally. Rs. 6,00,000 was the cost incurred while the incinerator was fabricated in Belgaum. Whereas incinerators available in the market of the same capacity costs roughly about Rs. 25,00,000.

Suggestions

- The field staff should be enforced to use safety gears.
- It would also be better if there is a technical staff at the site to check the process of disposal of bio-medical waste.
- Training for the D group workers has to be intensive and enforced to ensure proper segregation and avoid mixing of wastes.
- The Municipalities must involve and promote the govt. medical establishments also to be a part of this system.
- The site needs to be developed by planting trees.
- The waste water can be treated to the extent where the infectious components are destroyed and the resultant water can be used for watering the trees.

Targeted towns / cities: Towns / Cities having Medical Associations can take this initiatives. In this regard the team has suggested to consider towns / cities from the surrounding districts for replication i.e., Dharwad, Gadag, Raichur, Davangere, Hassan etc.

Best Practices Transfer Program

Team Members

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2. Generating revenue by selling Solid Waste at Rabkavi-Banahatti

Action Taken: Managing solid waste had become a critical aspect hence the CMC decided to outsource the collection and disposal of solid waste and thereby reduce the expenses incurred for Solid Waste Management. Rabkavi - Banahatti is an agriculture based town and selling of solid waste was a good idea and it clicked there as contractors came forward to buy organic waste through auctioning process.

Suggestions

- Complying with the MSW Rules 2000, source segregation of waste should be ensured. Collection of segregated waste would reduce the number of trips to the dump site and also augments revenue by selling recyclables marginally.
- Collection and transportation of secondary storage containers can be outsourced including the processing of bio-degradable waste in future programs, which would eliminate lacunas in the present system.
- Management of solid waste requires huge financial resources. Nominally cost incurred per ton of waste collection, transportation, treatment and landfill would vary from Rs.600 to Rs.1300. But here the CMC is earning money from waste.
- In the current scenario, if this initiative is transferred and effectively implemented by other local bodies then they can save considerable amount.



Team Inspecting Segregation of Waste

Targeted towns / cities

This initiative can be replicated in agricultural based towns and cities. However public inclination towards natural manure i.e. market for the products from municipal waste in the vicinity would make it potential area for replication. If cities are large then it should be properly sliced to accommodate two or more packages suitably. This initiative is easily transferable to the surrounding towns with in the vicinity of 10 - 15 km. The places suggested by the team for replicating this initiative is as follows: Mahalingapura, Mudhol, Jamkandi, Therdhal and Beelgi.

The elected representatives of Rabkavi & Banahatti are ready to help CMAK in promoting this initiative in their neighboring towns.

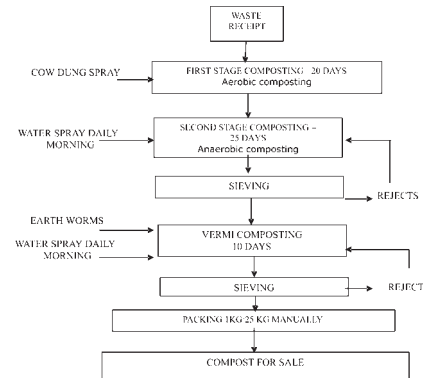
Best Practices Transfer Program

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Study & Analysis of Initiative from the State of Tamil Nadu

3. Namakkal... Zero Garbage Town

Situation Before: Managing solid waste was one of the problems faced by the Namakkal Municipality, which had turned into a serious issue after notification of Solid Waste (Handling & Management) Rules 2000 by the Hon'ble Supreme Court. The town generated 21 tonnes of waste per day.



Innovations in the process

- The recyclable waste which is not separated by the retriever is collected and planned to be utilized in the construction of rock garden.
- The previous waste dumps are now planned to be cleared to make a heap at one side of the landfill site on which an eco park will be constructed after capping the same.
- The unique feature of this town is that the waste is removed continuously by two dedicated auto model vans.
- Government Doctor visits the Municipality and checks the workers' health regularly.



The segregated primary waste from the households is collected using pushcart and bulk waste is collected directly by the transportation vehicles. The recyclables are separated into various types at two recycling units. The recyclables are then sold in the market. The drains and streets are being classified and cleaned regularly by the ULB workers(115 workers). The waste from pushcart is directly uploaded in the transportation vehicles using synchronisation technique. Entire waste collection, transportation and treatment is being outsourced at a cost of Rs. 2,40,000 per month. 5 trucks owned by ULB are given to the contractor along with the drivers for transportation of waste. The debris collection and transportation is the sole responsibility of the constructor. The land for compost unit is given on lease for three years. The company pays Rs. 325 per ton of vermi-compost produced to the municipality. Regular awareness programs are conducted through public announcements by mop-up-vans.

Financial Arrangement:

The average cost incurred by the local body per ton of solid waste collection, segregation, transportation, processing and unscientific disposal is Rs.1460. Once the sanitary landfill is formed, this cost may rise to Rs.1750/metric ton of waste generated.

Results Achieved: The municipality has successfully achieved;

- 1) No garbage & bin less town,
- 2) Odour-free atmosphere,
- 3) Reduction in problems related to stray animals & mosquitoes,
- 4) 90% reduction in complaints related to SWM.

Lessons to be learnt from this initiative

- The drain clogging problem has reduced by 95%
- The workers strength can be reduced for street sweeping once 100% door to door waste collection is initiated enabling the surplus workforce for other developmental activities.
- Regular awareness programs are must to make a SWM system effective and sustainable.
- The town needs to have a proper planning for debris management and cleaning of open areas.
- User charges have to be collected from the beginning of the process else people will refuse to pay in later stages.

Towns to be targeted: The Town Municipal Councils and Town Panchyats can be targeted for the Transfer Program.