

## A Shared Vision for Water Sustainability

Cities are where most of the world's population is going to live in the next few decades. As cities grow, they are "straining and exhausting the water sources that first gave them life, stifling their own future growth prospects". The key challenges faced by the water sector are governance, finance and technology. Piecemeal management of such a universal resource would only lead to imbalances and inefficiencies. There should be a clear strategy, with well defined lines of decision-making so that all the players involved, whether the public sector, private sector, financial institutions or end users know their roles and responsibilities. Creating an environment of competition between the best technological solutions could only be possible if the government, through its policies drove markets in that direction.

Most water utilities in the world are barely able to recover their operating costs. For long, it has been accepted that full-cost recovery can never be applied to water tariffs because water is so essential for existence. The irony about the artificially low tariffs is that it is not helping the poor at all. The inability to recover costs in a transparent manner has deprived this capital-intensive sector from the much needed finance for maintaining assets, building capacity and driving efficiency.

**- Singapore International  
Water Week 2010**

## this issue

APMCHUD-III: Solo Declaration - Implementation Plan for WATSAN	P.2
Executive Director, UN-HABITAT Participates in WCS and SIWW 2010	P.4
Community-Based Initiatives in Afghanistan	P.5
Mainstreaming the Tsunami affected people in Cuddalore District in India	P.6
PPP Approach implemented for accessing Safe Drinking Water in Nepal	P.9
Turning Trash into Cash: 3R's Approach to Manage Waste Plans in Laos	P.11
Successful completion of "Community-based" pilot project in Vietnam.	P.12



**water for asian cities**

## UN-HABITAT Executive Director visits Bangladesh



*(From right to left in Photo) Mrs. Anna Tibaijuka, Executive Director, UN-HABITAT, Ms. Phillippa Thomas, UK-Aid, Mr. Debashish Deb, Coca-Cola, Bangladesh, Mr. Richard Geier, Country Programme Manager (UPPR), Photo © UN-Habitat*

UN-HABITAT Executive Director Mrs. Anna Tibaijuka visited the Korail slum in Dhaka, Bangladesh on 21 June 2010 to see the community activities being supported through the Urban Partnerships for Poverty Reduction (UPPR) programme. Korail is the largest slum in central Dhaka where 120,000 people are living, some for over three decades, on a 100 acres land. The Community Development Committee office bearers and Cluster Level representatives briefed her about the community action planning process they have prepared and priority activities they have identified for implementation. One of the priorities of the community is to improve the water & sanitation situation in the settlement. Korail in Dhaka is also the location where "Water, Sanitation and Hygiene Education in Schools (WSHS) Serving Urban Poor" will be implemented through the Water for Asian Cities Programme.

Also present on the occasion to welcome Mrs. Tibaijuka was Mr. Debashish Deb representing Coca-Cola Company. As part of their Public-Private Partnerships, Coca-Cola Far East Ltd has come forward to support this initiative in Korail. She acknowledged the support of Coca-Cola & referred to her meeting with the Chief Executive Mr. Muhtar Kent in Davos with other representatives in Rio de Janeiro and Nairobi. Talking with the media representatives in Korail, Mrs. Tibaijuka, stated that, "eviction is not the solution. If you are going to use the land, you cannot do it at the expense of the poor." She went on to request the government to have a dialogue to reach a consensus which will bring a win-win solution for all.

Mrs. Tibaijuka later visited the Local Government Engineering Department (LGED) and received briefing from the Chief Engineer Mr. Wahidur Rahman about the activities of LGED and UPPR programme. Thanking the LGED team for over 10 years of partnership with UN-HABITAT, she commented, "this partnership has proven to be very effective in reaching out to the people particularly the urban poor". She continued, "Here in Bangladesh, I am extremely impressed to see a government agency embracing the people's process of development as its main strategy."

LGED, through US\$ 120 million financial and technical support from UK-Aid and UNDP, is implementing the UPPR programme in 23 cities and town in Bangladesh. UN-HABITAT is providing technical support focusing on the "people's process" of planning, implementing and monitoring the community development activities. The programme, which will run till March 2014, is already involving 1.7 million people living in the slums in the community development committees.

Later, Mrs. Tibaijuka called on the Honourable State Minister Abdul Mannan Khan, Ministry of Housing and Public Works to discuss about the challenges of urbanization and increasing urban poverty, urban land tenureship and urban sector policy. Mr. Stefan Priesner, UNDP Resident Representative and Mr. Lalith Lankatilleke, Senior Human Settlements Officer, ROAP, accompanied her at the meeting. Mrs. Tibaijuka also attended the UN Country Team meeting where she underscored the UN-HABITAT mandate in the urban sector.

## Water, Sanitation and Hygiene Education in Schools - Serving 'Urban Poor' Project in Bangladesh

UN-HABITAT signed a Memorandum of Understanding on 23 June 2010 with Concern Universal - Bangladesh to implement the "Water, Sanitation and Hygiene Education in Schools Serving Urban Poor Project". The project will be implemented over a two-year period. The objectives of the project are:

- To improve water and sanitation facilities and hygiene practices in 35 schools attended by beneficiaries in the Community Development Committees (CDCs) formed through the Urban Partnerships for Poverty Reduction project (UPPR) in Dhaka and Comilla;
- To enhance the capacity of the teachers and school authorities to ensure sustained operation and maintenance of water and sanitation facilities and to disseminate behavioural change messages and motivate students; and
- To demonstrate a viable public-private partnership that serves as a model for improving conditions in urban slums.

