



Workshop on “Pro-poor Urban Water and Sanitation Governance”

Bhopal, 18 – 19 March 2005

PROCEEDINGS

**Organized by
United Nations Human Settlements Programme
(UN-HABITAT)**

**In cooperation with
Government of Madhya Pradesh &
Asian Development Bank (ADB)**

Contents

Introduction	4
Recommendations	12
Next Steps/Follow-up Actions	16
Proceedings of Plenary and Working Group Sessions	19
Annexure I: Concept Note	31
Annexure II: Programme of Events	54
Annexure III: Addresses Delivered at the Inaugural Session and by Session Chair	57
Annexure IV: Matrix of Letters from City Mayors	66
Annexure V: List of Participants	67

Introduction

A. Background

At the turn of this century, 3.68 billion people, representing 60 per cent of the world's population of 6.06 billion lived in Asia. Urban population growth in Asia, currently at 2.7 per cent per annum, is 27 per cent higher than the global average. Asia is expected to double its urban population by the year 2020. By 2025, the majority of the region's population will live in cities. By 2015, there will be 153 cities of one million inhabitants, 22 cities with 8 or more million people, and 15 with 10 to 20 million people.

Asia, which is home to two of every three poor families in the world – twice as many as in sub-Saharan Africa, faces a major challenge in the water and sanitation sector. Eighty percent of the global population without access to improved sanitation, and almost two-thirds without access to improved water supply, live in Asia. The need for these basic services in Asia outstrips that of Africa, Latin America, and the Caribbean taken together.

To achieve the Millennium Development Goal and the related target of halving the proportion of people without access to improved services by 2015, an additional 1.5 billion people in Asia will need access to adequate sanitation facilities, while an additional 980 million will need access to safe water. In urban areas, the corresponding figures are 675 million and 619 million respectively. Emphasis on urban water and sanitation has also been placed in the Millennium Declaration by setting a target of improving the living condition of at least 100 million slum dwellers by 2020.

B. The Water for Asian Cities Program

The Water for Asian Cities (WAC) Programme is a collaborative initiative of the United Nations Human Settlements Programme (UN-HABITAT), the Government of the Netherlands and the Asian Development Bank (ADB) and countries in the region. The Programme was officially launched at the Third World Water Forum (WWF) on 18 March 2003 and a Memorandum of Understanding was signed between ADB and UN-HABITAT on the same day in Osaka, Japan, committing \$10 Million in grant for capacity building and follow-up investment loans of \$500 Million to Asian Cities. The first Asian Ministerial Forum was held in Osaka, Japan on 19 March 2003 and adopted a Ministerial Declaration on Water for Asian Cities.

The WAC Programme was developed based on Regional Consultation held in New Delhi, India, in April 2002 which recommended a new regional initiative on Water for Asian Cities that could promote pro-poor investments in water and sanitation in the region.

The Water for Asian Cities Programme supports the implementation of the water and sanitation related Millennium Development Goals and targets (MDGs) in Asian cities, specifically promoting pro-poor governance, water demand management, increased attention to environmental sanitation; and income generation for the poor linked to water supply and sanitation. The programme seeks to achieve this by mobilizing political will, raising awareness through advocacy, information and education; training and capacity

building; by promoting new investments in the urban water and sanitation sector; and by systematic monitoring of progress towards MDGs.

C. Programme Priorities

The programme focuses on the following thematic priorities:

- (i) ***Mobilization of political will through advocacy and exchange of information:*** Mobilizing political commitment calls for engaging policy level functionaries in the programme in a continuous manner. Information exchange is facilitated through internet (interactive network and website), newsletters, study visits, staff exchange etc.
- (ii) ***Creating a new ethic amongst children and communities through value-based Water Education:*** Interventions include capacity building for value-based water education in schools; establishing water education classrooms in pilot cities; community water education. Twinning of cities and schools are part of this initiative.
- (iii) ***Strengthening regional, country and city level capacities*** for integrated urban water management. This requires human resource development in a focused manner, strengthening the capacity of existing institutions and establishing a regional network of experts and institutions. Gender mainstreaming is an important cross-cutting theme of capacity-building at all levels.
- (iv) **Promoting integrated urban water management through demonstration projects focusing on:** income generation for the urban poor, demand management and environmental sanitation. Selected pilot projects will be undertaken to demonstrate the integrated approach and its benefits.

D. Water for Asian Cities Programme in Madhya Pradesh

Following the launch of the Program in March 2003. UN-HABITAT and ADB fielded a joint mission to the Ministry of Urban Development and Poverty Alleviation (MoUDPA) in India from 15 to 17 April 2003. The main aim of the mission was to brief the Government of India about the WAC Program and requesting the selection of a city in India to join the WAC Program. For the speedy commencement of the WAC Program in India, it was agreed both by UN-HABITAT and ADB to consider the selection of a city covered by the on-going ADB loan fact-finding mission in Madhya Pradesh covering water and sanitation issues.

Subsequently, another joint assessment mission was fielded to Madhya Pradesh from 27 April to 6 May 2003, exploring the feasibility of one or more cities in Madhya Pradesh for the Water for Asian Cities Program. The mission developed a Collaborative Framework for Water for Asian Cities in India. In December 2003 the Board of Directors of Asian Development Bank had approved a project loan of US \$ 200 million (about Rs.1000 Crore)

in the state of Madhya Pradesh for a project under the name of Urban Water Supply and Environmental Improvement in Madhya Pradesh (UWSEIMP).

The main objective of the ADB assisted UWSEIMP Project is to improve infrastructure and municipal services in the four major cities of Madhya Pradesh. The cities are Bhopal, Gwalior, Indore and Jabalpur. The project includes investment in physical infrastructure at city level and capacity building of municipal and state authorities with proposals for institutional reforms.

The project goal is to encourage sustainable economic growth and poverty reduction in urban Madhya Pradesh.

The objective of the project is to ensure that the quality of the urban infrastructure and municipal service delivery are improved in a sustainable manner to enable economic growth and poverty reduction to occur in four cities in Madhya Pradesh.

Madhya Pradesh is basically a rural state, but it is also increasingly urbanizing. The Government has therefore been giving increasing importance to its major urban areas. All the project cities selected for IUDMP have the potential to play major economic role, if proper planning and development is done for them. This view is also shared widely in the state government, as reflected in the state's 10th Five Year Plan document.

State Government in its statement in the FYP supports a pro-poor growth strategy. The most effective way of improving livelihoods and opportunities for the poor is to target employment generation within an overall growth strategy. In India, this would require improving prospects for growth in the secondary and tertiary sector which tends to have a higher multiplier through increasing demand for services. Improvements to urban infrastructure are, therefore, likely to have positive effect on poverty reduction through improving the business climate and prospects for job creation.

The social development of the towns and cities of the State is at a rate which continues to lag behind the nation as a whole. The State is the third poorest in terms of the population living below the poverty line. Progress to bridge the gap will rely on the more appropriate and effective use of scarce social sector funds. This will depend crucially on improved analysis and targeting to reach the urban poor, and greater participation of, and accountability to them.

E. Present Status of Urban Water Supply and Sanitation

1. Water Supply

In most of the Project cities, water supply does not meet basic human requirements, only being provided a few hours a day in the wet season and less than an hour every other day in the dry season. Non-revenue water is more than 50% in all the project cities and without an urgent intervention this will continue to get worse, exacerbating water shortages and increasing the cost of supply.

It is estimated that an average of 84% of the households across the 6 cities used piped water supply, either from public standposts (24%) or from house connections (58%). It is reported that proportion using piped water supply is highest in Bhopal, at more than 95%.

2. Sanitation

On an average 80% of households use a toilet in their own home. One in 5 households do not. The situation is far worse for EWS and Core Poor households. Around half of EWS households do not have a private toilet.

Flooding is reported by households to be a problem by an average of almost a third of all households in the 4 cities. This rises to over a half of Core Poor households in Jabalpur. In all cities however, there is less difference between poor and non-poor households on this issue.

Over half of households across the 4 cities state that they dispose of solid waste by throwing it outside of the house or onto the street. This is notably higher in Indore and Gwalior at 59% and 57% respectively. Community bins appear to be most effective in Bhopal with over 40% of households using them.

Collection performance by the corporation reflects these practices. 58% of households in Indore reported that solid waste was never collected from their neighbourhoods. EWS and core Poor households generally report collection performance lower.

F. The Objectives & Process of the Workshop

The key objective of the workshop was to bring together primary and secondary stakeholders to discuss and decide on the approach and strategy to be adopted by UN-HABITAT in the implementation of the Water for Asian Cities Programme in Madhya Pradesh. The workshop was attended by a large number of representatives from the Government of Madhya Pradesh, Mayors and Commissioners from the four project cities, academia and representatives from non-government organisations and community-based organisations, international agencies: UN-HABITAT, ADB, DFID, Cities Alliance, USAID, Professional and Experts and Media.

UN-HABITAT had prepared a concept note and strategy framework for Pro-poor Governance for implementation of Water for Asian Cities Programme in Madhya Pradesh, India (*refer Annexure – I*). This note was circulated to all the participants in advance. Part – A of the concept note gave a background of the WAC Programme in Madhya Pradesh analyzed the situation in the four project cities with respect to water, sanitation and hygiene; policy and institutions the direction and pace for achieving the Millennium Development Goals and the UN-HABITAT's approach based on its core competencies. Part – B of the concept note outlined a strategy framework for UN-HABITAT interventions in support of ADB project. As stated above the key objective of the workshop was to discuss and decide on the approach and strategy to be adopted by UN-HABITAT in

the implementation of the WAC Programme in Madhya Pradesh. The workshop process, therefore, aimed at achieving the set goals and objectives of determining the approach and strategy by UN-HABITAT.

The introductory session of the two days long workshop was followed by technical sessions¹ and panel discussions on pro-poor urban water and sanitation governance, mapping the poor and achieving the MDGs, bridging the sanitation gap, enhancing capacity for delivery and the UN-HABITAT implementation strategy.

Following the technical sessions, participants worked in smaller groups, based on interests and areas of expertise. Day 2 started with two more technical sessions, on water demand management and small scale piped water systems. Following these sessions, the group work from Day 1 continued in order to finalise group recommendations on the key issues together with priority actions for implementation. The workshop concluded with UN-HABITAT presenting the next steps/follow up actions and its action plan for the next six months and beyond.

The key issues discussed during the workshop are briefly summarized below:

The state government emphasized the need for the project to focus on capacity building, sustainable growth and poverty reduction with special attention given to qualitative social development issues.

The Principal Secretary and Secretary, UADD emphasized the potential of the programme to bring about improvements in the lives of the urban poor by ensuring an improved quality and quantity of water supply and linking this to broader improvements in health and livelihoods. They viewed the workshop as an opportunity to understand better UN-HABITAT's concepts of urban water conservation, water demand management, urban governance and institutional development and replicate or adapt these to best suit the needs and interests of the poor in the project cities.

UN-HABITAT outlined the history and mandate of the Water for Asian Cities programme (WAC) and the partnership between ADB and UN-HABITAT and its current status in Madhya Pradesh. The other project partners endorsed the government's point of view and stated that since the political leadership was impatient for the project to commence, a rigid timeframe needed to be developed and partners should work in a catalytic manner to ensure that the workshop would yield concrete steps to ground this project in the context of the four cities.

The ADB representative Mr. Alex Jorgensen emphasized the flexible nature of the programme i.e. if the cities articulated the need to revise the scope of the original loan document, to accommodate the changes in priorities it was something which could be done. The UWSEIMP project director Mr. S.N. Mishra stressed that implementers need to recognise the difference between *availability* of services and *accessibility*.

¹ Please refer the Section: Proceedings of Plenary and Working Group Sessions

The technical sessions were followed by panel discussions and questions from the participants. Some of the noteworthy cross cutting issues raised include:

Mapping the Poor and identification of Community Needs

- The difficulty in identifying the real poor, (i.e. those occupying peri-urban, non-notified slums and squatter settlements, non-slum poor, ignored vulnerable groups or communities etc), understanding their problems and prioritising them;
- All initiatives to be undertaken in close consultation with Mayors and Municipal Councillors, to enhance the work already underway in identifying community needs to develop context specific urban indicators through mapping.

Participatory Approaches: Involving the Community

- Ensuring greater participation among the poor, a reflection of their demands in planning and decision-making and more equitable service distribution;
- The manner in which the poor could be actively engaged in development activities especially the proposed bottom up planning model;
- The need for decision making to be consultative and participatory in order for citizens to develop a feeling of ownership;
- The need for quick action, in collaboration with other stakeholders to build on existing knowledge, using local resources;

Urban Local Bodies (ULB)'s Role

- Local bodies to have a greater role in scaling up pilots;

Sanitation and Hygiene

- Emphasizing safe human excreta disposal and hygiene behaviour change in order to achieve health benefits;
- Improvement in the levels of awareness about sanitation and hygiene related issues;
- Linking sanitation with livelihoods for sustainability;
- Safety and security aspects of community facilities need to be carefully examined in order to ensure use;

Revenue Enhancement & Sectoral Reforms

- Achieving better cost recovery for water generation and distribution and making qualitative improvements in existing sewerage and solid waste management systems;
- The scope of income generation activities in order to generate revenue to pay back the loan of the ongoing project;
- Improving maintenance and the efficiency of the system by reducing water losses to enhance equitable distribution;
- Optimisation of water supply with careful attention given to power supply
- Incentivising all classes of users and providers in a viable, cost-effective manner so as to achieve successful service provision;
- Developing effective transparency and accountability mechanisms in the implementation strategy as well as for consumers and providers to achieve pro poor governance objectives;

Capacity Building

- Develop technical expertise for enhancing conservation and repair of leakages;

Recommendations

Recommendations

The workshop on Pro-poor Urban Water and Sanitation Governance unanimously concluded that in order to implement Water for Asian Cities Programme UN-HABITAT should address the following key issues:

- Need to know more about the poor especially in peri-urban areas
- Adequate water is a pre-condition to achieve sanitation/health benefits
- The major challenge is to reduce leakages and other Unaccounted For Water (UFW)
- Sanitation should be linked with livelihoods
- All aspects of sanitation including Solid waste, drainage and toilets should be addressed together
- Safe excreta disposal and behaviour change are critical issues for health benefits
- Need for quick action in collaboration with other all stakeholders to build on existing work, using local resources and knowledge

Based on discussions held in four separate working groups, and their recommendations as presented, deliberated and adopted at the concluded plenary session, the workshop recommended the following with regard to programme priorities and implementation strategies for the Water for Asian Cities Programme in Madhya Pradesh, India.

Programme Priorities

Water for Asian Cities Programme in Madhya Pradesh should have the following areas for priority actions:

- Pro-poor Urban Water and Sanitation Governance
- Integrated Environmental Sanitation
- Capacity Building
- M & E and Knowledge Sharing

Each programme priority has several dimensions which may have to be kept in view by working out implementation strategies and partnership arrangements.

A. Pro-poor Urban Water and Sanitation Governance

One of the key issues is to find out who/where poor are and what is the level of service being provided to them. As the rights of consumers are unclear, especially the poor, it is important to educate both the consumers and providers especially in non-notified, and peri-urban areas. In this regard, workshop identified several constraints particularly lack of willingness to charge. There, however, exist several opportunities including the presence of civil society groups, research and training institutes, NGOs, and State Government having willingness to collaborate.

Several priority actions have been identified which are as under:

- Government- Non-government dialogue & partnerships for mapping the poor in both slums and non-slums areas, peri-urban with short-term and long-term, secure and unsecure tenures
- Comprehensive mapping of existing groups, NGOs, CBOs, Self Help Groups and others
- Create mechanism for dialogue, information sharing between different groups specifically on the vulnerable and unserved
- Conduct studies where needed, collate information, consolidate and share among 4 cities on special groups, access & use in notified short/long lease, non-notified, peri-urban areas etc.
- Initiate community level planning in all the 4 cities to understand key governance gaps and mechanisms for addressing them.

B. Integrated Urban Environmental Sanitation

Priorities under this include the development of appropriate technological options and promotion of Solid Waste Management. The workshop unanimously recommended priority actions for undertaking a rapid assessment of environmental sanitation and hygiene behaviour; developing and demonstrating simple sustainable and easily maintained technologies for sanitation and developing strategies for hygiene promotion and community managed systems for maintenance.