UPPR is already providing assistance to the residents in informal settlements in Dhaka and Comilla by forming CDCs of between 150 and 250 households. These CDCs have prepared Community Action Plans that outline various community-level initiatives to improve conditions in the informal settlements and promote socio-economic development. More than 90 percent of the beneficiaries are from poor or extreme poor households. One principle criteria in selecting the schools is that more than 50 percent of the students must come from poor or extreme poor families. In addition, the school management must agree to make financial contributions to the Operation and Maintenance fund. Teachers in these schools will undergo training in hygiene awareness and they will then disseminate the information they learn to their students. The students will then be encouraged to take the messages home to their families and their neighbourhoods. This project in Bangladesh is part of UN-HABITAT's Water for Asian Cities Programme which is a collaborative initiative with the Asian Development Bank to address urban water and sanitation issues, facilitate service delivery for the poor and build capacity to support participating countries achieve the MDG targets for water and sanitation. As part of their public-



Mrs. Tibajuka among the Community members in Dhaka, 2010. Photo © UN-Habitat

private partnerships, Coca-Cola Far East Limited has come forward to support this initiative. Another partner in this project is UPPR that is being implemented by the Government of Bangladesh's Local Government Engineering Department, receiving funding from UK-Aid and technical support from UNDP and UN-HABITAT. UPPR is being implemented in 30 towns in Bangladesh and targets 3 million beneficiaries. UPPR will provide assistance to this project by mobilizing the communities. Coca-Cola Far East Limited and UN-HABITAT will contribute US\$170,000. Concern Universal has committed US\$60,000 as a counter-part contribution. The communities will contribute 5 percent of the new and 2 percent of the rehabilitated infrastructure. A Steering Committee has been constituted with representatives from Coca-Cola, UN-HABITAT, UPPR, Concern Universal and Dhaka Ahsania Mission (a local partner of Concern). A project management committee will be formed in each school. If this model of cooperation is successful, all the partners hope to continue the collaboration to expand coverage to other towns in Bangladesh.

## APMCHUD-III: Solo Declaration - Implementation Plan for Water and Sanitation

The Third Asia Pacific Ministers Conference on Housing and Urban Development had included Water and Sanitation as an important Agenda for consideration both during the High Level Officials Segment as well as during the Ministerial Segment. UN-HABITAT had earlier prepared and circulated a background paper for consideration by all the delegates and particularly during the Working Group 3 on the MDG for Drinking Water and Sanitation. During the Working Group Session on Water and Sanitation, several case studies were presented particularly by Iran and Indonesia for sustainability of Water Management in the Asia Pacific Region. At the conclusion of the APMCHUD, an implementation plan was prepared both for the two year period and also for a medium-term up to 2015. This implementation plan also included implementation plan for water and sanitation. The key highlights of the Implementation Plan for Water and Sanitation as adopted in Solo as part of the Solo declaration are given in the box below. *The full text of Solo Declaration along with the detailed Implementation Plan can be downloaded at <http://www.unwac.org/pdf/SoloDeclaration&ImplementationPlan.pdf>*

### Delivery of MDGs for Water and Sanitation:

#### Key Recommendations

In Asia drinking water supply is progressing well, however there is a felt need for increasing water efficiency gains through various means of water demand management practices, desalination and reuse and recycling of wastewater treatment. Most countries in Asia are not on track to meet the sanitation MDG target. Access to safe sanitation is significantly lower than access to clean water. Therefore, there is an urgent need for community-based approaches to scaled up the process for sustainable sanitation. Several actions have been proposed to meet this challenge. Very limited wastewater is treated resulting in contamination of water resources, hence there is an urgent need for focusing on wastewater treatment.

#### Actions

##### Governments will:

- Establish a centre of excellence on Water and Wastewater for Asia and the Pacific for knowledge sharing and technology transfer at national and regional levels. The centre will be established in two years (The Islamic Republic

of Iran has offered to host the centre and UN-HABITAT will lend possible support). The centre will be linked to a network of national and sub regional centres of excellence for both water and wastewater. The centre will organize one international workshop and two regional training programmes in two years and two international workshops and four regional training programmes in five years.

- Conduct exchange visits for studying successful community-based water, sanitation & wastewater solutions and implement pilot demonstration projects in 3 Asian countries in 2 years and 6 countries in 5 years (Indonesia has offered to facilitate study visits together with UN-HABITAT under its Water for Asian Cities Programme for knowledge sharing and best practices).
- Increase investment flows into the sanitation, water and wastewater sector from national budget, national and international financing institutions, domestic and international NGOs, private sector by end of two years in three countries and by end of five years in six countries (UN-HABITAT's Water for Asian Cities Programme will facilitate sector investment in interested countries in Asia).



## THE SOLO DECLARATION

### The Third Asia Pacific Ministerial Conference on Housing and Urban Development (APMCHUD)

We, the Asia-Pacific Ministers responsible for housing and urban development, meet in Solo, Indonesia, on 22 – 24 June 2010, to address the challenges of housing and urbanization in Asia and the Pacific:

**Express** our sincere gratitude and appreciation to the Government of Indonesia for the excellent arrangements of the Third Asia Pacific Ministers' Conference on Housing and Urban Development (APMCHUD) and our appreciation to the people of the Republic of Indonesia for their warm hospitality,

**Announce** the establishment of the Permanent Secretariat of the Asia Pacific Ministers' Conference on Housing and Urban Development (APMCHUD) in New Delhi and express our appreciation for its efforts towards the progress made in implementing the Delhi Declaration and Tehran Declaration, and to UN-HABITAT for its continued support to the Conference and its works in the region,

**Express** our sincere gratitude to the Islamic Republic of Iran for hosting the Second APMCHUD, and for its serious and perseverant chairmanship in the APMCHUD bureau,

**Recognize** the importance of the Delhi Declaration and Tehran Declaration,

**Also recognise** the importance of the Pacific Urban Agenda as adopted at the South Pacific Forum Countries in 2007,

**Express concerns** on the impacts of economic crisis and climate change towards the achievements of the Millennium Development Goals (MDGs), with the possibility of significantly harming MDGs commitment indicators in some countries, and the need for additional efforts,

**Express concern** about the significant humanitarian situation in the Gaza Strip, in which poses extraordinary challenges associated with the rehabilitation of destroyed housing, property and infrastructure, in addition to the continued deterioration in the human settlements and the housing conditions in the occupied Palestinian territory, and the need to enable rapid recovery and reconstruction alongside humanitarian interventions, including concerted efforts for smooth flow of building materials in accordance with guidelines agreed upon by all parties,

**Recognize** the important role of local stakeholders, including the poor and vulnerable groups with due attention to the needs of women and children in achieving sustainable urbanization, including addressing the challenges posed by climate change and the economic crisis; and the need to increase stakeholder capacity to support the process of sustainable urbanization,

**Realize** the challenges of cities and human settlements in sustainable development and the growing need for urban-led development, which includes comprehensive strategies for rural-urban linkages and focus on local potentials and community aspirations, as well as promoting energy efficient development through the diversification of energy resources, including the peaceful use of nuclear energy towards sustainable urban development,

**Take note** the importance to strengthen cooperation between member countries in developing disaster prevention mechanism as well as emergency, reconstruction and recovery of areas damaged by disasters and extreme climate-change related events,

**Recognize** that cities around the Asia-Pacific region rely on the knowledge of their citizens, their institutions and their firms and enterprises to support sustainable development and there is already a wealth of development experience and knowledge, of which needs to be captured, share and disseminated more effectively for the benefit of our partners in development.

**Cognizant** of the current challenges and opportunities in the region:

1. **Acknowledge** the need to develop policies and strategies to empower communities for sustainable urbanization;
2. **Agree** to develop database and information systems; knowledge, innovation and learning networks between cities and countries in order to provide and

serve local needs to support sustainable urbanization;

3. **Agree** to promote the utilization of the capacity of the Regional Centre for Knowledge and Learning Network for Community Empowerment in Housing and Urban Development at existing centres in Indonesia and encourage other countries to take similar initiatives in order to strengthen APMCHUD's role as hub for knowledge in sustainable urbanization.
4. **Agree** to increase and accelerate capacity of stakeholders for integrated, participatory and inclusive planning by developing cooperation on tools and instruments for planning and governance to achieve sustainable urbanization;
5. **Agree** to strengthen poverty alleviation programmes in the urban system, especially facilitating access of the poor to the basic infrastructure provision, social and economic resources, through community empowerment and improved security of tenure;
6. **Invite** Governments to promote indicators on sustainable development for water supply and sanitation, housing, urban services, suitable with the local conditions; and urge governments to create an enabling environment through policies and actions to achieve sustainable urbanization;
7. **Urge** the Asia Pacific Community to minimize wars and conflicts in the region and make cities peaceful and liveable places for future generations;
8. **Recommend** to incorporate the impacts of climate change in spatial planning at the macro and micro levels;
9. **Take note** on the outcome of the Fifth World Urban Forum and call upon the next World Urban Forum to promote sustainable and harmonious urbanization, with an emphasis to cope with the negative impact of economic crisis and climate change;
10. **Agree** to analyze various policies adopted by planners to address the challenges of housing and urbanization which could lead to possible regional cooperation mechanism;
11. **Adopt** the Solo Implementation Plan resulting from the five Working Groups as attached;
12. **Agree** on the continuation of the activities of the five Working Groups, the Secretariat of which to be hosted by volunteer member countries. The five working group comprise of as follows:
  - WG1 Urban and Rural Planning and Management
  - WG2 Upgrading of Slum and Informal Settlements
  - WG3 Delivery of MDGs for Water and Sanitation
  - WG4 Financing Sustainable Housing
  - WG5 Urban Development with a focus on Natural Disasters
13. **Endorse** the composition of the 3rd Bureau of APMCHUD with its members being Ministers representing:
  - a. Republic of Indonesia; b. Islamic Republic of Iran; c. Republic of the Fiji Islands; d. Republic of India; e. Republic of Iraq; f. Hashemite Kingdom of Jordan; g. Republic of Korea; h. Islamic Republic of Pakistan
14. **Request** the current chair of APMCHUD to ensure the implementation of this declaration in collaboration with other members of the Bureau, the APMCHUD Secretariat and the UN-HABITAT Secretariat and look forward to receiving regular updates.
15. **Welcome** the offer by the Government of the Hashemite Kingdom of Jordan to host the 4th Asia-Pacific Ministerial Conference on Housing and Urban Development in 2012.

- Adopted in Solo, Indonesia on 24 June 2010

## Executive Director, UN-HABITAT Participates in the World Cities Summit and Singapore International Water Week 2010, Singapore

Mrs. Anna Kajumulo Tibaijuka, Under-Secretary-General of the United Nations & Executive Director, UN-HABITAT at the invitation of the organizers of the World Cities Summit, Singapore participated both in the Singapore International Water Week as well as the World Cities Summit from 28-30 June 2010.

The Executive Director was a special invitee for the Joint Opening Plenary for the Singapore International Water Week, Water Leaders Summit and World Cities Summit 2010. Mrs. Anna Tibaijuka delivered the Key note address in the Joint Opening Session on the theme of **'Sustainable Cities: Leadership and Governance'** which was well received and quoted later in various sessions.

Mrs. Tibaijuka was a special invitee for the Lee Kuan Yew Prize Award Ceremony and Banquet. This also included a dialogue with the Guest-of-Honour : Minister Mentor Lee Kuan Yew.

In Singapore, the Mrs. Tibaijuka addressed the participants of UNSGAB in the Opening Session. She also addressed World Cities Summit Mayors' Forum in which more than 60 Mayors from various countries of Asia and the Pacific, Africa and Latin America and the Caribbean were present. The Executive Director explained the role and involvement of the UN-HABITAT in the local governments for supporting their actions for strengthening urban local governance. Later she addressed the Visiting International Press and responded to several questions pertaining to her address at the Joint Plenary session.

During her visit to Singapore, on Monday, 28 June 2010, the Executive Director had a meeting with the President of NUS Singapore – Prof. Tan Chorh Chuan

at the National University of Singapore (NUS). She later visited URA Gallery of Singapore. On the same day she met with Ms. Grace Fu, Vice Minister of the Government of Singapore. The Vice Minister of Housing during her meeting with the Executive Director, UN-HABITAT explained the Singapore Model of housing and the future policies of housing to meet the changing demands in the country.

Mrs. Tibaijuka also met various dignitaries including the Deputy Prime Minister of Singapore at the evening reception. The Executive Director, UN-HABITAT also met with Ms. Noeleen Heyzer, the Executive Secretary of UNESCAP and discussed various areas of cooperation between UN-HABITAT and UN-ESCAP. Mr. Andre Dzikus was present during the meeting of the two leaders.

Mrs. Tibaijuka also met with the Vice President of ADB Ursula Schaefer-Preuss and briefly reviewed UN-HABITAT and ADB partnership under the Memorandum of Understanding signed between the two organisations in support of the Water for Asian Cities Programme.