C. Capacity Building

Several priority actions under the capacity building have been identified which are as under:

- Capacity needs assessment study and plan for capacity building
- Study of models/best practices of different types in different towns

- Special funds for development units which apply best practices
- Identification & utilization of resources available through government schemes/programmes
- Reforming governance structures to enable pro-poor implementation by PHED & others
- Utilize capacity building resources to strengthen capacity of elected representatives
- Facilitate collaboration between government, private sectors providers, NGOs, media, academic institutions etc.

D. Monitoring & Evaluation and Knowledge Sharing

In order to do mapping of the poor by using existing data and resources including satellite images and the available GIS information, following priority actions have been recommended.

- Identify relevant institutions having the data
- Establish a nodal agency such as a state urban observatory
- Facilitate agreement with Town & Country Planning to consolidate data using GIS
- Produce data map using the target populations – ensure that social mapping, participatory consultations and satellite imaging are combined to provide accurate picture

In addition to these priority areas for Water for Asian Cities Programme in Madhya Pradesh. The programme shall focus on the promotion of urban water demand management and bridging the sanitation gap by ensuring access to service for all in a particular area in which communities may be involved both in service and maintenance.

Requests for Support

The four project cities submitted letters to UN-HABITAT outlining specific areas for support and suggestions for UN-HABITAT's role. They emphasised that the WAC should be to able ensure sustainable growth and poverty reduction in an effective manner. Some common needs expressed by the mayors were, a focus on water demand management, the need for education and better infrastructure for water and sanitation. For details, please *refer Annexure IV.*

Next Steps/Follow-up Actions

The Next Steps: Follow-up Actions

An indicative time frame and action plan for implementation was discussed based on the outcomes from the group work, outlining immediate next steps. These include:

- (a) Administrative steps including strengthening local project office. In this regard the preparatory activities is as under
- UN-HABITAT project office in Bhopal will be strengthened with the induction of a Project Manager (in pipeline) (April 2005)
 - Stakeholder consultations to be conducted in four cities (April 2005)
 - Consultations with development partners (March - April 2005)
 - Commence development of city action plans (April 2005)
 - Start implementation in June 2005
- (b) Stakeholder consultations as well as discussions with development partners in order to generate comprehensive city action plans for:

Water Demand Management

Water Demand Management through local level workshops and training, water audits and diagnostic studies. The participatory development of water demand management in the four cities, will be followed by a comprehensive monitoring of performance.

- Training needs assessment and Initial City based training on WDM (May 2005)
- Conduct Water Audits/Diagnostic Studies (April - September 2005)
- Participatory development of WDM Strategy in 4 cities (July - December 2005)
- Start implementing WDM Strategies Phase I (December 2005)
- Monitoring performance (starting April 2005)

Pro-poor WATSAN Governance

Mapping the urban poor in its entirety, generating high quality GIS maps and development of a city specific pro-poor water and sanitation governance strategy;

- Commence governance assessment in four cities
- Mapping the urban poor both in slum and non-slum areas
- Develop Pro-poor Governance Strategy

Environmental Sanitation

City-wide integrated environmental sanitation and waste management programmes, including need based low-cost sewerage and on-site sanitation, aiming at improved health and hygiene behaviour change. This will be through initial assessments of the sanitation situation followed by demonstration pilots and scaling up to city wide programmes.

- Undertake a rapid assessment of environmental sanitation to establish amongst others:
 - The areas of the cities where sanitation demand is highest
 - The reasons for failure of public toilet systems
 - Primary community-based collection of solid waste
 - Hygiene approaches to excreta management, solid waste and drainage
- Develop a capacity-building programme with the four municipal solid waste management authorities to optimize community-based primary collection and the promotion of waste recycling
- Develop a city-wide integrated sanitation, waste management and drainage awareness programme aimed at health improvement and protection of water resources (cf. Bhopal Lakes)
- Develop pilot-scale demonstrations: on primary collection and small scale recycling industries; low-cost sewerage; on-site sanitation for technically difficult areas

Capacity Building

Capacity building through needs assessment studies and information sharing of best practices. Working in conjunction with existing government schemes and programmes to ensure effective governance structures.

- Capacity needs assessment study and strategic planning
- Study of models/best practices of different types in different towns
- Identification and utilization of resources available in various govt. schemes/programmes for capacity building
- Reforming governance structures to create environment for pro poor implementation

Monitoring

- Mapping the Poor (Baseline Data)
 - Evaluate data sources that have been identified, and assess whether they provide reliable MDG measurements.
 - Agreements with institutions creating the data
 - Agreements with institution who will place the data on the existing GIS maps (Satellite images are available and being used)
 - Identify the institution that will coordinate the getting the institutions to provide the data for mapping.
 - Compile the GIS maps that identify the poor.

Proceedings of Plenary and Working Group Sessions

Proceedings of Plenary and Working Group Sessions

Day One, Friday, 18th March 2005

First Technical Session (Pro-Poor Urban Water & Sanitation Governance)

(Speaker: Archana Patkar, Consultant, UN-HABITAT)

The project context in Madhya Pradesh was presented to the audience, by highlighting statistics and specific facts. Madhya Pradesh is the third poorest state in India after Orissa and Bihar in terms of percentage of people below the poverty line. The State also has the fifth highest rate of urbanisation in India, with a decadal growth rate of 31%. A significant proportion of the state's urban population of 16 million is concentrated in the four project cities. Madhya Pradesh has the highest urban poverty ratio of 48.4 per cent (1993-94) among all Indian states, according to the Planning Commission's Estimates of Poverty (1997). The emphasis was on recognizing and locating the urban poor, who ironically provide essential services, but are denied basic services. Very often, vulnerable group like migrants, scavengers, rag-pickers, shift workers and sex-workers, as well as groups located in non-notified slums and peri-urban areas, have no voice.

As regards infrastructure facilities and access to services, a quarter of urban households have no waste water drainage system and open *kuccha* drains serve more than 21 per cent in towns and cities. The Human Development report for MP, 2002, reports that 45 per cent of the urban population defecates in the open, while other reports put this figure at almost 80 per cent for the four project cities. 77 per cent of urban households report an increase in flies and mosquitoes, with worsening drainage and waste disposal conditions. Overall, residents of towns and cities in Madhya Pradesh and especially the urban poor, live in unsanitary and polluted conditions with irregular, inadequate and poor quality water supply, poor drainage and waste disposal, unhygienic housing and poor air quality with deleterious effects on health, livelihoods and well-being. The ADB survey identified sanitation as the number one priority of poor women.

The Government of Madhya Pradesh's strategies for Water Supply, Sewerage and Sanitation under the Tenth Plan, were highlighted with attention given to gaps like revenue losses, tariffs not being equivalent to the true costs, poor technical capacity of institutions, the problems associated with human resources and poor quality client feedback.

Pro-poor governance aims at putting poor people at the centre of service provision. By enabling people to monitor and discipline service providers, by amplifying their voice in policymaking and by strengthening the incentives for providers to serve the poor, men, women, adolescents and children, rich or poor can have improved access to water and sanitation services of adequate quantity and quality. The concept will integrate UN-HABITAT's core competencies in normative work, mobilisation and awareness building, partnership building at the local level and demonstration and piloting. The governing principles of UN-HABITAT's work will ensure synergies with the stakeholders, be consultative in nature and will focus on pro-poor aspects - disaggregation, voice, participation, negotiation, decision-making & monitoring by citizens, especially the poor.

The discussions that followed highlighted the need for locating the poor and actively engaging them in developmental activities. It was felt that the local people understand as to what should be done to meet their felt needs. Further it was recommended that the classification of poor should be done as per local situations.

Second Technical Session (Achieving the MDGs: Mapping the Poor)

(Speaker: Harvey Herr, Consultant, UN-HABITAT)

The WAC programme needs to demonstrate significant improvements in target 10 and 11 of goal 7 of the MDG. These MDG indicators demonstrate the access of persons to water and sanitation. Beyond the issue of service delivery coverage lies the impact that improvement in water and sanitation should bring to reduce infant mortality and morbidity. Therefore, the MDG indicators relating to these indicators also need to be measured. The role of pro-poor monitoring and evaluation in WAC is to bring measurement of these MDG down to the local level so that projects like those proposed by WAC can be shown to have a positive impact on the MDG in the poor communities.

An important step in taking WAC strategy of pro-poor governance forward will be to map the poor. Mapping the poor starts with baseline data that illuminate the location and condition of the poor, establish baseline values for the MDG indicators in the poor areas, inform the engineering solutions for water and sanitation service delivery, and establish programme management indicators for the WAC. It was apparent from workshop deliberations that baseline data exist that are collected by many different agencies, which do not integrate the data into a single information product. In addition, the data are not presented in the necessary spatial detail. However, existing satellite imagery and GIS expertise are available in Madhya Pradesh that has the potential to provide the necessary data integration leading to mapping the poor.

The concept paper and discussants stressed the importance of behaviour as a factor in the implementation of solutions to the common problem of open defecation in MP². Without correct statistical focus on understanding the socioeconomic and behavioural situation of the communities solutions are easily limited to infrastructure roll-out that is coupled with unrealistic assumptions of local acceptance.

It has been observed that national programmes have often failed to recognize the urbanization of poverty. For many decades the focus of poverty has been in rural areas, and this has been reflected in the way data have been collected. Primary concern has been that stark urban inequalities have been masked by statistical practice that treats urban areas as a singularity; as if there was a uniformity of socioeconomic condition in the urban area. With the idea to make clear the extreme differences within the urban areas that are common in all developing countries, UN-HABITAT designed the Urban Inequities Surveys in collaboration with other international institutions.³ Three kinds of survey

² It was widely accepted that sanitation, rather than water, is the primary concern in the four cities that are the subject of the WAC.

³ UNICEF, USAID, World Bank, The Population Council, the Urban Health Project, ORC Macro and others.

instruments - community questionnaires, household questionnaires⁴ and women's questionnaires combine with a revised sample survey design to ensure robust scientific estimates of indicators and local conditions.

While mapping the poor in MP is to be initiated by using existing data, the process will be supplemented by using UIS community questionnaires, expert advice and existing satellite imagery. Community questionnaires identify features that are of interest to the WAC project design such as the location of accumulated solid waste, poor drainage and open defecation. The features thus identified are digitized on existing satellite images to become part of a GIS that maps the poor. Key community informants then identify priorities; expert opinion identifies existing infrastructure, land use and secure tenure while the household surveys or existing data provide detailed socioeconomic data.

The working groups identified existing sources of data that can be used instead of conducting an extensive household survey. The data identified has to be evaluated for its quality, timeliness, repetition and ability to monitor the MDG. Agreements and institutional arrangements are to be identified so that existing data are made available for identification and mapping of the poor. An institutional commitment to a time frame and a commitment to achieving the MDGs in the targeted poor areas of the cities are proposed initial outcomes. Although not discussed in depth, project performance is to be measured and monitored by output, process, and outcome and impact indicators.

The participants responded that user based monitoring of MDG coverage is essential. Further it was felt that there was a real need to map and identify the urban poor areas as the existing efforts are not sufficient to target them and access their ability to pay. It was also recommended that slum and non-slum areas should be focused separately.

Third Technical Session (Bridging the Sanitation Gap)

(Speaker: Mr. Graham Alabaster, Programme Manager, UN-HABITAT)

The definition of 'lack of service provision for sanitation' depends on the criteria used to assess what "adequate" sanitation really is. If one measures the sanitation gap as those who lack access to a toilet, including a shared toilet – then globally around 300 million urban dwellers lack sanitation and this would imply that many Asian cities have as much as 90-99% of their population with adequate sanitation, which is far from the truth. Drawing on 150 detailed city-studies and on data from the Demographic and Health surveys one can see the reality of how bad the provision for sanitation is. In reality, in many Asian countries, 30-50% of the urban population, have inadequate sanitation and in sub-Saharan Africa the numbers are 50-60%.

The statistics for Madhya Pradesh are in keeping with these figures and in order to bring about improvements in these one needs to focus harder on the guiding principles for promoting improved sanitation. These are usage, not coverage – which looks at issues of safety and security and convenience of use for women and children as well as technology

⁴ The household questionnaire includes modules on water, sanitation and solid waste; social capital, secure tenure, and household economy.

aspects. The unholy trinity – sanitation, waste and drainage – project actions must amalgamate the three and focus on the poorest, such that it can be linked to education as well as livelihood issues.

Replication and scale up of good practices – this must recognize the fact that pro-poor governance structures for sanitation must be in conjunction with those for water. Before one replicates and scales up any good practice, one must determine the usefulness of the structure and then harness the marketing skills of other sectors to promote, mainstream and upscale the existing water and sanitation governance structure.

Finding the right balance between the hardware and software – one must move away from viewing sanitation in a silo i.e. hygiene for latrines, and in fact understand its multifaceted nature as including excreta disposal, grey water disposal and solid waste as well.

Possibility of promoting better linkages between trunk infrastructure systems for the better off and basic service provision for the poor – coverage can be improved by lowering connection costs to the poor and linking the small scale providers to the larger utilities. Linking the approach to income generation activities and developing low cost technologies would ensure larger participation.

One such low cost technology option, Vacutug, was discussed. The pilot started off by identifying the main type of sanitation used by the poor and their reasons for using it and how the pilot could effectively address the issues. Details on where and how the pilots were tested and their results were shared and Vacutug Phase II in Mozambique was discussed.

The discussion that followed underscored the need for the community involvement for the primary collection of the domestic solid waste. It was also recommended that the models of Pune, Mumbai and Indore which are successfully running and maintaining the community based sanitation infrastructure should be replicated.

Fourth Technical Session (Enhancing Capacity for Delivery)

(Speaker: Prof. Meine Pieter van Dijk, Consultant, UN-HABITAT)

This is a complex project because of the many stakeholders in Madhya Pradesh and the many donors, in particular the ADB, DFID, Cities Alliance, UN-HABITAT and USAID. The advantage of this Pro-poor water governance workshop is that we get to know each other better and that we can learn from each other. I have been involved in a similar DFID funded project in Andhra Pradesh and worked on similar issues for ADB in Karnataka. I have learned a few lessons from these projects:

1. It is important to listen to the stakeholders and in particular the eventual users, because otherwise you will have problems in a later stage. The problem is how to give a voice to the poor and Habitat calls efforts to do so: Pro poor water governance.
2. However, no parallel structures should be created and the challenge is to use the institutions envisaged in the ADB project document (the empowered committee and

in each city a city steering committee will be set up to provide overall monitoring and guidance to the respective PUIs).

Determine what each party can contribute

We should determine what each party could contribute and the best way to do so is to take the need of the people in the four project cities as point of departure. Then the different parties should contribute what they are good at and be realistic about what there means allow them to achieve. For UN-HABITAT it means involvement in achieving the pro poor water governance structures, introducing water demand management and different sanitation technologies. Habitat will also be involved in the monitoring and provide the baseline data and promote public awareness and hygiene education. Finally in the field of capacity building the organization has something to contribute and demonstration projects will be launched after an assessment of the current governance structure, sanitation technologies and training needs.

Challenges for different stakeholders

1. To all get a realistic view of what can be expected from the project and what you will have to contribute yourself.
2. Let us try to listen to what the local stakeholders have to say and contribute.
3. Coordinate the interventions, to avoid duplication and to increase effectiveness, but make decentralization work.
4. Let the donors be aware of their complementarily and look for win-win situations instead of trying to raise their own flag all the time.
5. Let us mobilize the necessary resources at the ward level, the city, the state, the national and the international level to make this project a success. It means paying user fees, collecting taxes and accessing additional sources of funding.

Fifth Technical Session (UN-HABITAT Implementation Strategy)

(Speaker: Ms. Archana Patkar, Consultant, UN-HABITAT)

The proposed framework & strategy for Pro-Poor Urban Water and Sanitation Governance in Madhya Pradesh, is in support of the MDGs on water and sanitation and slum upgrading with a special focus on the urban poor.