During her stay in Singapore, the Executive Director also had a Meeting with HE Juma Bin Ahmed Al Ka'abi, Minister of Municipal Affairs and Agriculture, Bahrain. She also met the China Mayor, Mr Zhao. She also had a meeting with the Director of Coca-Cola from Atlanta together with Mr. Praveen Aggarwal, General Manager, CCI in which new initiatives of cooperation between Coca-Cola and UN-HABITAT in Asia and other regions were discussed.

She also had a Press Interview with Channel News Asia (CNA), Millennia.

## UN-HABITAT Participates in World Cities Summit Expo 2010

The World Cities Summit was held in Singapore from June 28 to July 1, 2010. The goal of the summit was to bring together practitioners and policy makers with leading experts in their field to identify innovative solutions to the most pressing challenges facing cities today. The principal theme for the summit was Liveable and Sustainable Cities for the Future. In keeping with this theme the World Cities Summit Expo was organised, where 100 participating companies showcased the latest and most innovative solutions with a focus on practical, scalable & replicable solutions to challenges faced by the cities today. The UN-HABITAT also showcased some of the significant projects undertaken in recent times in two areas of the expo:

1. In the topical gallery, UN-HABITAT presented/ displayed posters featuring technical details of (i) the Reed-bed Wastewater Treatment System: Sunga Wastewater Treatment Plant in Nepal (ii) the Kanchan Arsenic Filter: Technology for Removal of Arsenic and Microbiological Contamination and (iii) Principles of Water Governance: Enabling Private Sector Provide Better Water and Sanitation Services to the Urban Poor.
2. The Singapore Inc. pavilion of the expo showcased initiatives and programmes by Water and Sanitation branch and other branches involved in urban development. At this pavilion, UN-HABITAT showcased projects pertaining to water/ sanitation and urban development/ redevelopment. The UN-HABITAT Exhibition was well-visited by dignitaries including the Executive Director of UN-HABITAT, Mrs. Anna Tibaijuka, as well as several delegates from municipal and town councils of various cities in the world. Several publications by UN-HABITAT were made available to the visitors, including the State of the World's Cities Report 2010/2011, the Global Report on Solid Waste management as well as a brochure on the activities of UN-HABITAT.

An oral presentation was made by Andre Dzikus, Chief, WSS-II, UN-HABITAT on the theme of Water Demand Management under the Water for Asian Cities Programme's experiences in Madhya Pradesh, India. As many as three more presentations were made through poster presentations as were displayed during the Expo. This exhibition was conceptualized by Andre Dzikus and Roman Rollnick of UN-HABITAT and was voluntarily well managed by Nandita Subbarao.



UN-HABITAT Exhibition booth during Singapore Expo, 2010. Photo © UN-Habitat



Posters presented/ displayed during the Expo, the high-resolution of these posters can be downloaded at [http://www.unwac.org/new\\_unwac/recent\\_publications.php#ep](http://www.unwac.org/new_unwac/recent_publications.php#ep)



## Community-Based Initiatives in Afghanistan

UN-HABITAT's work in Afghanistan over the past seventeen years has been based on the principle that the best way to achieve sustainable and cost effective development is through supporting organized communities to plan and implement development activities that they have identified. Communities are partners not beneficiaries in the development process, contributing their skills, resources and knowledge. This approach has been adopted by the Government of Afghanistan as the methodology to be used in the implementation of its successful National Solidarity Programme (NSP) and in its urban development projects UN-HABITAT uses the same approach. Supporting community based initiatives also creates opportunities for women to be active participants in community development and ensures that their priorities for themselves and their children are included in the community action plans. The foundation of UN-HABITAT's development work in Afghanistan is the mobilization of urban and rural communities and the development of their capacity to prepare and implement community action plans. This is based on the Government of Afghanistan's NSP approach, which UN-HABITAT helped formulate. UN-HABITAT works with the government to build the capacity of service delivery agencies and local governments to meet the needs of urban and rural communities and to create mutually beneficial linkages between organised communities and local government.

UN-HABITAT continues to be one of the main Facilitating Partners in the implementation of the NSP which will see a further rollout of its Phase II and start of Phase III. Community Development Councils formed under the NSP form the basis for UN-HABITAT's implementation of the USAID funded Learning for Community Empowerment Program (LCEP-2) which will, in 2010, continue to expend its coverage in twenty provinces. In addition to basic literacy LCEP-2 also provides training in productive skills and supports self-help groups in the communities to save and lend money through a network of community banks. In the urban sector, UN-HABITAT continues its CIDA funded work in Kandahar Municipality where there has been a major breakthrough in working with the local government to register land in informal settlements and for the plot holders to pay municipal taxes. UN-HABITAT works with urban communities to improve the city water supply network, basic infrastructure and services and at the same time building up the capacity of the municipality in service delivery and strengthening the network of local government offices, schools and clinics.

In Lakshar Gah, Helmand Province, UN-HABITAT has started implementing the next phase of its DFID funded programme, supporting the municipality to improve its solid waste management and linking this to community initiatives. It also helps strengthen the provision of water supply and support communities to improve their living conditions. In Kabul and Jalalabad, there has been another phase of the European Commission funded project of integrating returnees and internally displaced persons through supporting communities to prepare and implement community action plans addressing their needs for roads, footpaths, drains, water supply, housing and sanitation and develop education and health facilities. It works with Community Development Councils to support social, economic and health programmes particularly for women community members.

Further, UN-HABITAT is working with USAID and the Government of Japan to strengthen the urban planning and service delivery capacity of the Municipality of Kabul and to bring community managed improvements into informal settlement areas. The project funded by the Government of Japan has started its implementation to aim at the integration of the demobilized fighters, returnees and internally displaced persons not only in Kabul and Jalalabad but in other provincial centres. In this project, UN-HABITAT may also be involved in further strengthening the village cluster development approach in rural areas, building on its experiences with the NSP.

### Community Empowerment and Development for Peace Building (CEDPB)

#### - Improvement of Water Supply Network in Jalalabad City -

The CEDPB Project funded by the Government of Japan, has completed its operational activities with an aim to respond to the needs of the returnees and Internally Displaced Persons (IDPs) in the border areas through the empowerment communities thus contributing to building peace. It was intended to achieve significant impacts in improving access to infrastructure, basic services, shelter and water supply network for the returnees and IDPs.