The presentation was based on the matrix for UN-HABITAT's proposed strategy in Madhya Pradesh, presented in their concept note. The three essential areas of intervention are pro-poor water and sanitation governance, integrated environmental sanitation and hygiene behaviour change and monitoring and valuation and knowledge sharing.

Pro-poor water and sanitation governance will emphasise a rights based approach to services and therefore on pro-poor cost recovery mechanisms, based on ability and willingness to pay. Governance extends beyond the institutions of government and includes the important role that governments have in regulating, facilitating and collaborating with

other actors and institutions – as well as the important role that other actors have in achieving public goals and holding governments to account. The strategy would include Water Demand Management with an emphasis on demand assessment, efficiency as well as equity in distribution and use. Better water and sanitation governance for the urban poor does not mean that the government needs to provide these services, but it does imply that the government needs to work to ensure that the poor groups can obtain adequate water and sanitation.

Human excreta management and hygiene behaviour change will be the focus with attention given to human excreta management and the benefits of hand-washing with soap. There is a need for a practical urban environmental sanitation approach that recognizes the challenges inherent in achieving the move from open defecation to sanitary disposal of human excreta as opposed to mere construction of toilets. An integrated approach would also ensure that health and educational institutions, markets and households are integrated into a citywide environmental health strategy to achieve an improved urban environment. The IMR, MMR, rate of diarrhoeal disease, and the fact that Madhya Pradesh has the lowest per capita expenditure on food amongst all the Indian states – a manifestation of widespread poverty and lack of livelihood security, with tribal groups being particularly vulnerable – was highlighted.

Monitoring and evaluation and knowledge sharing would emphasise the development of partnerships and developing indicators and monitoring systems with a focus on outcomes and impact on the poor. Sharing international, regional and national best practices would help UN-HABITAT take up the role of an efficient knowledge broker.

Day Two, Saturday, 19th March 2005

Sixth Technical Session (Water Demand Management)

(Speaker: Mr. Daniel Meyer (Niel), Consultant, UN-HABITAT)

Water Demand Management (WDM) refers to implementation of policies and measures to control or influence the water demand. Such measures are grouped in three categories:

- Technical (Engineering aspects regarding efficient and equitable distribution)
- Social (awareness campaigns and education of water users on efficient water usage)
- Institutional (legislation and staff capacity issues)

The current severe water supply situation in the four cities of Madhya Pradesh has highlighted the fact that the available water should be used more efficiently and that water leakages should be minimized.

Key challenges regarding WDM in Indore, Bhopal, Jabalpur and Gwalior can be summarized as:

Intermittent supply: None of the four cities receive 24-hour water supply. The associated problems with intermittent supply includes health risks, inefficient distribution and shortened lifespan of pipelines.

Water Losses: Available information suggests that leakage levels in all four cities are very high (between 20% and 43%). The exact water losses should be determined.

Metering: The bulk water infrastructure is currently not metered. Proper metering will provide actual data on the quantity of water distributed.

Flat rate billing: Very few consumers in the four cities are billed according to consumer meter readings. Therefore, it is difficult to determine what the total volume of water is received by the consumers. It also creates problems to bill consumers on a fair billing system.

Electronic drawings: The Municipal corporations do not have electronic drawings of water infrastructure showing details of pipelines, valves, reservoirs etc.

Proposed WDM Action Plan for Madhya Pradesh can be summarised as:

Training for municipal corporations: The training will include various WDM technical training modules (i.e. Importance of WDM, Principles of leakage estimates, sectorising and metering, high flow analysis, pressure management, benchmarking of leakage, economics of leakage and undertaking WDM audit etc.) Specific training requirements will be clarified with members of the project team before the training is presented.

Water Audit / WDM Investigation: The objective of the water audit will be to determine what the extent of leakage is, what types of leakage occurs and where the leakage occurs.

WDM Strategy development: The objective of the WDM Strategy will be to provide a detailed step-by-step procedure to implement WDM in Madhya Pradesh. The results and findings of the water audit will be used as a guideline. The three key aspects covered in the strategy should be 1) efficient and equitable distribution 2) Efficient and equitable use and 3) accounting for all water.

Implementation of strategy: Once the strategy has been work-shopped and approved by all the project stakeholders the strategy should be implemented. Pilot projects should be considered for certain WDM interventions to evaluate the effectiveness before implementation in larger areas.

Monitoring: The effectiveness of each WDM intervention should be monitored. The water consumption and minimum night flows (MNF's) before and after the implementation of each intervention should be compared.

Seventh Technical Session (Small Scale Piped Water System)

(Speaker: Mr. Arthur C. McIntosh, Consultant, ADB)

The presentation explored the feasibility of setting up pilots for small piped water networks in the project cities. It is an established fact that in most Asian countries less than 35% of urban population receive piped water in their home. Very few households have their own wells and the remainder are served by standposts, tanker deliveries or water vendors. This leads to the dual problem of high costs and inconvenience. The inherent simplicity of the small scale piped water system, which can tackle both the above mentioned problems, makes it the most appropriate technology option for the cities.

The rationale for the ADB regional technical assistance is to set up several pilots in Philippines, Vietnam and India to test the rapid connection of people to piped water. In order to be able to efficiently undertake this, one needs to carry out water audits in the cities (namely Jabalpur and Indore, before up scaling). These audits will be carried out through household questionnaires focusing on water usage, source, quality, quantity and so on, and will cover peri-urban areas as well. This will be followed by an analysis of these audits and discussions of the same with the larger community to take decisions on the intricacies of registering providers and training in O & M to take forward pilots. Stakeholder consultations will also be essential to ensure that the technical aspects of individual household sanitation, drainage and solid waste disposal are looked into. The project partners will essentially be the municipal corporations, local banks, the water providers, urban planning consultants, non-government organizations and community based organizations, along with the ADB and UN-HABITAT.

The time frame for putting the systems in place is three months and the project will be completed by the end of the year. Once this works in two project cities, scaling it up and applying it to all the cities will take another year or two.

Working Groups

The participants worked in smaller groups and considered the proposed strategy for intervention against the conditions and opportunities in their own cities. Lively discussions ensued as the four cities have very different conditions and experiences. What followed was a prioritisation of key concerns, identification of opportunities and constraints and listing of priority actions where the city managers and officials would like support. These are as under:

Group A - Pro Poor Urban Water & Sanitation Governance

Key Issues

- Mechanisms/Space for dialogue on who/where poor are, levels of service, etc.
- Education of consumers & providers especially in non-notified, peri-urban, etc
- Responsible, efficient use by consumers, including the poor
- Rights of consumers are unclear, especially the poor (no bills)

Constraints

- Willingness to charge
- Rich use more, but pay less, poor pay more for irregular, inadequate service

Opportunities

- Poor are not considered an integral part of city economy
- No information about what the poor actually pay for services
- Lessons from local experience & other states (VAMBAY, APUSP)
- Presence of groups (SJSRY), civil society, research & training institutes
- NGOs & GoMP, City Government willing to collaborate
- State has given some thought already to shelter issues

Priority Actions

- UN-HABITAT project office in Bhopal will be strengthened with the induction of a Project Manager (in pipeline) (April 2005)
- Stakeholder consultations to be conducted in four cities (April 2005)
- Consultations with development partners (March - April 2005)
- Commence development of city action plans (April 2005)
- Start implementation in June 2005

Group B - Integrated Environmental Sanitation

Key Issues

- Very few household/Pvt. Toilets
- Proper drainage not available
- Low level of awareness re hygiene issues & excreta disposal
- All slums have poor drainage
- Drinking water pipes flow in surface water drains
- Relocation/eviction is a problem- construction sites become a permanent slum
- Facilities not maintained, toilets used for illegal activities
- Need to ensure the participation of men

Constraints

- Poor feel government should pay, unwilling to pay for communal facilities
- Difficulty in forming CBOs

Opportunities

- Lack of faith in government, NGOs
- High demand for sold waste disposal – filled by scavengers
- Under GOI Sanitation for All – 50% grant available for capital costs

Priority Actions

- Hygiene Education for men, women, adolescents, children on sanitation, solid waste management & drainage system.

- Undertake a rapid assessment of environmental sanitation & hygiene behaviour
- Repair, restore existing water, sanitation facilities
- Develop, demonstrate simple sustainable, easily maintained technologies for sanitation
- Promote community managed system for maintenance
- Develop hygiene promotion strategy
- Develop coordination mechanisms to ensure synergies & uptake of government schemes

Group C - Capacity Building

Key Issues

- Demand Side stakeholders - Consumers, invisible citizens, users, Elected representatives, ward committees
- Supply side stakeholders - Government officials / city managers / functionaries / technical personnel
- Needs are technical, managerial, participatory planning

Constraints

- Inadequate focus on urban capacity building methodologies / techniques / contents
- Lack of synergy between various departments engaged in Urban Development

Opportunities

- Capacity does exist skills need to be upgraded
- Local advisory committee for capacity building
- Partnerships with experienced actors such as FIRE and others for economic viability
- Use of land withheld by sick industries

Priority Actions

- Capacity needs assessment study and plan for capacity building
- Study of models / best practices of different types in different towns
- Special funds for development units which apply best practices
- Identification & utilization of resources available through govt. schemes / programmes
- Reforming governance structures to enable pro-poor implementation by PHED & others
- Utilize capacity building resources to strengthen capacity of elected representatives
- Facilitate collaboration between Government / private sector providers / NGOs / media / academic institutions

Group D – Monitoring & Evaluation and Knowledge Sharing

Key Issues

- Need to map the poor
- Use existing data & resources to assess gaps in access & entitlements & exclusion from services.

Constraints

- Information is being collected by many organizations
- Reliability & accuracy of data needs to be determined

Opportunities

- Institutional integration needs to occur to ensure data are available for mapping the poor
- Satellite images exist, GIS already being done

Priority Actions

- Identify relevant institutions having the data
- Establish a nodal agency such as a state urban observatory
- Facilitate agreement with Town & Country Planning to consolidate data using GIS
- Produce data map using the target populations – ensure that social mapping, participatory consultations and satellite imaging are combined to provide accurate picture

Annexure I: Concept Note

Annexure II: Programme of Events

**Annexure III: Addresses Delivered at the
Inaugural Session and by
Session Chair**

**Annexure IV: Matrix of Letters from City
Mayors**

Annexure V: List of Participants



CONCEPT NOTE & STRATEGY FRAMEWORK
PRO-POOR GOVERNANCE FOR IMPLEMENTATION OF
WATER FOR ASIAN CITIES PROGRAMME
MADHYA PRADESH, INDIA

March 2005

Abbreviations

ADB	: Asian Development Bank
ADF	: Area Development Fund
ASCI	: Administrative Staff College of India
AUWSP	: Accelerated Urban Water Supply Programme
BDA	: Bhopal Development Authority
CEMIS	: Community Based Environmental Management Information Systems
CIF	: Community Initiative Fund
CMF	: Change Management Forum
DFID	: Department For International Development
EGM	: Expert Group Meeting
GOI	: Government of India
GOMP	: Government of Madhya Pradesh
GUO	: Global Urban Observatory
IMR	: Infant Mortality Rate
Km	: Kilometres
Lcpd	: Litres per capita per day
MDGs	: Millennium Development Goals
MDSUPHO	: Management Development for Senior Urban Health Officials Programme
MMR	: Maternal Mortality Rate
MP	: Madhya Pradesh
NGOs	: Non-Governmental Organisations
PHED	: Public Health and Engineering Department
SRS	: Sample Registration System
UGI	: Urban Governance Index
ULBs	: Urban Local Bodies
UNDP	: United Nations Development Programme
VAMBAY	: Valmiki Ambedkar Awas Yojana
WAC	: Water for Asian Cities
WEDC	: Water Engineering Development Centre
WSP-SA	: Water and Sanitation Programme, South Asia

PART A: CONCEPT NOTE

A. BACKGROUND

Water for Asian Cities in Madhya Pradesh

The Water for Asian Cities programme was officially launched at the Third World Water Forum (WWF) on 18 March 2003 and a Memorandum of Understanding was signed between ADB and UN-HABITAT on the same day in Osaka, Japan. As per the agreement between ADB and UN-HABITAT, the two Parties plan to make available consistent with their respective programmes at least an amount of US\$10,000,000 for Phases I and II as follows: US\$5,000,000 to be provided by UN-HABITAT and US\$5,000,000 to be provided by ADB. WAC is expected to build on UN-HABITAT's experience in urban water governance and capacity building in other regions as well as ADB's operational experience including lessons of evaluation. The partnership is expected to contribute to the operationalising of ADB's water policy and the poverty reduction strategy. UN-HABITAT is mandated under the WAC agreement to develop a strategy for Pro Poor Water and Sanitation Governance in Madhya Pradesh, an initiative which aims to support the attainment of the Millennium Development Goals on water and sanitation and slum upgrading with a special focus on the urban poor.

ADB has approved a loan of \$200 million for the '*Urban Water Supply and Environmental Improvement in Madhya Pradesh Project*' which together with state and city government matching contributions aim to address citywide deficiencies in basic urban services for four of the largest urban centres in Madhya Pradesh. The project will undertake improvements in water supply, sanitation, garbage collection and disposal and drainage with the ultimate aim of improved living conditions and better health for the people living in these cities. The loan focuses on improving primary environmental infrastructure in water, sewerage and sanitation storm water drainage and solid waste management and to address some of the major infrastructural bottlenecks facing the delivery of basic services in Bhopal, Gwalior, Indore and Jabalpur.

The overriding thrust of the Water for Asian Cities Programme is to enhance capacity at city, country and regional levels and to create an enabling environment for new flows of investments in the urban water and sanitation sector, with a view to meet the water and sanitation related MDGs in Asian Cities. As per the agreement, the primary areas of focus will be Pro-poor Urban Water Governance, Urban Water Demand Management, Integrated Urban Environmental Sanitation and Income Generation for the urban poor through community based water and sanitation services. It was mutually agreed by the President of the ADB, UN-HABITAT and the GOI that Madhya Pradesh presented a good opportunity for collaboration under the Water for Asian Cities programme.

The government of MP and key stakeholders recognise the challenges inherent in ensuring that the benefits of this improved infrastructure accrue to the citizenry at large and especially the poor and marginalized population. Two community level funds have been earmarked within the proposed ADB loan component for participatory planning and tertiary infrastructure investments for in-slum provision. Various donors and support agencies including DFID India, the Cities Alliance and others have committed to supporting the planning and urban management processes in order to ensure effective pro-poor service delivery in the four project cities.

Project Area: Situation Analysis⁵

Madhya Pradesh has 14 Municipal Corporations, 86 municipalities and 234 Nagar Panchayats. It is the third poorest state in India after Orissa and Bihar in terms of percentage of people below the poverty line. The State also has the fifth highest rate of urbanisation in India, with a decadal growth rate of 31%. A significant proportion of the state's urban population of 16 million is concentrated in the six cities of Bhopal (1,433,880) Indore (1,597,441), Gwalior (826,920) and Jabalpur (951,469) Ratlam (221,270) and Ujjain (429,933)

Rates of urban poverty are comparable to rates of rural poverty, with approximately 38% of the urban population living below the poverty line compared to 37 % of the rural population (Planning Commission, 1999-2000). This is significantly higher than the national average of 24% of the urban population living below the poverty line. Madhya Pradesh has the highest urban poverty ratio of 48.4 per cent (1993-94) among all Indian states, according to the Planning Commission's Estimates of Poverty (1997).

The slum population reported in 42 towns in Madhya Pradesh is 2,388,517 persons and as a percentage of the urban population is 24.31% in Madhya Pradesh, as opposed to an overall figure of 14.1% for India. This high growth rate is expected to continue, with the urban population rising by a further 50% to over 25 million people living in Class 1 towns by 2021.

The Infant Mortality Rate for the new Madhya Pradesh has been estimated at 88 per thousand. The rural IMR is 94, while urban IMR is 56 against an all-India average of 68. Nearly a quarter of the children in MP suffer from diarrhoea at any given time and thirty per cent have symptoms of acute respiratory infection. Nearly about half of these did not receive health care from any facility or provider, with ARI and related infections being common killers of infants and children. Maternal mortality rates are 498 deaths per 100,000 live births (all India average is 408). Overall, Madhya Pradesh has the lowest per capita expenditure on food amongst all the Indian states – a manifestation of widespread poverty and lack of livelihood security, with tribal groups being particularly vulnerable. Only one-third of tribal children receive a diet adequate in calories and protein, while almost three fourths (70.3%) tribal women are anaemic and one-fourths (23.8%) are moderately/severely anaemic. Three fourths of children in MP are anaemic and strikingly, over half of the children have moderate/severe anaemia.