The Project has contributed to rehabilitating the existing water supply system in Jalalabad City and to build a new two-story office building of the Central Authority for Water Supply and Sewage (CAWSS). Besides, it has also contributed to building capacity of officials of the CAWSS and Municipality of Jalalabad with modern methodology and equipment so that the city water supply system will be operated and maintained by them after completion of the Project. A technical steering committee, comprising of the CAWSS, the Municipality and UN-HABITAT, was formed to conduct a technical study and assessment, prepare an investment plan and facilitate implementing the activity. It is now expected that about one fourth of the whole population in Jalalabad City (approximately 162,000 people) will be provided safe drinking water in each household. Two large water reservoirs have been installed on the hillside and each has a net capacity of 2,500m<sup>3</sup> which could accommodate demands of water for the needy. There are two main pipelines extending from the two reservoirs to the City. One pipeline connects to the existing pipeline network to distribute the clean water to the tap for the individual houses. The other connects to three newly-built hand-pump wells where the people are able to obtain water in sufficient volume. The scale of the whole system is incredibly large, not common in other parts of Afghanistan. UN-HABITAT Afghanistan Programme will continue working directly with communities in meeting their essential basic needs such as shelter, services, employment, water supply and social inclusion across the country of Afghanistan. At the same time it will also contribute to further assisting the Government of Afghanistan through an expanding number of projects in both rural and urban areas with a common theme of community solidarity and empowerment. With the Government & people of Afghanistan, UN-HABITAT will support to empower communities to take development into their own hands through establishment of governance structures at village level and to create solidarity amongst the people.



Before

After

*Situation  
"Before" and  
"After" the  
UN-HABITAT  
Interventions in  
Afghanistan,  
2010 Photo ©  
UN-Habitat*



## Mainstreaming the Tsunami affected people in Cuddalore District in India

UN-HABITAT in partnership with BASF Social Foundation is implementing a project to provide access to Tsunami affected people living in selected villages of Cuddalore District of Tamil Nadu, India to water and sanitation facilities as well as to public places for people with disabilities with added objective to enhance their livelihood opportunities. Local partners Foundation for Ecological Research, Advocacy and Learning (FERAL) is supporting implementation of the water and sanitation component and Leonard Cheshire Disability (LCD), UK for the disability component of the project. The project is being implemented in 16 villages for WATSAN intervention and 25 Panchayats for disability aspect.

### Access to Water:

Ground water is the only source of drinking water for the target villages. But due to proximity to the sea, the ground water is saline in most of the areas. The hydro-geological and geo-morphological survey was conducted and the priority areas were identified for installing hand pumps in the selected villages. Since the areas get submerged during rains, the design for raised platforms for hand pumps were developed and finalized in consultation with the residents. Community as well as house holds hand pumps were installed in 16 locations and bore wells have been installed in 2 locations in C Manambadi, Nanjaimagathuvazhakai and Singarakuppam villages. A case study of Singarakuppam village is described below, where 4 community hand pumps and one household hand pump supplying clean potable water to 180 families have changed the lives of people.

### A case study:

Shanthi is a single mother of 5 from Singarakuppam Village, in Cuddalore district of Tamil Nadu, India. She used to spend 2 hours a day collecting water from a standing tap over 5 kilometers from her home. But life changed with the initiative of FERAL under UN-HABITAT and BASF supported project.

"The situation here used to be bleak," she explains. "The water wasn't good. My stomach felt bloated and sore, sometimes for weeks. My children got sick with fever and dysentery."

In an effort to increase community-based management of water resources, micro-planning meetings were held to facilitate decision-making about who should receive hand pumps. When the time came to identify possible candidates, Shanthi's name was raised. After losing her husband 3 years ago in a masonry accident, she has struggled to keep her children in school and food on the table. After a group discussion, a unanimous decision was made that

Shanthi would be the recipient of an in-house hand pump. The entire village community rallied around Shanthi and her family, and were there the day the hand pump installation was completed. Shanthi beams at how the hand pump has become a great source of pride. "Owning a hand pump makes me feel important, like someone to be respected in the community. The village has been very supportive of me. I knew this would change my life, and my children's."

A neighbor stops by the house to congratulate her. "We are very happy for Shanthi and her family. They deserve this."

### Access to Sanitation:

Design for house hold toilet pour flush with twin pits were developed and shared with the beneficiaries. The woman headed and disabled persons were selected for demonstration of the design. Construction of two individual sanitation units completed. A Case study on house hold toilet is presented below:

### A Case Study:

Amudha from Kandakadu Village was one of the unfortunate without access to a sanitation facility before the intervention. She and her four daughters used to walk over an hour a day to relieve themselves. But life changed when a leech-pit toilet was constructed in their home under the project.

Amudha describes the arduous journey she and her daughters faced everyday:

"We used to leave the house at 6am. It's a 30 minute walk to the beach or a 40 minute walk to the woods" [each way]. Both options are dangerous. Although the beach is closer, the path is uneven and slippery during rains, so there's a risk of falling. Also, there's always a chance of being seen by fisherman out for the morning's catch. Going to the woods can be just as bad. There are snakes, wild animals, and insects to worry about." In addition to these challenges, the risk of being molested.

Amudha and her family were chosen as the beneficiary by their local WASH committee as they are categorized as 'vulnerable persons', which include people with disabilities, the elderly and women-headed households.

"I don't know how I can thank UN-HABITAT and FERAL enough. Now that we have a toilet, I have more time to work at the furniture shop and increased energy. Most importantly, I have more time to spend with my daughters and we can use this time for small extra income generating activities."



*Women having access to water and sanitation in their premises after UN-HABITAT Interventions in Cuddalore District, 2010  
Photo © UN-Habitat*





## Mainstreaming the People with Disabilities in Cuddalore District of India

Physical assessment and fitment camps in the target locations were conducted and 365 persons with disabilities were identified. Aids and appliances like calipers, splints, gaiters, artificial limbs etc. were provided to 57 persons for better mobility. The applications for Physical Handicapped Pension (PHP) for 24 disabled persons were facilitated and Government of Tamil Nadu sanctioned all the applications. This is a sustained monthly income for disabled people. Medical checkup from Government Health Care Centers were conducted for identified disabled persons to facilitate disability identity cards from Government of Tamil Nadu. This will allow the disabled persons and their dependents to obtain scholarships, train pass, self employment loans, bus pass, medical facilities from government health centers, one time money for marriage etc. More than 448 disabled persons have been taken to Pondicherry Institute of Medical Science (PIMS) for health care facilities. Case studies on two beneficiaries are presented below:

### Case Studies:

**1. Priya** is born with congenital deformities. Her parents live in Nanamedu village of Cuddalore district. Father is the sole bread winner of the family through daily wage which is very less. When the mother was pregnant with Priya she did not receive much health care, food or proper vaccinations. As a result the child developed congenital deformities in her left hand and left leg. Being poor the parents didn't take her for any medical treatment.

Priya remained in a state of complete dependency and at home till she was almost five years old when she was identified by the project. Realising the need for early intervention project staff referred her to Pondicherry Institute of Medical Sciences and according to their prescription Priya is being provided with therapy and assistive devices like splint and ankle foot orthosys to help improve her mobility. She was trained to correct her position and provided regular physiotherapy. Project also supported the family to get a disability certificate for Priya. As a result they are now receiving a pension from the government.

As a result of all these interventions Priya is presently able to take care of her self-care activities. More importantly she is commuting to school independently. The families have now been trained to provide regular therapy to enhance her mobility. This has also improved her relationship with her peers and her performance at the school. The teachers have been provided with sufficient inputs on managing children with disability.

Priya is a good example to demonstrate the importance of early identification and proper interventions to improve quality of life. Today Priya's parents and teachers are very happy about her independent functioning.

**2. Kausalya** is 7 years old with Cerebral Palsy. Though she was born with this condition, due to lack of awareness the parents did not provide her with any treatment or therapy. As a result she has been in lying position with complete dependency on parents for all self care and toileting activities.

In 2009, LCD identified and referred her to Pondicherry Institute of Medical Sciences for assessment. Project staff provided her physiotherapy, appliances like splints, gaiter and special chair to help her maintain body position and improve functional abilities of the child. Currently the project is providing her training in self care activities so that she need not depend on others for the same. Kausalya is also being provided preparatory training to attend mainstream school from next academic year.

**3. Prathap**, ten years old boy, was born with Cerebral Palsy. His parents are daily wage earners. During Tsunami the family was badly affected. Though they received relief services from Government and other organisations but nobody attended to the needs of Prathap. He continued to be in lying position dependent on his parents for self care and toileting. Initially he was taken for medical assessment to the Pondicherry Institute of medical Sciences and based on their advice the team is carrying out regular physiotherapy. His mother was trained about managing her child through care givers training programme. The project



*Prathap doing the physiotherapy exercise, a ten years old boy, born with Cerebral Palsy, Cuddalore District, 2010 Photo © UN-Habitat*

provided him with a standing frame and splints. Through regular field visits of Project team and extensive efforts made by the family members there is considerable improvement in Prathap's condition and Prathap is able to stand with support. Project aims at enrolling him to mainstream school next academic year. After witnessing this change in him Prathap's parents remark "even though we received relief services after tsunami no one realized our son's need and we also did not know the way for our child's rehabilitation. But now we can feel the effect and importance of the services provided to by the project team.

**4. Thulasi** resides at Devanampattinam village of cuddalore district. She is a single child of her parents who were involved in daily wage labour. There was no problem during her birth. However when she was two years old, she had fever which was not properly treated. Later it was diagnosed as Hemiplegic.

Being the first and the only child to her parents, it was extremely hard for them to accept the state of their daughter. Therefore, parents remained indifferent towards the child. Particularly her father could not accept her disability.

As a result the parents separated. Thulasi's mother decided to provide adequate care and affection to her. With the encouragement from her mother and peers Thulasi completed her schooling. But she had to discontinue her education because of meager family earnings and mobility issues. It was in this state that the project identified Thulasi during a survey in the locality.

The mother and the daughter were not even aware of disability identity card which could get them some financial support from the government. The project immediately facilitated to get the identity certificate. In order to reduce her problem in mobility the technical team referred her to the Pondicherry Institute of Medical Science for higher intervention. As per their recommendations, supportive devices such as splint and ankle foot orthosys and regular physiotherapy were provided to them under the project. Thulasi has been enrolled for skill training in cell phone repair provided by the government.

The interventions mentioned above have resulted in considerably changing Thulasi's life. She is now more independent in her day to day mobility and her interactions with peers and community has also improved considerably. Thulasi's mother is now reassured and does not worry as much about her future.

The project has now included Thulasi in one of the self help groups. In future the project wants to enhance her abilities to such an extent that she becomes the leader of the group and raise their voices to avail their rights and entitlements.

## Community Managed Municipal Waste Disposal in Jabalpur

Jabalpur is third largest city of Madhya Pradesh having population just over a million. It generates about 380 tones of municipal solid waste (MSW) daily. However, due to inadequate transportation facility only about 50% to 60% of generated waste is actually being removed and dumped at the Ranital dumping ground and few other dumping sites in an unscientific manner. There is a practice of burning the wastes at disposal sites. All these practices cause environmental problem. The Government of India has brought out the Municipal Solid Waste (MSW) (Management and Handling) Rules 2000 and entrusted the municipal authorities the responsibility of handling the MSW in an environmentally sustainable manner. It specified the methods to be adopted for segregation of MSW at source and house-to-house collection and their proper disposal.

In compliance to these Rules, Jabalpur Municipal Corporation (JMC) with support from UN-HABITAT initiated the Community Managed Scheme for Solid Waste Management in 5 municipal wards of Jabalpur city to create a zero garbage zone on a demonstration basis. The five wards namely George Desilwa ward, Gupteswar ward, Pt Banarsidas Bhanot ward, Napier town ward and Shahid Gulab Singh ward were selected to implement the programme. Primary task of JMC was to create demand from the community for such services and to test their willingness to pay nominal service charges for the improved services. Accordingly JMC hired the services of a NGO. It undertook the base line survey, which revealed that there are 11,772 households and 3,624 commercial units in all 5 wards. It followed the stakeholders consultations, division of the 5 wards into 77 wards and formation of 77 Resident Welfare Associations (RWAs).

In order to ensure community participation, intensive awareness campaign were conducted for dissemination of information on the program and its objectives through cable TV, radio networks, street plays, audio-visual shows, posters, and distribution of pamphlets in five wards. JMC provided one tricycle with 4 HDPE containers each of 80 litres capacity to each of the 77 RWAs. The NGO also organized training programme on technical aspect of door to door collection and disposal of waste for the RWAs. The office bearers of RWAs were also trained on bookkeeping and financial management.