⁵ All figures obtained from Census of India Data,2001, GHK, STUP & IPE study for ADB, MP Human Development Report, 2002 and SRS data from GOMP official Website.

Indicators of Deprivation

	Indicators	Bhopal	Gwalior	Indore
1.	Mean age of marriage for girls	20.1	19.7	15.2
2.	Institutional deliveries – government facility	35.9	29.0	25.3
3.	Institutional deliveries – private facility	15.3	17.6	40.2
4.	Infant mortality rate	42.5	44.9	18.6
5.	Non-literates	36.0	51.8	38.3
6.	Female Literacy Rate	73.41	70.44	73.21

Source: Census data, 2001; MP Human Development Report, 2002

Water, Sanitation and Hygiene

As regards infrastructure facilities and access to services, a quarter of urban households have no waste water drainage system and open *kuccha* drains serve more than 21 per cent in towns and cities. The Human Development report for MP, 2002, reports that 45 per cent of the urban population defecates in the open, while other reports put this figure at almost 80 per cent for the four project cities. Poor women in MP continue to use leaves, straw or firewood for cooking, with 45 per cent of urban households using these polluting fuels. 77 per cent of urban households report an increase in flies and mosquitoes, with worsening drainage and waste disposal conditions. Overall, residents of towns and cities in Madhya Pradesh and especially the urban poor, live in unsanitary and polluted conditions with irregular, inadequate and poor quality water supply, poor drainage and waste disposal, unhygienic housing and poor air quality with deleterious effects on health, livelihoods and well-being.

42.3 % have no in-house water supply, 15.1 % have no access to piped water, 40 % of households receive water on alternate days, 18.8 % have no private toilets and about 80% defecate in the open. 325 report flooding problems and 40% have no solid waste collection
ADB, November 2003

	Indicators	Bhopal	Gwalior	Indore	Jabalpur
1	Population served (water)	67	68	68	89
2	No in-house connections	34.1	29.6	52.5	51.6
3	No private toilets	18.6	19.3	19.4	16.7
4	Open defecation	51	44	63	43
5	Unaccounted for water	64	64	52	52
6	Population served by reticulated sewage scheme	7	9	10	0
7	Population served by septic tank services	3	1	4	3
8	Safe disposal of solid waste	0	0	0	0

Source: WAC, Programme outline of capacity building activities in MP

In 2002, UN-HABITAT together with Cities Alliance and the UN Statistics Division called an expert group meeting (EGM) in order to improve measurement of the Millennium Development Goals (MDGs) with special reference to Goal 7. *By these definitions (see box*

below), over half the population in the four project cities in Madhya Pradesh live in unacceptable conditions.

DETAILED DEFINITIONS OF ACCEPTABLE URBAN CONDITIONS

Slums of the World: The face of Urban Poverty in the New Millennium, Global Observatory, UN-HABITAT

Access to improved water: A household is considered to have access to improved drinking water if it has sufficient amount of water (20 litres/person/day) for family use, at an affordable price (less than 10% of the total household income), available to household members without being subject to extreme effort (less than one hour a day for the minimum sufficient quantity), especially to women and children.

- Piped connection to house or plot
- Bore hole
- Protected spring
- Public stand pipe serving no more than 5 households
- Protected dug well
- Rain water collection

Access to improved sanitation: A household is considered to have access to improved sanitation, if an excreta disposal system, either in the form of a private toilet or a public toilet shared with a reasonable number of people, is available to household members.

- Direct connection to public sewer
- Pour flush latrine
- Direct connection to septic tank
- Ventilated improved pit latrine.

Sufficient-living area, not overcrowded: A dwelling unit is considered to provide a sufficient living area for the household members if there are fewer than three people per habitable room. Additional indicators of overcrowding have been proposed: area level indicators such as average in-house living area per person or the number of households per area; housing-unit level indicators such as the number of persons per bed or the number of children under five per room may also be viable. However, the number of persons per room has been shown to correlate with adverse health risks and is more commonly collected through household surveys (UN-HABITAT (1998), “Crowding and Health in Low Income Settlements of Guinea Bissau”, SIEP Occasional Series No. 1).

- Fewer than 3 persons per room (minimum of four square meters)

Structural quality/durability of dwellings: A house is considered as “durable” if it is built on a non-hazardous location and has a structure permanent and adequate enough to protect its inhabitants from the extremes of climatic conditions such as rain, heat, cold, and humidity:41

- Permanency of Structure
- The dwelling is not in a dilapidated state
- Location of house (hazardous)
- The dwelling is not located in a flood plain
- Permanent building material for the walls, roof and floor
- The dwelling is not located in a dangerous right of way (rail, highway, airport, power lines).
- Compliance of building codes
- The dwelling is not in need of major repair
- The dwelling is not located on or near toxic waste
- The dwelling is not located on a steep slope

Security of tenure: is the right of all individuals and groups to effective protection by the State against arbitrary unlawful evictions: 420

- Evidence of documentation that can be used as proof of secure tenure status
- Either *de facto* or perceived/protection from forced evictions

Policy and Institutions

The Government of India’s Tenth Five Year Plan (2002-2007) envisages completing the task at hand of providing 100 per cent of the rural and urban population with safe drinking water as per the stipulated norms and standards on a sustainable basis. The Plan document

emphasizes, however, that the focus should not only be investment requirements to augment supplies or install additional systems in sanitation and water supply, but rather to pay greater attention to the critical issues of institutional restructuring, managerial improvement and better and more equitable services to citizens who must have a greater degree of participation. Additionally, the task of providing and managing water supply and sanitation cannot be separated from the issue of functional and financial autonomy and strengthening of capacity in urban local bodies, as enshrined in the 74th Constitutional Amendment.

The Government of Madhya Pradesh has outlined its specific strategies for Water Supply, Sewerage and Sanitation under the Tenth Plan as follows:

- *Raising the level of services from 40 lpcd to 55 lpcd.*
- *In pursuance of the ‘Sector Reform’ measures initiated in April 1999, a policy of demand driven approach will be followed.*
- *Reduce the maximum distance of water source from 1.6 Km. to 0.5 Km.*
- *Potable drinking water supply to new settlements.*
- *Providing alternate safe source of water where existing sources have been contaminated.*
- *Augmenting water-testing facilities.*
- *Conducting evaluation studies*
- *Emphasis on implementing sewerage schemes.*

For implementing the above mentioned objectives in rural and urban Madhya Pradesh, the state outlay approved for the Tenth Plan is Rs. 89425.00 lakhs. It should be noted that State Human Development Report as well as the Plan Document project outlays and planned investments for the rural and urban sectors as a whole. Thus, for example, sector reform initiatives have as yet to be reflected in policy and practise in the urban water and sanitation sector in Madhya Pradesh.

Over 38 % of MP’s urban population is officially classified as BPL as compared to an all-India average of 26.62. The State has a sizeable tribal population – 20 % of the total. The State Government has outlined a range of schemes designed to promote human resource development and economic upliftment through a two-pronged strategy –through sectoral programmes (health, education, etc.) and also through specific targeted programmes Every development department is expected to allocate about 14% of their total State Budget for the welfare of SC/ST. A range of centrally sponsored and state supported schemes for housing, services and services schemes targeting the economically weaker sections (EWS) and lower income groups (LIGs) exist. Of specific relevance to this project are The Urban Low-Cost Sanitation scheme for the Liberation of Scavengers, VAMBAY, SJSRY, STEP-UP scheme, group insurance schemes, etc. Utilising these schemes effectively, in tandem with project resources to maximise benefits to unreached groups is a key challenge for project interventions.

Madhya Pradesh has seen several innovations through to completion. Examples include the municipal reform initiatives undertaken by Indore Municipal Corporation, the concept of Rogi Kalyan Samitis in the management of health centres across the state and in generating user charges that are being used to modernise health centres and patient care facilities, the setting up of Rajiv Gandhi Missions for focussing on human development indicators such as education and health and the Gram Sampark Abhiyan to collect information on the quality of government services and the pioneering steps taken by the state government to increase financial devolution to the Panchayat institutions through budgetary institutions. Traditionally a large feudal state, all these innovations have focussed largely on rural MP, with little recognition of its burgeoning urban population and high urban poverty ratios.

Between 1996 and 2002, Indore Municipal Corporation (population 16 lakhs) undertook several steps to improve resource mobilisation. These included: The introduction of a computerized MIS, improved revenue collection, simple property tax assessment system, a move towards an accrual based system of accounting, and an energy savings programme among others. While total revenue trebled in this period, IMC also managed to grow its own revenue from 16 crores to 40 crores.

This improved MIS together with simplified procedures for assessment, billing and collections and crucial local and state government support substantially increased the financial viability of the IMC.

Indore Municipal Corporation
Urban reform & New Funding Options,
Crisil Infrastructure Advisory Seminar, August 2002

As in many other states, urban Madhya Pradesh continues to suffer from an unhealthy overlapping of responsibilities between the state level Board/Department and Municipal Corporation leading to a dilution of responsibility for service quality and accountability to consumers. The Public Health Engineering Department continues to implement urban water supply schemes where the local bodies so desire and also the implementation of the accelerated urban water supply programme (AUWSP) of the GoI. The ULBs, who in the spirit of the 74th CA are technically the ultimate owners of the schemes, often have little say in project specifications, project cost or quality control and receive little assistance from the PHED for subsequent operations and maintenance of the scheme. As such, Municipal Corporations (MC) in MP, are reluctant to take over many of the new assets due to insufficient information, technical data or resources for maintenance.

The Urban Administration and Development Department mainly provides financial assistance for civic amenities and facilities to the urban population. Safe drinking water, street lighting, sanitation facilities and arrangements for disposal of sewage, prevention of epidemics, etc. are the responsibility of the ULBs.

Key Institutional issues constraining effective delivery of water and sanitation services in urban MP include:

- States and ULBs have deficit financing and ULBs rely heavily on the State for guarantees, salaries and subsidies.
- ULBs are yet to focus on developing their own credit worthiness and capacity to mobilise revenues
- Unaccounted for water in MP's cities is in the 40-60% range resulting in 50 % revenue losses

- Inefficient billing and collection – 40-60% results in further revenue losses
- Tariffs for water are too low and do not reflect cost of productions, distribution, O&M and sewerage. Sanitation tariffs are absent.
- Inadequate technical capacity to contract out and quality control planning, design and construction
- Human resource issues including efficiency, moral and performance, recognition and rewards.
- Governance, transparency and accountability issues
- Poor stakeholder participation – inadequate client feedback and satisfaction monitoring

Reforms to bring ULBs to a sustainable level and thereby deliver equitable and reliable services require strong political will and commitment by State and ULB politicians and officials. The ADB Preparatory Project TA has been grappling with many of the above issues since loan preparation. Raising awareness and advocating for reform across civil society, providers and users of these services will be an essential part of enabling effective and wide participation in improving the urban living environment in urban MP.

Madhya Pradesh and the MDGs

MDG Goals

Target 10

Halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation

Target 11

Have achieved by 2020 a significant improvement in the lives of at least 100 million slum dwellers

Whether it is global monitoring initiatives, national survey instruments or the State Human Development Report, analysis of data, advocacy and investments remain skewed towards rural India, largely ignoring the evidence on the rapid urbanization of poverty. It is difficult to prepare an accurate estimate of the extent of urban poverty, gaps in access and entitlements and exclusion from basic services from the data available. The urban context presents particular challenges, some of which are presented below:

- 1. Location of the Urban Poor:** Poor households are estimated to be 25% of the total population and living within clearly demarcated slum settlements or integrated within the mainstream city. The assumption is that the poor outside slum settlements will automatically benefit from the improved infrastructure as they form a part of the main city. However a rapid analysis of urban poverty in MP reveals that this is not the case. The urban poor are scattered across the city and include pavement dwellers, inhabitants of fringe settlements, workers and their families on construction sites. Research from urban centres across the world confirms that

*urban poverty rates are often higher in peri-urban areas than in core cities.*⁶ The large migrant population in peri-urban areas and fringe settlements provides essential services to the city, but are denied basic services due to their “illegal” status. The extent of this vulnerability is rarely quantified because of the inability of traditional statistical surveys and census data to capture and then disaggregate data on marginalised populations. Infrastructure that reaches the slum boundaries and is extended into marginalised slums, but that does not extend into non-notified slums or squatter/shifting settlements will fail to benefit the most vulnerable. The lessons from the Mid-term evaluation of the Andhra Pradesh Urban Services for the Poor project (APUSP) on which the Municipal Action Plans for Poverty Reduction are modelled, reveal that there is a *real need to target the poor in peri-urban areas and non-notified settlements and the need to institute clear reporting systems with a focus on outcomes for the poor.*

The ever-growing difference between the demand and supplies of house sites and units coupled with B.D.A's restriction on other forms of supply and very high cost of land in the city have increased the pressure of fringe area tremendously which has given rise to proliferation of unauthorized development of land uses-residential and industries etc.

The fringe areas are generally within the jurisdiction of panchayat which has neither the financial resources nor the technical expertise to plan and manage the rapidly developing fringe. They use the municipal services without paying for it. The property and service taxes are relatively higher in the city than in the fringe area and therefore attract industries which intensifies development. Like municipal areas, panchayats have no town planning rules, sub-division regulations and rules for provision of services suited to the dynamic situation of the fringe and haphazard development takes place. Since land in the city is beyond the reach of middle/low income group people, they look for land outside the city limit.

Remote Sensing & GIS in assessing physical transformation of Bhopal city, India
Dr.Aruna, Saxena, M.A.N.I.T, Bhopal, India

2. Urban Poverty is Multi-dimensional and Dynamic: Locational differences are exacerbated by the division of the poor between those living in officially ‘recognised’ settlements where services are provided to a certain extent and those living in illegal squatter settlements with no official service provision. It is also important to keep in mind the dynamic state of poverty and the vulnerability of certain groups within the poor to shocks. Women, children and adolescents, especially girls are worst affected by economic shocks, which result in cutbacks on nutrition, schooling and healthcare. Crises push the coping poor into decline, eroding their asset base and making it difficult for them to meet their basic survival needs. The urban poor move in and out of poverty and do not confirm to a static idea of poverty. This brings into question the cost recovery principles on which infrastructure investments have been planned, as sample *Willingness to pay* assessments, do not factor in seasonal and dynamic variations in the asset base of the poor and their *ability to pay*.

⁶ Douglas Webster, A summary of peri-urbanisation, the New Global Frontier

3. Municipal Action Plans for Poverty Reduction: These have been identified as the mechanisms by which tertiary services for urban poor settlements will be integrated into citywide development and by which capacity would be built within the municipal corporations for participatory planning with community groups, using social and poverty analysis. The problems of the urban poor in Madhya Pradesh are largely unarticulated with little data available within the state on the location and status of the urban poor in the four cities, exclusion issues and vulnerable groups. Additionally, civil society voice and action is less in evidence than in many other Indian cities. Consultations in Bhopal and Indore revealed that there is little awareness of the problems faced by particular marginalised groups such as scavengers, rag pickers, shift workers, commercial sex-workers although there is evidence that these groups exist and participate in the urban economy. Special studies on vulnerability, marginalized groups and analysis of access to entitlements will be needed to help inform and strengthen the MAPP process.