*Tricycles deployed for the collection of door-to-door household waste disposal in Jabalpur, 2010. Photo © UN-Habitat*

JMC also created composting facility where the biodegradable waste could be disposed to convert it to compost. A MOU has been signed between JMC and the RWAs for the operation of the system. At present in each of 77 blocks, the respective RWAs are managing the operation through appointment of a sanitary worker, who at a fixed time visit each house hold in his area for collection of segregated waste. The biodegradable wastes are transported to the compost site, the recyclables are being sold by him at the market and the other wastes are transferred to the Municipal bins kept outside the 5 wards for final disposal by the JMC vehicles. JMC has also fixed the differential user charges for households and the commercial units and allowed the RWAs to collect the same. The recurring cost of operation of the system is being met out of the user charges being collected by the RWAs

## Planning Workshop to Promote HVWSHE in Schools of Madhya Pradesh

Human Values-based Water, Sanitation & Hygiene Education (HVWSHE) has been an integral part of UN-HABITAT's Water for Asian Cities Programme and aims at creating a new water and sanitation ethic through behavioural change among the children and the community to adopt good practices with respect to water conservation, sanitation and hygiene. In India, the initiative is under implementation in the cities of Bhopal, Indore, Jabalpur and Gwalior in Madhya Pradesh since 2006. Under this programme, HVWSHE Classrooms have been created in one of the schools in each project city. These classrooms are not a conventional classroom, but a place where an awareness and understanding of the water and sanitation situation is learnt through a process of values elicitation in experiential and practical methods. Furthermore, critical thinking and problem-solving skills are promoted in the learners to nurture positive behavioral changes towards water and its management. The guidebooks and other resource materials have been developed and resource teach-

ers in schools were properly oriented to conduct HVWSHE lessons. In continuation to these initiatives, a series of capacity building programmes for the teachers and classroom programmes for the students in other schools of project cities have been planned which will be implemented over a period of two years in partnership with the School Education Department and Vibhavari, the cooperating partner of UN-HABITAT. In this connection, a planning workshop was organised on 23 April 2010 in Bhopal to finalize the work plan. Besides senior government officials from the water and sanitation line department and the School Education Department, Principals of 18 Schools, officials of UNICEF and NGOs participated in the programme. The suggestions received from the participants with respect to contents, duration of each activity, preferred period of the programme to synchronize with other class room activities were incorporated in the action plan for the implementation of HVWSHE programme in schools.

*Participants attending the Planning Workshop on HVWSHE in Bhopal, 2010. Photo © UN-Habitat*





## PPP Approach implemented for accessing Safe Drinking Water in Nepal

Access to safe drinking water is a basic need of every human, and is directly related to public health. In Nepal, every year around 10,500 children die due to water-borne diseases caused by unsafe drinking water. Incidence of such diarrheal diseases can be reduced by 39 percent by increasing access to safe drinking water.

Realizing it, UN-HABITAT Water for Asian Cities Programme launched "Partnership for Safe Water Programme" in partnership with Government of Nepal and Coca-Cola India Private Limited to raise awareness on safe drinking water, promote household drinking water treatment (HWT) options and increase access to safe drinking water. The programme had been designed based on the principle of Public Private Partnership Approach, which has been taken as an effort to combine the strength of Government agencies, non-government organizations/ civil societies and private sector for the improvement of water and sanitation (WATSAN) sector. The Environment and Public Health Organization (ENPHO) was the implementing agent of this programme. The programme implemented its WATSAN activities in selected poor communities of five municipalities including Lalitpur, Bharatpur, Hetauda, Butawal and Nepalgunj to generate demand for safe drinking water, strengthen its supply and organize multi-stakeholder partnership.

More than 500 trainings were conducted and around 20,000 people were sensitized during the implementation period to raise awareness on safe drinking water, which directly benefited more than 30,000 people. It promoted Point of Use (PoU) drinking water options by performing street drama; and organizing rally, folk song competition and interaction programmes in the project area. The information related to safe drinking water was disseminated widely through media as well. The distribution network of Coca-Cola Company

in Nepal was also utilized to disseminate the information up to ground level. It helped in raising public awareness and bringing behavioural change, which increased the use of PoU options in these five municipalities. The survey carried out in the project area has found more than 70 percent of populations using PoU options, which increased the sales of HWT options and reduced the incidence of diarrheal diseases. It's one of the factors that helped the people of 13 communities to declare their area as safe water zone.

Moreover, the engagement of Coca-Cola Company in the programme has also increased the interest of other private sectors to get involve and contribute in WATSAN sector. More than 10 private companies have already expressed their commitment to invest in water, sanitation and hygiene sector, which can be taken as a positive indication in drinking water sector.

The programme also conducted a youth campaign "Pashchim Paila" to combat against diarrhea in middle and far-western regions of Nepal. The campaign mobilized youth led teams comprising doctors, health workers, youth volunteers and women in 20 VDCs of 4 diarrhea affected districts, where communities were sensitized on water, sanitation and hygiene issues.

The "Partnership for Safe Water" Programme conducted "Safe Water and Hygiene Campaign" in Kathmandu Valley to raise public awareness on safe drinking water and proper sanitation, and prevent outbreak of waterborne diseases. This campaign established temporary information booths at different public places of Kathmandu, where trained youth volunteers were mobilized to share the information on safe drinking water and proper hygiene. It also chlorinated dug-wells in different locations of the valley and distributed chlorine solution for drinking water disinfection at household level.

## Implementation of Integral Development Activities in Hetauda Municipality, Nepal

Hetauda Municipality has initiated efforts for the integral implementation of all development activities including construction of new infrastructures, environment improvement, poverty reduction and economic uplifting for the sustainable development of municipal area. The Chief Executive Officer of Hetauda Municipality Mr. Bharat Bahadur Dhungana had shared this information while speaking at a stakeholder sharing workshop held in Hetauda. The workshop was organized by Hetauda Municipality with support of UN-HABITAT's Water for Asian Cities Programme Nepal. Mr. Dhungana further stated that water and sanitation improvement activities, and skill development trainings have also been conducted in addition to environment improvement activities in the poor communities of this municipality. At the workshop, Mr. Upendra Baral, an Advisor of the Urban Environment Improvement Project (UEIP) informed that a bus park, systematic abattoir, vegetable market and public toilet have been constructed to utilize the municipal resource and improve the environmental condition. According to him, the project have also laid pipelines to increase access to drinking water. Similarly, a wastewater treatment plant with sewer lines is being constructed in the municipality.