Box 1: Progress towards the MDGs - Water and Sanitation

Global, Regional, National, Local

- 234 million people in South Asia still do not have access to improved water sources. Although India has made huge strides in improving access to drinking water, more than 40% of the urban poor in MP have irregular and inadequate supply.
- Over half of those without improved sanitation – nearly 1.5 billion people – live in China and India.
- **Without a sharp acceleration in progress the world will miss the sanitation target by half a billion people.**
- On an average slums in the four cities in MP account for more than a third of the total population. Estimates for the urban poor rise substantially when pavement dwellers, construction sites and fringe areas are included and when definitions of *acceptable conditions* are applied.
- In Madhya Pradesh, nearly 45 per cent of urban households defecate in the open, open “*kuccha*” drains serve 21 per cent of the urban population and the situation in slums is far worse. Robust data on adequate water and sanitation in peri-urban and fringe areas is not collected.
- Less than 5 % of households in slums in MP have access to toilets of any kind, although most have access to water.
- **Sanitation was identified as the number one priority by poor women in urban slums during ADB project preparation surveys.**

Slums of the World: The face of urban poverty in the new millennium? Monitoring the MDG, Target 11 - Worldwide Slum Dweller Estimation, Global Observatory, 2003

Headlines from WHO-UNICEF's JMP, Mid-term assessment report, July 2004

The Human Development Report – Madhya Pradesh 2002

- 4. Sanitation and Behaviour Change:** The scope of the Urban Water Supply and Environmental Improvement programme specifies in detail the scope of sanitation infrastructure to include sewerage and community sanitation blocks on municipal land, improvements within existing drainage channels in Gwalior and Jabalpur, and identification of disposal sites on municipal land and collection bins to be located through community participation. Decades of centrally sponsored programmes and State-run initiatives across India have demonstrated that infrastructure, although critical, is only one half of the problem and at that, the lesser challenge. *Achieving sustainable changes in behaviour for a critical mass of citizens, resulting in optimum use and maintenance of this sanitation infrastructure with corresponding changes in hygienic practices, is the real challenge.*

The Government of Madhya Pradesh recognizes the high level of software intervention and expertise called for to achieve sustainable hygiene behaviour change at scale and has noted the absence of competent and adequately resourced stakeholders in this area in MP. The challenge of sanitation remains one of change in behaviour. Attaining this at scale and sustaining the achievements remains elusive in the South Asian context. While success stories abound from rural Bangladesh and India, policymakers and practitioners the sheer challenge of sanitation in situations of uncertain tenure, high densities and insecure livelihoods. Yet, there are several examples of best practice in urban scenarios, lessons to be learnt and urban sanitation successes to be scaled up from within the region. The four cities of MP will be recipients of large scale investments in planning and infrastructure and present excellent opportunities to develop and implement a holistic urban environmental health strategy, drawing in expertise and resources from the region.

Without committed action and investments in behaviour change, people in the four cities will fail to benefit from primary infrastructure investments. The challenge of ensuring voice and articulation of demands that may be high on women's priorities but reflect much lower down in community managed and male-dominated processes will need to be factored into community mapping and planning processes that are a precursor to investments. The software aspects of sanitation are often sacrificed in participatory assessments, losing out to visible and tangible infrastructure investments in roads, water, street lighting, toilet blocks, etc. Additionally, the experience nationally, in use and maintenance of community sanitation blocks is varied, highlighting the importance of exploring alternative technology options that are demand responsive and respect individual preferences, factor in maintenance burdens and costs and do not exclude the poorest. There is a need for a *practical urban environmental sanitation approach that recognizes the challenges inherent in achieving the move from open defecation to sanitary disposal of human excreta as opposed to mere construction of toilets. An integrated approach would also ensure that health and educational institutions, markets and households are integrated into a citywide environmental health strategy to achieve an improved urban environment*⁷.

⁷ Indicator at goal level in LFA

B. UN-HABITAT's Approach

The four project cities suffer from poor quality infrastructure, environmental degradation, inadequate planning, financial bottlenecks and a high degree of urban poverty. However, all the project cities also present opportunities in services and trade, occupying as they do the commercial hub in their districts. If sustainable development has to succeed at the local municipal level in the four project cities, a focus on good governance in tandem with better management is needed. This means that processes must be inclusive and transparent, involve all relevant actors meaningfully with a special focus on marginalized or disadvantaged groups, resources need to be committed to developing systems for monitoring performance and access that help providers and clients alike to maintain and use services of adequate quality and quantity.

UN-HABITAT's interventions under the Water for Asian Cities Programme in MP will be governed by the basic principles of the ongoing work in Pro-Poor Urban Water and Sanitation Governance that builds on the Urban Governance Framework developed in 2002. In adherence with these principles, *the strategy framework presented in Part B of this note outlines Habitat's interventions and value addition under the Water for Asian Cities Programme in MP. This framework puts poor people at the centre of its objectives and activities with the explicit aim of accelerating progress towards attaining MDGS 10 and 11 in India.*

UN-HABITAT'S Core Competencies

- Normative work, focussing on standards and priority setting, monitoring and evaluation, and capacity building. Corresponding areas of activity/programmes:
 - Formulating the appropriate pro-poor policies and translating them into standards and regulations.
 - Developing institutional capacity for management and system maintenance and development..
 - Facilitating training and capacity building partnerships.
 - Strengthening regional, country and city level capacities.
- Political mobilization and political awareness raising through advocacy and value-based education
 - Mobilizing political will through advocacy and exchange of information.
 - Enhancing public awareness and support, with a particular emphasis on empowering the urban poor to insure its participation in priority and standards setting.
 - Promoting value-based education that will create a new ethic among children and communities
- Partnership building at local level (bringing cities and communities together)
 - Promoting participatory local environment management, focusing on the protection of water quality against pollution from urban waste, including human waste from low-income settlements.

- Supporting local demand management initiatives to improve the efficiency of urban water use.
- Demonstration and piloting
 - Experimenting new and innovative approaches to effectively service the poor in a sustainable way, and sharing the lessons learned with the greatest possible number of countries and donors.
 - Demonstrating alternative and innovative financing mechanisms for community initiatives.

Pro-Poor Urban Water and Sanitation Governance

From a human rights point of view, equity, civic engagement, transparency and accountability can be considered as basic principles of good governance.⁸

Governance extends beyond the institutions of government and includes the important role that governments have in regulating, facilitating and collaborating with other actors and institutions – as well as the important role that other actors have in achieving public goals and holding governments to account.⁹ *Better water and sanitation governance for the urban poor does not mean that the government needs to provide these services, but it does imply that the government needs to work to ensure that the poor groups can obtain adequate water and sanitation.*

Habitat’s own understanding of ‘good governance’ is based on its operational experience and the Habitat Agenda. *This operational experience confirms that it is neither money, nor technology, nor even expertise but good governance that means the difference between a well-managed and inclusive City and one that is poorly managed and exclusive.¹⁰* Water and sanitation services of adequate quantity and quality that can be accessed by all men, women, adolescents and children, rich or poor are an important outcome of good urban governance.

While it is widely accepted that good governance is vital for improving the quality of life in cities it is equally important to know what we are looking for as results. Research at the national level has demonstrated that good governance correlates with positive development outcomes. A survey on governance in 165 countries reported that a one standard deviation increase in one of six governance indicators causes a 2 ½ fold increase in income, a 4 fold increase in infant mortality and a 15 to 25 percent increase in literacy, thus establishing a

⁸ International Legal Instruments Addressing Good Governance

⁹ Pro-Poor Urban water and sanitation governance, Gordon McGranahan and David Satterwaithe, IIED

¹⁰ The Global Campaign for Good Urban Governance (2000).

clear relationship between governance and human development.¹¹ As the survey concluded:

“The result of good governance is development that ‘gives priority to the poor, advances the cause of women, sustains the environment, and creates needed opportunities for employment and other livelihood.’”¹²

UN-HABITAT’s approach in Madhya Pradesh is to develop a Pro-poor Governance Framework that will allow water and sanitation reform and investments to reach the poorest of the poor through partnership building at all levels. The governing principles of this approach include:

- *The need for civil society to be involved and to influence priorities and investments*
- *Specific attention to women, adolescent girls and boys, children and marginalised groups*
- *Mechanisms for the most vulnerable to articulate their interests and hold government and providers to account*
- *The importance of a regulatory framework that protects providers and consumers alike*
- *Services need to be responsive, affordable and sustainable*

Key features of the approach will include drawing on UN-HABITAT’s extensive experience in the region and wider (South East Asia and Africa) in incorporating environmental and health considerations into management and urban planning practise, building genuine partnerships linking local institutions with community groups, creating spaces for civil society voice and action and adapting and using urban management tools for planning, monitoring, technology options, communication and information developed and tested successfully in various cities around the world. Specific tools and approaches already developed and tested by UN – Habitat of relevance to the project area listed below:

- i. Community Based Environmental Management Information Systems (CEMIS)
- ii. The Urban Governance Index – a framework that project cities can continually use to assess where they stand on urban governance, identify gaps and take action;¹³
- iii. The Global Urban Observatory to develop performance monitoring options linked to customer satisfaction standards.
- iv. Assessing effective demand for water and sanitation services
- v. Water Demand Management with an emphasis on demand assessment, efficiency as well as equity in distribution and use.
- vi. Environmental Sanitation innovations in technology, management and livelihood generation, especially human excreta and solid waste management.
- vii. Value-based water and sanitation education, especially in schools

¹¹ Wescott. Clay (2000); Measuring Governance in Developing Asia, Asian Development Bank, Manila.

¹² Re-conceptualising Governance, UNDP, 1997. Pg 1.

¹³ The UGI includes indicators against five principles: Effectiveness, Equity, Participation, Accountability, Security

- viii. Income generation for the urban poor, through water and sanitation interventions

Community Based Environmental Management Information Systems (CEMIS)

UN-HABITAT's two global campaigns for security of tenure and good urban governance are based on the belief that well-functioning cities must be inclusive where people are enabled to participate productively and positively in the opportunities offered by the urban economy. A tool to promote this approach is the Community Based Environmental Management Information Systems (CEMIS) which is based on the central principle that community self-determination and community co-management are the key requisites for sustained human settlements development. CEMIS emphasizes planning as a dialogue (Consultation) at different levels with the family, the neighborhood, and the community - and with partners who include political leaders, governments, and NGOs, in order to share information and experiences.

The Urban Governance Index

The UGI has a dual purpose: At the *global level*, the UGI will demonstrate the importance of good urban governance in achieving broad development objectives, such as the Millennium Development Goals and those in the Habitat Agenda. Research at the national level has demonstrated that good governance correlates with positive human development outcomes. The index will also permit the regional and global benchmarking of cities against key indicators based on the quality of their urban governance. The process of comparison is designed to catalyze specific action to improve the quality of local governance. At the *local level*: the index is expected to catalyze local action to improve the quality of urban governance. Local indicators will be developed by cities and their partners to respond directly to their unique contexts and needs. The Urban Governance Index, will be supported by tools, training guides and an appendix of additional indicators to help cities develop their own systems.

The Global Urban Observatory (<http://www.unchs.org/programmes/guo/>)

The Global Urban Observatory (GUO) addresses the urgent need to improve the world-wide base of urban knowledge by helping Governments, local authorities and organizations of the civil society develop and apply policy-oriented urban indicators, statistics and other urban information. The GUO was established by UN-HABITAT in response to a decision of the United Nations Commission on Human Settlements, which called for a mechanism to monitor global progress in implementing the Habitat Agenda and to monitor and evaluate global urban conditions and trends.

Values Based Water Education

Values-Based Water Education was developed by UN-HABITAT under the Water for African Cities Programme as a guided process of behaviour change through self-transformation in order to guide communities to an *equitable and sensible use of water*

resources. VBWE goes beyond imparting information on water, sanitation and hygiene to inspire and motivate learners to change their behaviour and adopt attitudes that promote wise and sustainable use of water. VBWE attempts to integrate the values enshrined in the Millennium Declaration and basic human values by working at three levels – environmental, social and economic, in order to develop a new water use ethic.

Water Demand Management

Water demand management refers to the implementation of policies or measures, which serve to control or influence the amount of water used. This can be affected by education and awareness, economics and enforcement of legislations on the customer side. Efficiencies include reduced losses, increased waste water use and more efficient demand. Water demand management enables water utilities to become more efficient and financially viable service providers by reducing wastage and losses.

PART B: STRATEGY FRAMEWORK

Opportunities For UN-HABITAT Support in Madhya Pradesh

The framework below is an updated version of the collaborative framework developed by UN-HABITAT in the first quarter of 2003. It attempts to identify key interventions that will influence and direct the benefits of project investments to the poor in the four cities of MP where UN-HABITAT will engage more intensively in partnership with other stakeholders. This framework is designed to complement planned ADB interventions, the DFID supported MAPP process, city specific strategies and interventions, avoiding duplication and ensuring synergies.

The separate intervention areas are explained further in this section, with key issues highlighted, followed by a brief section on key principles and the process for taking this forward.

Table 1: Framework for UN-HABITAT Intervention

ABD project category	UN-HABITAT Interventions		
	Pro-Poor Water Governance	Integrated Environmental Sanitation & Hygiene Behaviour Change	M&E, Knowledge Sharing
Part I: Urban Water Supply & Environmental Improvement <ul style="list-style-type: none"> ▪ Water Supply ▪ Sewerage & Sanitation ▪ Drainage ▪ Solid waste management 	<ul style="list-style-type: none"> ▪ Demand Assessment ▪ Rights based approach to services ▪ Pro poor cost recovery mechanisms ▪ Ability to pay ▪ Innovative pricing ▪ Demand management, water education & water conservation 	<ul style="list-style-type: none"> ▪ Urban Environmental Health Strategy Formulation ▪ Focus on <i>practices and behaviour change- approach, training, resources, best practices</i> ▪ Technology Options – formulation, testing, replication, scaling up and advocacy ▪ Sanitation & Hygiene education in schools, markets, religious establishments, government institutions, hospitals, etc. 	<ul style="list-style-type: none"> ▪ Develop partnerships with civil society in MP to inform and strengthen planning and implementation. ▪ Share information on appropriate technical solutions for urban issues and highlight these in MDG regional discourse ▪ Play role of knowledge broker and knowledge sharing on benchmarking utilities and performance monitoring systems.
Part II: Urban Governance & Institutional Development <ul style="list-style-type: none"> ▪ Urban Governance ▪ MAPP, ADF, CIF 	<ul style="list-style-type: none"> ▪ Collaborate in strengthening the MAPP process and identification of non-slum, peri-urban beneficiaries under ADF and CIF. ▪ Performance monitoring for municipal managers and service providers while highlighting equity and use concerns. ▪ Explore a livelihoods approach to poverty reduction in the project cities that includes shelter, environmental living and working conditions, basic services and income generation opportunities. 		<ul style="list-style-type: none"> ▪ Develop indicators and monitoring system to focus on outcomes for the poor, with an emphasis on inequities in access, use, maintenance and sustainability using UN-HABITAT's technical expertise and resources in M&E (CEMIS, UGI, GUO)
Part III: Implementation Assistance Consultancies, Public Relations & Awareness, Programme Benefit monitoring & evaluation	<ul style="list-style-type: none"> ▪ Raising awareness, advocacy ▪ Measurement, benchmarking, exposure visit, workshops, regional sharing, lessons learning ▪ Impact evaluation – accountability, grievance redressal, voice & participation, replicability, sustainability and scalability. ▪ Local observatory on tracking progress towards achieving the MDGs in order to enrich policy and practice on the urbanization of poverty. 		<ul style="list-style-type: none"> ▪ Bring international and regional expertise and best practice for sharing and advocacy.

I.Pro-Poor Urban Water & Sanitation Governance

“The exercise of economic, political and administrative authority to manage a country’s affairs at all levels. It comprises the mechanisms, processes and institutions, through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences.”

UNDP, <http://magnet.undp.org/policy/summary.htm>, accessed June 2004

- i. a) There is a need to ensure that the dialectic of “pro-poor governance” is articulated and reflected across indicators and performance appraisal systems to be used by city managers so that these are eventually customer/client satisfaction ratings that focus on use, rather than access and include poverty and equity considerations at every stage. Identification of the most marginalized needs to feed into ADB preparatory work, DFID design and implement processes, City Development Strategies and any project work initiated. This would not mean parallel design processes but rather identify key areas for pro-poor intervention through focused work (e.g. peri-urban settlements, migrant labour, manual scavengers and linkages with health entitlements, squatters, etc.) Special studies looking at gaps between access and entitlements will be key to ascertaining who the excluded are, their concerns and needs, how to reach them and address these needs.

b) Creating space and platforms for voice and dialogue is an important first step in locating the poor and engaging them effectively in city governance. UN-HABITAT aims to collaborate with local and international NGOs such as ActionAid, Oxfam, WaterAid, National Centre for Human Settlements and Environment, Aarambh, CEECOEDECON active in Madhya Pradesh, agencies with expertise in urban governance and management issues such as FIRE –III, Water and Sanitation Programme – South Asia, CRISIL, Indian Institute of Management-Indore, All India Institute of Local Self Government, the Academy of administration, Bhopal. Urban NGOs such as YUVA, Shelter and SPARC have important lessons to offer in MP, while UNICEF and UNFPA as part of the UN family are natural and important partners. Collaborating with Cities Alliance and the City Managers Association to ensure that strategies and actions emanate from the city and are fully owned by key stakeholders will be an overarching concern.
- ii. Pro-poor benchmarking & performance monitoring is another key area where UN-HABITAT has a comparative advantage and can bring in international/regional lessons to strengthen local initiatives already underway by the City Managers Association. Additionally, substantive work has already been done by UN-HABITAT on the Urban Governance Index and the Community based Environment Management Information System which is being tested in cities across the world and this experience and lessons can be brought to bear in MP.

II. Sanitation & Hygiene Behaviour Change

During the social and poverty impact assessment undertaken by ADB for the six cities, the survey respondents identified lack of access to a reliable in-house water supply as the foremost deficiency. However, during the participatory rapid appraisal exercise, poor women cited fetching and storing water for domestic use as their *second* priority for improvement. The ***topmost priority was toilets*** because nearly half of poor women defecate outdoors, one quarter use public toilets, and the rest use pay toilets.

Project benefits, Impacts and Risks, ADB, RRP:IND 32254, November 2003

- i. In collaboration with the government and key stakeholders, UN-HABITAT will develop an approach and strategy on integrated environmental sanitation including human excreta management – i.e. moving from 5 % access to latrines to 100% sanitation (i.e. no open defecation and sanitary disposal of child and adult faeces), wastewater and solid waste management. The focus will be the changes in hygiene behaviour required to translate the benefits of investments in toilets and sewers into environmental health benefits and improved livelihoods.
- ii. Human excreta disposal and linked changes in hygiene behaviour within households and public institutions such as schools, hospitals and markets (stop open defecation, hand washing with soap at critical times, appropriate technology, etc.) as separate from investments in sanitation infrastructure have emerged as key linked areas where there is currently a gap – even at the level of intent. Government and other stakeholders consulted in Bhopal, Indore and Delhi endorsed the urgent need to tackle this “forgotten area”.
- iii. An enabling environment and untapped funds exist under the GOI’s centrally sponsored schemes – including Nirmal Bharat Abhiyan, Swajaldhara (which may include some peri-urban areas), VAMBAY, etc. A holistic investment strategy which looks at various resources available and mechanisms to utilise these efficiently for the public good can help to fill shortfalls and investment gaps.
- iv. There is a need to collate and bring together the successes in sanitation and hygiene behaviour from the region together, analyse the key ingredients and drivers for change and consolidate these into useful material and tools that can be used locally.

III. Knowledge Sharing, Lessons Learning

- i. UN-HABITAT may play the role of coordinator, catalyst, knowledge broker and desist from direct intervention in three of the four cities. Given its earlier commitment to Indore and presence of willing and able partners, UN-HABITAT can initiate its demonstration pilots in one city, while sharing the lessons and setting up networking and knowledge sharing mechanisms across the four cities and wider.

- ii. Effective knowledge sharing and lessons learning was identified as a key gap in the recently concluded evaluation of APUSP. There is a demand for a neutral knowledge broker that can create a space for effective sharing and learning. UN-HABITAT can play this role across the four cities, bringing in best practice and expertise in specific areas. There is a need to create a dialogue and network on environmental sanitation and health and to link this with the City Managers Association, CMF and other practitioner groups.

IV. Develop Local Advisory Capacity

- i. Externally driven, projectised inputs will fail to sustain beyond the project life. There is a need to invest in local (state and city) human resources that can provide ongoing support to city managers and civil society in the technical and managerial aspects of urban poverty reduction and service delivery. Although potentially strong resources do exist in the form of Institutes of Management and state and district level training institutes, these have been under-utilised and disengaged from development activity. UN-HABITAT is keen on building the capacity of local institutes in supporting the technical and management aspects of the ADB/DFID investments by leveraging international, regional and national resources to transfer skills, update expertise and ensure state-of-the art thinking is available to the project.

V. Demonstration Pilots - In Partnership

- i. Demonstration pilots in key areas of UN-HABITAT expertise that lie within the larger ADB – MP Urban Poverty Reduction programme can serve to strengthen advocacy on pro-poor governance while forging strong partnerships for more substantive work. These pilots can provide the testing ground for adaptation of best practise to suit local conditions in urban MP and to engage local actors.
- ii. There is early evidence that implementing partners are available for this in the immediate short term bringing with them knowledge of and presence in MP, and an interest in working in strategic areas to demonstrate and scale up.

Annexure II: Programme of Events

Pro-poor Urban Water and Sanitation Governance Workshop

Day One, Friday, 18th March 2005	
0930 hrs	Registration
1030 hrs	<p>Lighting of Lamp</p> <p>Welcome Address <i>Mr. Gopal Reddy, Secretary, UADD</i></p> <p>UN-HABITAT WAC Programme in M.P. India <i>Mr. Andre Dzikus, Programme Manager, WSIB, UN-HABITAT</i></p> <p>Background of UWSEIMP Project <i>Mr. Alex Jorgenson, Asian Development Bank,</i></p> <p>Message from Executive Director, UN-HABITAT <i>Mr. Kalyan Ray, Senior Advisor, Office of the Executive Director, UN-HABITAT</i></p> <p>Inaugural Address <i>Mr. Satya Prakash, Principal Secretary, UADD, Govt. of MP</i></p> <p>Vote of Thanks <i>Mr. S.N. Mishra, Project Director, UWSEIMP</i></p>
1130-1150 hrs	Tea/Coffee Break
1150–1230 hrs	<p>First Technical Session (Pro-poor Urban Water and Sanitation Governance) (Session Chair: Mr. Satya Prakash, Principal Secretary, UADD) (Session Co-chair: Mr. Kalyan Ray, UN-HABITAT)</p> <p>Key Note Speakers <i>Ms. Archana Patkar, Consultant, UN-HABITAT</i> <i>Situation Analysis and Context for Pro-poor Water and Sanitation Governance Approach of Water for Asian Cities in M.P.</i></p> <p>Discussion</p>
1230–1310 hrs	<p>Second Technical Session (Achieving the MDGs: Mapping the Poor) (Session Chair: Mr. Satya Prakash, Principal Secretary, UADD) (Session Co-chair: Mr. Kalyan Ray, UN-HABITAT)</p> <p>Key Note Speaker <i>Mr. Harvey Herr, Consultant, UN-HABITAT</i></p> <p>Discussion</p>

1310-1350 hrs	<p>Third Technical Session (Bridging the Sanitation Gap) (Session Chair: Mr. Alex Jorgensen, ADB) (Session Co-chair: Mr. Andre Dzikus, UN-HABITAT)</p> <p><i>Key Note Speaker</i> Mr. Graham Alabaster, Programme Manager, WSIB, UN-HABITAT</p> <p>Discussion</p>
1350-1450hrs	LUNCH
1450-1530 hrs	<p>Fourth Technical Session (Enhancing Capacity for Delivery) (Session Chair: Smt. Susheela Singh, Mayor of Jabalpur) (Session Co-chair: Mr. Peter Smith)</p> <p><i>Key Note Speaker</i> Prof. Meine Pieter van Dijk, Consultant, UN-HABITAT</p> <p>Discussion</p>
1530-1615 hrs	<p>Fifth Technical Session (UN-HABITAT Implementation Strategy) (Session Chair: Mr. Satya Prakash, Principal Secretary, UADD)</p> <p>Lead Presentations Ms. Archana Patkar / Prof. Meine Pieter van Dijk, Consultants, UN-HABITAT</p>
1615-1630hrs	<p><i>Discussions (in smaller groups-next session)</i> <i>Formation of Working Groups</i></p>
1630-1645hrs	<i>Tea/Coffee break for the Participants</i>
1645-1800 hrs	<p>Working Groups</p> <p>Group – A: Pro-poor Water Governance (Facilitator: Ms. Archana Patkar, Consultant, UN-HABITAT)</p> <p>Group – B: Integrated Environmental Sanitation and Hygiene (Facilitator: Mr. Graham Alabaster, Programme Manager, UN-HABITAT)</p> <p>Group –C: Capacity Building (Facilitator: Prof. Meine Pieter van Dijk, Consultant UN-HABITAT)</p> <p>Group – D: Monitoring and Evaluation, Knowledge Sharing (Facilitator: Mr. Harvey Herr, Consultant, UN-HABITAT)</p>

Day Two, Saturday, 19th march 2005	
1000-1045 hrs	<p>Sixth Technical Session (Water Demand Management) (Session Chair: Dr. Uma Shashi Sharma, Mayor of Indore) (Session Co-Chair: Mr. V.N Shejwalkar, Mayor of Gwalior)</p> <p><i>Key Note Speaker</i> <i>Mr. Daniel Meyer (Niel), Consultant, UN-HABITAT and Andre Dzikus, UN-HABITAT</i></p>
1045-1130 hrs	<p>Seventh Technical Session (Small Scale Piped Water System) (Session Chair: Mr. V.N Shejwalkar, Mayor of Gwalior) (Session Co-Chair: Dr. Uma Shashi Sharma, Mayor of Indore)</p>
1130-1200 hrs	<i>Tea/Coffee break for the Participants</i>
1200-1330 hrs	Group Discussions continued for finalizing their conclusions and reporting back to plenary
1330-1430 hrs	<i>Lunch Break</i>
1430-1530 hrs	<p>Closing Session (Session Chair: Mr. Satya Prakash, Principal Secretary, UADD) (Session Co-Chair: Mr. Gopal Reddy, Secretary, UADD)</p> <p><i>Reporting Back by 4 Groups</i></p> <p><i>Conclusions and Recommendations</i> Dr. Kulwant Singh, CTA, UN-HABITAT</p> <p><i>Indication of Next Steps</i> Mr. Andre Dzikus, Programme Manager, UN-HABITAT</p> <p><i>Remarks</i> Mr. Kalyan Ray, Senior Advisor, UN-HABITAT</p> <p><i>Closing Remarks</i> Mr. Satya Prakash, Principal Secretary, UADD</p> <p><i>Vote of Thanks</i> Dr. Kulwant Singh, CTA, UN-HABITAT</p>

Annexure III: Addresses Delivered at the Inaugural Session and by Session Chair

Welcome Address by Mr. Gopal Reddy, Secretary, Urban Administration and Development Department (UADD), Govt. of Madhya Pradesh

I welcome all the delegates who have showed their big consent and valuable time for this consultation.

This workshop is basically for two days and it is designed in such a way that there is a dialogue between all the participants. It shall deal with various aspects of social and community development issues. Most importantly Pro-poor Urban Water Governance and capacity building need things and dealing with preparations of implementation strategies. The workshop will also grow like on various aspects of urban water conservation and human management integrating urban involvement to sanitation governance. The Urban Administration and Development Department with the assistance of Asian Development Bank has conceptualized a project on Urban Water Supply and Environmental Improvement in four major cities of Madhya Pradesh viz. Indore, Bhopal, Gwalior, Jabalpur. A very important aspect of those projects in Urban Governance and institutional development besides Urban Infrastructure development and there has been lot of focus in the Urban Infrastructure Development this project envisaged not only in the urban infrastructure but also focusses on urban governance issues which are very critical to urban administration and project of this kind, and also on capacity building. The primary objective of this project is to promote sustainable growth and poverty reduction in project cities. The Project also proposes to strengthen the capacities of the Municipal Corporations in planning and managing all the activities in a most effective and sustainable manner because at present we have the system in which sustainability is a major concern, the capacity building is aimed in this direction so that the extreme or four cities being in a position to equip itself at the end of project to sustain itself from long term development in working effectively by transparent manner and I am sure this workshop will be able to include the necessary implementation strategies for success of the project of this kind and achieve the overall objective of the project. I again welcome all the dignitaries who have come to participate in this workshop and hope that to do the discussion will enable us to come out with implementation strategy to effectively implement the project in all the four cities in Madhya Pradesh and do as a guide of guidance for the implementation of such project in the future, I welcome all the guests once again.

Policy Statement of UN-HABITAT

Presented by Mr. Andre Dzikus, Programme Manager, UN-HABITAT

The Water for Asian Cities Programme (WAC) in Madhya Pradesh, aims at pro-poor investments in water and sanitation to support the achievement of the millennium development goals. The ADB – UN-HABITAT partnership aims to:

- Expand and improve water supply and sanitation services to the urban poor in Asia,
- Build the capacity of Asian cities to secure and manage pro-poor investments, and
- Help the region meet the Millennium Development Goal of halving by 2015 the proportion of people without safe drinking water and basic sanitation.

At the WAC consultation in New Delhi, in 2002, there were a hundred participants from sixteen Asian countries and twelve external support agencies and NGOs. The primary areas of focus will be Pro-poor Urban Water Governance, Urban Water Demand Management, Integrated Urban Environmental Sanitation and Income Generation for the urban poor through community based water and sanitation services. A letter of intent was signed between ADB, UN-HABITAT and the Government of Netherlands in September 2002. The Water for Asian Cities programme was officially launched at the Third World Water Forum (WWF) on 18 March 2003 and a Memorandum of Understanding was signed between ADB and UN-HABITAT on the same day in Osaka, Japan. Under the partnership both agencies are making available US \$10 million in Grants and ADB US \$500 million in loans.

The WAC Programme has three phases, which may be implemented either sequentially, simultaneously, or be overlapping, depending upon the requirements and circumstances, as appropriate, together with the participating countries, in the design, development and implementation of the three phases.

Phase I: Capacity Building, which aims at creating the enabling environment and build the necessary capacity for the WAC Programme; **Phase II:** Project Preparation, aims at identifying, developing and preparing investment projects for WAC Programme, to be consistent with the ADB Country Strategy and Programme. **Phase III:** will focus on the mobilisation of financial resources, provision of loans to the participating countries where appropriate, physical implementation of projects, as well as continuation of policy reforms, capacity building measures and institutional strengthening. Particular attention will be paid to efficient and effective operation, management and sustainability of water supply and sanitation services.

Regional activities undertaken by project partners include study visits and staff exchanges, attending international WATSAN events (WWF4, Stockholm Water Symposium, ADB Water Week), networking and meetings of professionals, publication of Unheard Voices of Poor Women (CSD 12) and regional capacity building and demonstration initiatives, such as Values-based Water and Sanitation Education and Small Scale Piped Water Systems.

The activities for WAC in Madhya Pradesh began with a joint UN-HABITAT and ADB assessment mission from April to May 2003, followed by incorporating a collaborative framework for WAC incorporated in the ADB Project Document. The project document was approved by the Board of Directors, ADB in December 2003 and the Government of India signed the loan agreement in March 2005.

Address by

Mr. Alex Jorgensen, Head, Urban Development, ADB, New Delhi

Message from

Dr. Anna Kajumulo Tibaijuka, Executive Director, UN-HABITAT

As read out by Mr. Kalyan Ray, Senior Advisor, Office of the Executive Director, UN-HABITAT during the Inaugural Session

Smt. Sushila Singh, Mayor of Jabalpur, all the members of the Mayor-in-council of Jabalpur, Mr. Satya Prakash, Principal Secretary, Govt. of Madhya Pradesh, representatives of DFID, other agencies, Cities Alliance our partner, Media and other distinguished participants of this workshop. On this occasion I will like to present the message of the Executive Director of UN-HABITAT, Dr. Anna Kajumulo Tibaijuka. I will read the message which has been issued on the occasion of this workshop.

So as follows

I send my warm greetings to you all for your valuable support in the organization of this workshop on pro-poor urban water governance and for gracing this inaugural session with your benign presence. On this Occasion, I wish to recall the leadership of the Union Minister for Urban Development and Poverty Alleviation of the Government of India in hosting the UN-HABITAT organized regional consultation in New Delhi in April 2002 which brought together Asian countries and their development partners and led to the development of the Water for Asian Cities Programme to promote pro-poor water and sanitation investments in the Asia-pacific region. India was also one of the first countries to voice its support for the Water for Asian Cities Programme when a memorandum of understanding was signed by the Asian Development Bank and the United Nations Human Settlements Programme (UN-HABITAT) in Japan 2003 pledging capacity building and investment support to the cities participating the programme.

Mr. Chairman, distinguished participants, a key objective of the Water for Asian Cities Programme is to support developing countries in their effort to reach the Millennium Development Goals relating to water and sanitation. These goals adopted by the Heads of States who assembled in the Millennium Summit in September 2000 represents unprecedented global commitment to address forward which rocks people on their health and hope and remains the single most vital aspect to achieve peace and prosperity of our nations.

It is indeed laudable that Government of India's 10th five year plan 2002-2007, envisages providing for 100 per cent rural and urban populations with safe drinking water on a sustainable basis. In the area of sanitation also, India has shown its determination to make rapid progress by allocating the necessary resources for this purpose. The plan document underscores the necessity not only to generate surplus to instal additional capacity in sanitation and water supply but to pay greater attention to the critical issues of institutional restructuring and reforms, managerial improvements and better and more equitable services through a participatory process. We are encouraged to know that the Government of Madhya Pradesh has also developed specific strategies for water supply, sewerage and sanitation, under the 10th plan focussing on the demand driven approach and ensuring minimum level of service to people. The urban water supply and environmental improvement project in Madhya Pradesh is, therefore, a timely and important intervention to achieve the water and sanitation goals entirely set by the Madhya Pradesh government under the 10th Plan.

Mr. Chairman, distinguished participants I would like to assure you that UN-HABITAT is committed to support this important project by working closely with the government and other

development partners. In doing so, UN-HABITAT will rely on its core competencies and its international mandate to support the MDGs and targets. Notable among these are the global monitoring responsibility that UN-HABITAT currently performs for MDG target level related to improving the living condition of slums dwellers, its lead role within the United Nations system in the area of urban water management and the international experience that UN-HABITAT could draw from its two global campaigns on Rural/Urban Governance and Secure Tenure for the Urban poor, as also its regional water and sanitation programmes in Asia and Africa. A collaborative framework developed jointly by UN-HABITAT and Asian Development Bank in May 2003 within the context of the urban water supply and environmental improvement project in Madhya Pradesh, which now forms part of the loan document outlines UN-HABITAT's possible interventions that could bring added value to this project. This workshop on pro-poor urban governance will provide an excellent opportunity to have a meaningful dialogue with the key stakeholders of this project and to develop a consensus on the priority areas of UN-HABITAT intervention that would improve the impact and effectiveness of this project I am pleased to note that a draft strategy framework has been developed for this purpose and a concept note on the strategy has been circulated for facilitation of discussion of this workshop.

Mr. Chairman, distinguished participants, I look forward to a productive outcome of this workshop. UN-HABITAT remains ready to respond to the call for support from the state and city governments, the primary stakeholders of this project and I can assure you that it will work in close cooperation with other development partners in this project.

Thank you for your attention

**Inaugural Address by
Mr. Satya Prakash, Principal Secretary, Urban Administration and
Development Department (UADD), Govt. of Madhya Pradesh**



Address by*
Mrs. Susheela Singh, the Mayor of Jabalpur
At the UN-HABITAT Workshop on 18th March 2005

Distinguished delegates, Ladies and gentlemen

At the outset, I would like to greet all the guests on the Dias and all the participants who are presence in this programme.

In this workshop organized by UN-HABITAT, there has been enough discussions on the subject of drinking water supply in the Asian cities. In this workshop many experts have expressed their ideas on the subject of supplying potable drinking water to the urban poor settlements besides discussing the subject relating to the drainage of waste water and provision of basic services for the improvement of urban environment. I on behalf of Jabalpur Municipal Corporation welcome the resolution of the State Govt. to include Jabalpur Municipal Corporation in the UN-HABITAT's Water for Asian Cities Programme to be implemented in Madhya Pradesh.

In the city of Jabalpur there are 328 slums and squatter settlements. The total population living in these slums and squatter settlements is about 43 per cent of the total city population. The people living in these slum areas do not have access to the most essential basic services. Jabalpur Municipal Corporation also does not have the correct data of the persons living below the poverty line. In these slums & squatter settlements the City Municipal Corporation is supplying drinking water through public taps and tubewells. Despite the shortage of resources and deficient water distribution system, the city corporation is unable to supply adequate water to weaker sections. Simultaneously due to illiteracy and environment pollution, people do not get clean environment as a result of which they continuously suffered from many serious diseases.

It should be possible to implement the programme for the urban poor in a planned manner in the city of Jabalpur in partnership with UN-HABITAT under the Water for Asian Cities Programme.

In today's workshop the presence of our Mayor-in-Council and other members indicates our commitment and we feel that we are capable of implementing this programme.

With the implementation of the UN-HABITAT Programme and its activities under the WAC Programme, especially relating to the improvement of water supply, sanitation through public awareness, advocacy and some of the direct interventions, common persons will immensely benefit which shall help in positive improvement in their standard of living. However, this programme will succeed only with an active cooperation of the State Govt. administration and the Asian Development Bank.

It is my firm belief that the outcomes and recommendations of this workshop will be highly beneficial for implementation.

Before I conclude, I would like to thank all of you for your patient hearing.

* Translated in English from the originally delivered speech in Hindi



Address by*
Mr. V.N. Shejwalkar, the Mayor of Gwalior
At the UN-HABITAT Workshop on 19th March 2005

Distinguished delegates and friends

The Gwalior City Corporation is presently having its budget session. I, therefore, could not be present yesterday due to my pre-occupation in the budget session of the Corporation. We have already given our suggestions for the implementation of UN-HABITAT programme in the city of Gwalior. In this regard, I, however, would like to reiterate some of our suggestions. However, before I do that, I would like to give some highlights of the present situation in the city of Gwalior.

Gwalior is the fourth largest city of Madhya Pradesh. In the year 2001 the total population of Gwalior was 0.83 million. During the last decade of 1991 to 2001, the total population increase was 19.71% which is less than the national and state average. The slow growth was result of the closure of some of the old industries but in their place no new industries were setup. It is estimated that by the year 2021 the city population of Gwalior will increase to 1.3 million. There is a felt need for significant improvement in the provision of basic civic amenities in the city. Provision of drinking water, cleanliness and other basic civic amenities are recognized as essential pre-requisites. The present situation with respect to some of these services is as under:

Water Supply

The city water supply from surface water sources is 190 million litres per day. Besides these, there are 900 tubewells which pump approximately 27 million litres of underground water. In addition there are 920 handpumps which provide water supply to the concerned households. The total availability of water is quite sufficient for at least another ten years. However, there is a need for improving the present distribution system and increasing the efficiency of the present water sources. Since 1989, a project for improving the distribution system was launched at a total cost of Rs. 194 million. However, due to paucity of funds, this project could not be completed. Under this project it was planned to construct six reservoirs for a total capacity of 30 million gallons of water per day and 110 Km long distribution pipeline. Until now only four reservoirs have been constructed along with a 15 Km long distribution pipeline.

Other features of our present water supply system are as under:

- Of the total 1,22,903 households only 76,360 households have got piped water connection, whereas 6600 households draw water from 1100 public standposts. The remaining 39,941 households make use of underground water informally. In this manner only 68% city population uses piped water supply while the remaining 32% meet their water needs through wells, tubewells and other sources.
- It is estimated that on average 93 litres per capita per day water is supplied. This is after taking into account water leakages of about 23 per cent in distribution, 8 per cent in water reservoirs and other treatment plants etc.
- There are no water metres and the billing is only at flat rates.

* Translated in English from the originally delivered speech in Hindi

- On average water is supplied every day for about one hour on a reasonably low pressure.
- It is also estimated that there are about 20,000 illegal connections.
- Our main problems are: old distribution pipelines, leakages due to several factors and a total unaccounted for water at a level of 64 per cent.
- In order to improve distribution system some of the important tasks are (a) identification of the source of leakages and their control (b) regularization of illegal connections (c) public awareness and advocacy for water conservation (d) energy and water audits

Cleanliness and water drainage system

In the central part of the city, sewerage line has been provided. However, only about 60% of the households have been connected and the remaining 40% of the households are yet to be connected. The work for the sewerage has not yet been fully completed for financial resource constraints.

Slum and Squatter Settlements upgradation

There are 146 slum squatter settlements with a total population of 0.4 million. The city corporation aims at improving and upgrading facilities in these areas by providing drinking water supply, drainage, construction of roads etc. Importantly, the corporation aims at increasing the source of revenue from these settlements and also focus on right use of drinking water by creating public awareness and education relating to the water utility, availability, stoppage of misuse of water and conservation of water etc. The city corporation aims at providing individual household piped water connections to 95 per cent of the population and making available water through public standpost only to the remaining 5 per cent of the households. The corporation feels the great need for creating public awareness where UN-HABITAT can play a key role.

We do hope that in the implementation of UN-HABITAT activities, the city corporation's felt needs shall be kept in view.

Thank you



Address by*

Dr. Uma Shashi Sharma, the Mayor of Indore

At the UN-HABITAT Workshop on 19th March 2005

The programme for enhancing the availability and management of Water for Asian Cities being implemented by UN-HABITAT in Madhya Pradesh is highly appreciable. The joint efforts of ADB and UN-HABITAT in undertaking numerous activities for increasing the Water supply in the cities of Madhya Pradesh, which inter alia, include assessment of water resources, enhancing their existing capacity, creating awareness about the importance and conservancy of water among the people and educate them about the management of water etc. included in it are highly commendable.

Presently, we all have been facing the problem of shortage of water and if the thereby actions are not taken to solve the problem, it is likely to take a more dangerous dimension. The demand for water has been increasing tremendously with the increasing population & spreading up of industries. Hence, the main and most important issue is to bring balance in demand and supply of water. The Indore Municipal Corporation has been making various efforts for increasing the supply of water. All formalities related to ADB Project Loan for Narmada Water Phase III have been completed. The scheme continuing all the year upto 2009 includes streamlining the present position, rectification of leakage, modernization of water treatment plants, extension of water distribution system etc. With the completion of this scheme the city of Indore would get the water in double quantity i.e. instead of 180 Mld to 360 Mld. As a result the industries in Indore city and also in Dewas would also get the water in required quantity. The Municipal Corporation has also taken up the scheme for the development of Yashwant Sagar. Under this scheme of Rs. 255 million, the Yashwant Sagar would be expanded in length and width as well as in height with the implementation of the project. The present capacity of water supply from Yashwant Sagar would be more than doubled. Presently, in order to make regular availability of water in the city, the water is being supplied on alternate days besides distribution of water through tankers.

In addition to all these efforts, the other most important factor is that the urban population in general should become fully aware and take up all steps to cooperative in conservation of water. The people at their own level do make efforts. The domestic use of water should be undertaken in such a way that there may not be unnecessary use and wastage of water. The water taps should not be left open, leakage should be stopped spontaneously and there should not be overflow of water in kitchen, gardens etc. Thus, with these little but concerted efforts, we all will be able to conserve the water for better use in future.

It is our moral responsibility to save the water and if we become conscious now, we may secure our future. A medium family generally requires 800-1000 litres water per day, but at present we supply only 30 per cent of this requirement. It may not be out of context here to narrate that when Mahatma Gandhi went to meet Pandit Nehru in Allahabad in the State of Uttar Pradesh, he (Mahatma Gandhi) performed all his daily course in just one jug of water, then Pandit Nehru said to Gandhi that in the city of Allahabad flows the river Ganges, therefore, he should not be so miserly, and concerned about the use of water to which Gandhi replied that he only needed one jug of water and not more rest of the water is for others. We have to create similar awareness and awakening our people to conserve water. UN-HABITAT, therefore, should focus on public awareness, advocacy and capacity building.

* Translated in English from the originally delivered speech in Hindi

Annexure IV: Matrix of Letters from City Mayors

	Issues	UN-HABITAT's role
Bhopal	<ul style="list-style-type: none"> ▪ Need for Urban water demand management ▪ Lack of integrated urban environmental sanitation ▪ No income generation for the urban poor 	<ul style="list-style-type: none"> ▪ Introduction of responsive demand management strategies to improve efficiency and equity of water supply, water use and to give more influence to those currently deprived of water and sanitation
Gwalior	<ul style="list-style-type: none"> ▪ Low number of households with access to tap water ▪ Large amount of illegal connections ▪ Lack of infrastructure in the municipality ▪ Need of water audit ▪ No water conservation policy 	<ul style="list-style-type: none"> ▪ Development of appropriate technical options with focus to develop and implement strategies for the provision of water and sanitation services
Indore	<ul style="list-style-type: none"> ▪ Challenge – water conservation & water demand management ▪ Project benefits must reach poor in slums & outside. ▪ Interventions must involve civil society, NGOs, CBOs, and others 	<ul style="list-style-type: none"> ▪ Draw plan for sustainable water & sanitation governance ▪ Support capacity building of municipal staff ▪ Carry out demo project on Water Demand Management, sanitation, other
Jabalpur	<ul style="list-style-type: none"> ▪ Poor distribution system ▪ Inadequate capacity of distribution network- & leakage resulting insubstantial water losses ▪ Low no. of registered house service connections & many unauthorised connections ▪ Inadequate public toilets and their usage ▪ SWM reform needed 	<ul style="list-style-type: none"> ▪ Develop and apply tools for planning, monitoring, technology options etc, to help the 4 cities in developing a framework for pro-poor water and sanitation governance

Annexure V: List of Participants

Govt. of Madhya Pradesh

1. **Satya Prakash**
Principal Secretary
Urban Administration and Development
Department
Mantralaya, Govt. of Madhya Pradesh,
Vallabh Bhawan, Bhopal 462016,
Madhya Pradesh
Tel: +91-755-2441582
Fax: +91-755-2762535
Email: satyaprakash@nic.in
2. **Gopal Reddy**
Secretary
Directorate of Urban Administration and
Development Department,
Palika Bhawan, Shivaji Nagar,
Bhopal 462016, Madhya Pradesh
Tel: +91-755-2552356
Fax: +91-755-2551836
Email: modugur@yahoo.com
3. **S.N. Mishra**
Project Director
Urban Water Supply & Environmental
Improvement Project,
UWSEIP – ADB Assisted Project,
2nd Floor, Beej Bhawan, Arera Hills,
Bhopal – 462011, Madhya Pradesh
Tel: +91-755-2762825
Mobile: +91-9827012820
Fax: +91-755-2763868
Email: uwseimp@yahoo.com
4. **A.K. Gupta**
Deputy Project Director
Urban Water Supply & Environmental
Improvement Project,
UWSEIP – ADB Assisted Project,
2nd Floor, Beej Bhawan, Arera Hills,
Bhopal – 462011, Madhya Pradesh
Tel: +91-755-2762825
Fax: +91-755-2763868
Email: uwseimp@yahoo.com
5. **M.A. Khan**
Deputy Project Director
Urban Water Supply & Environmental
Improvement Project,
UWSEIP – ADB Assisted Project,
2nd Floor, Beej Bhawan, Arera Hills,
Bhopal – 462011, Madhya Pradesh

Tel: +91-755-2762825
Fax: +91-755-2763868
Email: uwseimp@yahoo.com

Municipal Corporation Bhopal

6. **Gulshan Bamra**
Commissioner
Municipal Corporation
Office of the Mayor Municipal
Corporation
Bhopal, Madhya Pradesh
7. **Vishnu Khare**
City Planner
Municipal Corporation
Bhopal, Madhya Pradesh
Tel: +91-755-2541190
8. **Ashok Khare**
City Engineer
Municipal Corporation
Bhopal, Madhya Pradesh
9. **Sunil Shrivastava**
City Engineer
Municipal Corporation
Bhopal, Madhya Pradesh
Tel: +91-755-2553797(O)/2377992
10. **K.M. Vijay Vergia**
Deputy City Engineer
Water Works Department
Municipal Corporation
Bhopal, Madhya Pradesh
Tel: +91-755-2574013/2681771
11. **Sarad Solanki**
Deputy City Engineer
Municipal Corporation
Bhopal, Madhya Pradesh
Tel: +91-755-5293190
12. **Dr. Pramod Chandra**
Health Officer
Sadar Manzil
Bhopal 462001
Tel: +91-755- 2772030(R)
Mob: +91-9425030325
13. **A.K. Nanda**
Executive Engineer
Municipal Corporation

Bhopal, Madhya Pradesh
Tel: +91-755-2558964
Mob: +91-9826244950

- 14. B.M. Soni**
Superintendent Engineer
Sadar Manzil
Municipal Corporation
Bhopal, Madhya Pradesh
Tel: +91-755-2641989/2425042
- 15. Dr. (Mrs) H. Sultana**
Superintendent Engineer
Sadar Manzil
Municipal Corporation
Bhopal, Madhya Pradesh
Tel: +91-9827058009
- 16. Parmesh**
Asstt Director
Nagar Parishad Bhopal
Municipal Corporation
Bhopal, Madhya Pradesh
Tel: +91-755-2425138
- 17. Sudha Bhargava**
OSD, Nagar Nigam
Sadar Manzil
Municipal Corporation
Bhopal, Madhya Pradesh
Tel: +91-755-5259698
- 18. M.K. Mudgal**
Assistant Engineer
C/O Engineer-in-Chief
Public Health Engineering Department
Satpura Bhawan, Bhopal
Tel: +91-755-2551712(O)/2557840(R)
Email: mk_mudgal@yahoo.com
- 19. Izhar Rasool**
Assistant Engineer
Water Works Dep't
Municipal Corporation
Bhopal, Madhya Pradesh
Tel: +91-755-2756449(R)/2574013(O)

Municipal Corporation Gwalior

- 20. Mr. V.N. Shejwalkar**
Mayor of Gwalior
Gwalior Municipal Corporation
Jal Vihar, Nagar Nigam
Gwalior 474002, Madhya Pradesh
Tel: +91-751-2326251 / 2438200
Fax: +91-751-2432417

- 21. B.S. Sikarwal**
Project Engineer PIU
Gwalior Municipal Corporation,
Gwalior, Madhya Pradesh
Tel: +91-751-2326550
Fax: +91-751-2326550

Municipal Corporation Indore

- 22. Dr. (Mrs.) Uma Shashi Sharma**
Mayor of Indore
Indore Municipal Corporation
Indore, Madhya Pradesh
Tel: +91-731-2431608
Fax: +91-731-2531166
Email: mayorindore@satyam.net.in
- 23. Anil Bindal**
Member in Council
55 Janki Nagar
Indore, Madhya Pradesh
Tel: +91-731-2436868(O)/2409001(R)
Mobile: +91-9425067774
- 24. Ravindra Supekar**
Assistant Engineer
Indore Municipal Corporation
Indore, Madhya Pradesh
Tel: +91-731-2543776
Mobile: +91-9329361498

Municipal Corporation Jabalpur

- 25. Mrs. Susheela Singh**
Mayor of Jabalpur
Jabalpur Municipal Corporation
Jabalpur, Madhya Pradesh
- 26. Sandeep Yadav**
Commissioner
Jabalpur Municipal Corporation
Jabalpur, Madhya Pradesh
Tel: +91-761-2400262
Fax: +91-761-2410892
- 27. Hari Om**
Special Commissioner
Jabalpur Municipal Corporation
Jabalpur, Madhya Pradesh
Tel: +91-761-2400262
Fax: +91-761-2410892
- 28. Abhay Singh**
Member in Council
Jabalpur Municipal Corporation

Jabalpur, Madhya Pradesh
Tel: +91-761-2622637

- 29. Mukesh Yadav**
Member in Council
Jabalpur Municipal Corporation
Jabalpur, Madhya Pradesh
Mobile: +91-9425154222
- 30. Sharad Tamrakar**
Member in Council
Jabalpur Municipal Corporation
Jabalpur, Madhya Pradesh
Tel: +91-761-2421778(R)
- 31. Virendra Soankar**
Member in Council
Jabalpur Municipal Corporation
Jabalpur, Madhya Pradesh
Mobile: +91-9827239067
- 32. Nisha Kuril**
Member in Council
Jabalpur Municipal Corporation
Jabalpur, Madhya Pradesh
Tel: +91-761-2665418
Mob: +91-9826118952
- 33. Rupanjali Banerjee**
Member in Council
Jabalpur Municipal Corporation
Jabalpur, Madhya Pradesh
Tel: +91-761-2621982/343165064
- 34. R.K. Shrivastava**
Technical Advisor
Jabalpur Municipal Corporation
Jabalpur, Madhya Pradesh
Mob: +91-982706222
- 35. A.K. Tiwari**
Project Manager
Jabalpur Municipal Corporation
Jabalpur, Madhya Pradesh
Tel: +91-761-2403020
Fax: +91-761-2410892
- 36. Shyamlal Pandey**
Secretary
Jabalpur Municipal Corporation
Jabalpur, Madhya Pradesh
Mob: +91-9827007212
- 37. Dr. Anuradha Pandey**
Speaker
Jabalpur Municipal Corporation

Jabalpur, Madhya Pradesh
Tel: +91-761-2401629
Mob: +91-9826820678

**State Academy of Administration,
Bhopal**

- 38. Prof. H. M. Mishra**
Professor, HUDCO Chair
Room No. 24, State Academy of
Administration,
Bhopal, Madhya Pradesh
Tel: +91-755-5282808
Fax: +91-755-2467316
Email: mishra_hm@hotmail.com
- 39. A.K. Singh**
State Academy of Administration,
Bhopal, Madhya Pradesh
- 40. S. C. Shukla**
Joint Director Administration
RCVP Naroonna
State Academy of Administration,
Bhopal, Madhya Pradesh
Tel: +91-755-5273067
- 41. Dr. Pratiksha Rajgopal**
Reader Public Administration
RCVP Naroonna
State Academy of Administration,
Bhopal, Madhya Pradesh
Tel: +91-755-5279060

NGOs / CBOs / Others

- 42. Urvi Mankad**
Coordinator
City Managers' Association
Madhya Pradesh
Palika Bhawan, Shivaji Nagar,
Bhopal – 462016, Madhya Pradesh
Tel: +91-755-2553717
Fax: +91-755-2552591
Email: cmamp@sify.com
- 43. Dr. Sanjeev Sachdev**
Sr. Research Officer
Lake Conservation Authority of Madhya
Pradesh
Paryavaran Parisar, E-5, Arera Colony
Bhopal-462016
Tel: +91-11-2460141
Fax: +91-11-2460183
Email: sachdev_sanjeev@yahoo.com

- 44. Pradip Kumar Nandi**
Senior Executive
Lake Conservation Authority of Madhya Pradesh
Paryavaran Parisar, E-5, Arera Colony
Bhopal-462016
Tel: +91-11-2460141
Fax: +91-11-2460183
Email: nandipk56@rediffmail.com
- 45. S.C. Jaiswal**
Project Manager
Water Aid, E 7/846 Arera Colony
Bhopal, Madhya Pradesh
Tel: +91-755-5294724
Fax: +91-755-5294317
Email: jaiswal@wateraidindia.org
- 46. Shailendra Sharma**
Project Coordinator
AARAMBH, 52 C Indrapuri
BHEL Bhopal
Tel: +91-755-2754270
Email: aarambhpl@sify.com
- 47. Dr. Yogesh Kumar**
Executive Director,
SAMARTHAN,
E-7/81 Arera Colony,
Bhopal, Madhya Pradesh
Tel: +91-755-5293147 / 2420918
Email: samarth_bpl@sancharnet.in
- 48. Abhishek Shukla**
Project Coordinator
SEWA, Gandhi Bhawan,
Shamla Hills,
Bhopal, Madhya Pradesh
Tel: +91-755-2660387
Email: abhishekshukla@yahoo.com
- 49. Dr. V.S. Krishna**
Vice Chairman
National Centre for Human Settlement
and Environment
E5/A Girish Kunj, Arera Colony, Bhopal
Tel: +91-755-2463731/5306
Fax: +91-755-2464151
Email: nchse@sancharnet.in
- 50. S.L. Gupta**
Consultant
National Centre for Human Settlement
and Environment
E5/A Girish Kunj, Arera Colony, Bhopal
- Tel: +91-755-5260458
Fax: +91-755-2464151
Email: nchse@sancharnet.in
- 51. R. Sankaranarayanan**
Water Resources Engineer
National Centre for Human Settlement
and Environment
E5/A Girish Kunj, Arera Colony, Bhopal
Tel: +91-755-2465651
Fax: +91-755-2465651
Email: iyer2@hotmail.com
- 52. Dr. V.K. Shrivastava**
Advisor
Energy Environment and Development
Group
R-12, II Floor, GTB Complex
New Market, Bhopal - 462003
Tel: +91-755-2768369
Email: eedes@rediffmail.com
- 53. P.C. Gupta**
Chairman
Sulabh International
34, M.P. Nagar, Zone-II
Bhopal 462011, Madhya Pradesh
Tel: +91-755-2553882
Fax: +91-755-2576184
Mobile: +91-9826023109
- 54. Dr. S.G. Kulkarni**
Vice President
Eco Development Solutions Society
MIG A-80 Sonagiri
Bhopal, Madhya Pradesh
Tel: +91-755-2752855/5207071
Email: sk_39@rediffmail.com
- 55. Prof. Gautam Gyanendra**
Professor & Head
Department of Sociology and Social
Work
Barkatulla University, Bhopal
Tel: +91-755-2584390(O)/2582424(R)
- 56. Dr. Santosh Sharma**
Chairman
Shashi Charity
Mayor House, Nandlal Bordia Marg,
Indore,
Tel: +91-755-2422896
Mob: +91-9329066108
- 57. Neeraj Khare**
Project Officer

Swami Vivekanand Paryavaran Aur
Samajik Utthan Sanstha
49, Vivekanand Colony, Jhabua,
Madhya Pradesh – 457661
Tel: +91-7392-243104
Fax: +91-7392-243183

4 San Martin Marg
Chanakyapuri
New Delhi 110021, India
Tel. + 91 11 24194369 / 2410 7200
Fax: + 91 11 2687 0975
Email: ajorgensen@adb.org

- 58. Aniruddhe Mukerjee**
H-40, Nishant Enclave,
74, Bunglows, Bhopal 462003
Madhya Pradesh (India)
Email: aniruddhem@rediffmail.com
- 59. Sowmyaa Bharadwaj**
Programme Officer
Junction Social
201 A, Gagangiri,
10 Carter Road, Khar (West),
Mumbai – 400052, India
Phone: +91-22-2604 4934/0874
Fax: +91-22-5690 5700
Email: sowmyaa@junctionsocial.com
- 60. Mr. Mitranand Kukreti**
Interpreter
29, Shree Badrinath Apartments
Plot 18, Sector IV, Dwarka
New Delhi-110075
Tel: +91-11-25096003
Mobile: +91-9891741243
- 61. Ms. Nupur Goswami**
Interpreter
Mobile: +91-9312243692
- 62. Dr. Diwa Mishra**
Assistant Professor
M-38. Old Subhash Nagar
Bhopal – 462023, Madhya Pradesh
Tel: +91-755-2587188
Mobile: +91-9425006689
Email: drdiwamishra@rediffmail.com
- 63. Dr. Ajay Kumar Bharadwaj**
Assistant Professor
Govt. P.G. College, Sehore (M.P)
MIG-13, Housing Board Colony
Sehore, Madhya Pradesh
Tel: +91-7562-225679
Mobile: +91-9826740031

International Agencies

- 64. Alex Jorgensen**
Head, Urban Development
India Resident Mission

- 65. Arthur C. McIntosh**
ADB Consultant
Developing Country Water Supplies
3, Sandringham Drive, Robina
Gold Coast, Queensland, 4226
Australia
Tel: (61-7) 55787697
Fax: (61-7) 55787697
Email: arthurmcintosh@hotmail.com
- 66. Peter Smith**
Infrastructure
Urban Development Environment
Advisor
Department for International
Development
DFID India, British High Commission,
B-28, Tara Crescent, Qutub Institutional
Area
New Delhi 110016
Tel: +91-11-265291/2/3 (Ext: 3482)
Fax: +91-11-26529296
Mobile: +91-9811432762
Email: P-Smith@dfid.gov.uk
- 67. Alison Barrett**
South Asia Regional Adviser,
Cities Alliance, 70, Lodi Estate,
New Delhi, 110003
Tel: +91-11-5147 9206 (Direct line) /
2461 7241 (Ext 206)
Fax: +91-11-2461 9393 / 2462 8073
Email: abarrett@worldbank.org
- 68. Chetan Vaidya**
Senior Urban Advisor
USAID/FIRE Project
Email: chetan@indo-usfired.com

ADB Project Team

- 69. S. Bhattacharyya**
Deputy Team Leader
Urban Water Supply & Environmental
Improvement Project
UWSEIP – ADB Assisted Project, 2nd
Floor
Beej Bhawan, Arera Hills,

Bhopal – 462011, Madhya Pradesh
Tel: +91-755-5281760
Fax: +91-755-2763868
Mobile: +91-98260 67712
Email: swb@vsnl.com

- 70. Suresh Gupta**
Consultant
Urban Water Supply & Environmental
Improvement Project
UWSEIP – ADB Assisted Project, 2nd
Floor
Beej Bhawan, Arera Hills,
Bhopal – 462011, Madhya Pradesh
Tel: +91-755-5281760
Email: guptasuresh@rediffmail.com

UN-HABITAT

- 71. Kalyan Ray**
Senior Adviser
Office of the Executive Director,
UN-HABITAT, P.O.Box 30030
Nairobi, Kenya
Tel: Direct +254-20-623039 / 623781
Fax: Direct +254-20-623588 / 624265
Email: Kalyan.Ray@unhabitat.org
- 72. Dr. Graham Alabaster**
Human Settlements Officer
United Nations Human Settlements
Programme (UN-HABITAT)
Water, Sanitation and Infrastructure
Branch
P.O. Box 30030
Nairobi, Kenya
Tel: +254-20-623588
Fax: +254-20-623588
Email: Graham.Alabaster@unhabitat.org
- 73. Andre Dzikus**
Programme Manager Water for Cities
Programmes
Human Settlements Officer
United Nations Human Settlements
Programme (UN-HABITAT)
Water, Sanitation and Infrastructure
Branch & Focal Point for Children
P.O.Box 30030, Nairobi, Kenya
Tel: +254-20-623060, 623047
Fax: +254-20-623588
E-mail: Andre.Dzikus@unhabitat.org

- 74. Harvey Herr**
Consultant Statistician
UN-HABITAT
P. O. Box 30030
Nairobi, Kenya
Email: herrhj@yahoo.com
- 75. Dr. Kulwant Singh**
Chief Technical Advisor
Water for Asian Cities Programme
Office
EP 16/17, Chandragupta Marg,
Chanakyapuri
New Delhi: - 110 021, India
Tel: +91-11-2410-4970/1/2/3
Fax: +91-11-2410-4961
Mobile: +91-9312663698
Email: Kulwant.Singh@unhabitat.org
- 76. Ramanuj Banerjee**
Project Officer
Water for Asian Cities Programme
Office
Bhopal, Madhya Pradesh
Mobile: +91-9893116578
Email:
ramanuj_banerjee@rediffmail.com
- 77. Archana Patkar**
Director
Junction Social
201 A, Gagangiri,
10 Carter Road, Khar (West),
Mumbai – 400052, India
Phone: +91-22-2604 4934/0874
Fax: +91-22-5690 5700
Email: archana@junctionsocial.com
- 78. Prof. Meine Pieter van Dijk**
Professor of Water Services
Management,
Department of Management of
Management and Institutions
Westvest 7, P. O. Box 3015
2601 DA Delft, The Netherlands
Tel: +31-0-15-2151715 / 2151779
Fax: +31-0-15-2122921
E-mail: m.vandijk@unesco-ihc.org
- 79. Neil Meyer**
Consultant Engineer
WRP, South Africa
Tel: 2712-3463496
Email: neil@wrp.co.za