Dr. Roshan Shrestha, CTA, UN-HABITAT South Asia said that all communities and areas in the municipality need to be uplifted in various aspects to develop the municipality in real. Representative of UDLE/GTZ Mr. Vijaya Rajbaidhya expressed her pleasure to have an opportunity to collaborate in the development activities initiated by the municipality. She also informed that similar activities have also been initiated in another 21 municipalities in cooperation with correspondent municipalities to reduce poverty. Hetauda Municipality is implementing various development activities in co-operation with UEIP, UN-HABITAT, UDLE/ GTZ and local community. A Water Management Board has been formed in the Municipality, which will initiate supplying drinking water to the Hetauda Municipality as soon as the Nepal Water Supply Corporation handover the responsibility of drinking water management to the board. Presently, the municipality with support of UN-HABITAT has established community level water supply systems at various urban communities particularly Kalyantar, Nawalpur and Rai Tole in Hetauda municipality. The project taps water from spring and deep boring to supply in these communities. Similarly, rainwater is



Chief Executive Officer of Hetauda Municipality, Mr. Bharat Bahadur Dhungana speaking at the National Stakeholder Workshop held in Hetauda, 2010. Photo © UN-Habitat

being harvested in Bhairav Danda, a village located at remote hilly region of Hetauda, to overcome the problem of water shortage.

In addition to constructing toilets and sewer lines, the municipality has been improving road and walkway along the poor communities to bring about the environment improvement in these communities. The municipality has already constructed 509 toilets including 220 toilets with bio-gas plant. A public toilet has also been constructed in China Quarter under the initiation of the Municipality with support of UN-HABITAT. The municipality has also initiated a revolving fund to provide the loan for toilet construction in these poor communities. Apart from toilet construction, the inhabitants of these communities have also invested their loan in various income generating activities such as agriculture, livestock rearing and small scale business. Mr. Druba Bhujel, Social Welfare Officer at Hetauda Municipality told that they have targeted to declare the municipal area as open defecation free zone by 2010. Hence, they are conducting various awareness raising activities in Hetauda. These initiatives have helped to bring the behavioural change in the inhabitants, and increased the use of toilet in the project covered communities. The municipality is also providing trainings on composting in the municipality, and has constructed a compost plant as well for the proper solid waste management. Incinerator has been constructed in the Hetauda District Hospital to destroy the hospital waste.

## World Environment Day and Sithi Nakha observed in Nepal

UN-HABITAT and GUTHI in association with organizations working on Water and Sanitation (WATSAN), private agencies and youth groups organized various awareness raising programmes in June 2010 to commemorate World Environment Day (WED) 2010 and Sithi Nakha 2010. WED is celebrated globally every year on 5 June to sensitize people and raise public voice on environment related issues. The day was celebrated this year as well and the theme of WED 2010 was *'Many Species One Plant One Future'*.

In Nepal, Ministry of Education in association with other sector players including UN Agencies, civil society organizations, private agencies and youth groups organized various events to celebrate WED 2010 at National level. On this occasion, UN-HABITAT, GUTHI, Women Environment Preservation Committee and Friends' Club Kupondole jointly organized a WATSAN exhibition at Bagmati River Bank. The exhibition was held to sensitize people on environmental issues, and urge them to act for reducing river pollution and conserving rivers. At the exhibition, models of rainwater harvesting system, wastewater treatment system, Ecosan toilet, Solar Water Disinfection technique and household solid waste composting system had been demonstrated.

An Eco-Football 2010 was also organized in Lalitpur on the occasion of WED. Members of Constitution Assembly, youth political leaders, WATSAN experts and journalists from different media houses participated at the football competition to express their solidarity in the global mission initiated to hit the goal against climate change. Likewise, community level orientation programmes



Visiting fellows to the WATSAN exhibition at Bagmati River Bank, 2010. Photo © UN-Habitat



Eco-Football team formed on the occasion of WED, consisting of Members of Constitution Assembly, Youth Political Leaders, WATSAN Experts and Journalists, 2010. Photo © UN-Habitat

were also conducted in Bhaktapur and Siddhipur VDC to mark WED-2010. At the programme, the students, teachers and community people were oriented on WATSAN technologies including rainwater harvesting, wastewater treatment and household drinking water treatment techniques. In addition to participating in various international WATSAN events, UN-HABITAT is also promoting indigenous festivals particularly Sithi Nakha in Nepal.

Sithi Nakha is being celebrated in Kathmandu Valley by cleaning water sources from medieval past. On the day, people clean the local water sources including dug wells, stone spouts, springs and others with the purpose to conserve source and improve water quality. They also conduct other sanitation activities in their communities on this day. On the occasion of Sithi Nakha 2010, UN-HABITAT, GUTHI, Lalitpur Nagarik Abhiyan, Stone spout and Source Conservation Association, NGO Forum for Urban Water and Sanitation, Water Aid Nepal and Freshwater Action Network Nepal jointly held a consultation programme in Lalitpur. Political leaders, human right activists, cultural experts, representatives of WATSAN organizations, youths and journalists took part at the programme to put their opinion about Sithi Nakha, and its value in water source conservation. 'Water Walk' was also organized to observe and disseminate the existing condition of traditional water source and its contribution to community level water management in Kathmandu Valley.

During the walk, the team comprising youths & journalists visited to Saptapatal pond and Kamal pokhari in Lalitpur, Rani Pokhari in Kathmandu, where they noticed human encroachment in pond area, decreasing water level and utilization of rainwater in pond recharging. Similarly, they observed the rainwater harvesting and dug wells recharging system at Machhendra Bahal, Lalitpur and household level water management practice at Eco-Home, Kathmandu.

## Urine Bank in Siddhipur: Supplying Urine for Agriculture

Jeevan Maharjan, a local farmer of Siddhipur VDC, proudly says "We provide healthy agricultural products to our customers in our vegetable market", but what makes this statement special is that he uses urine as a fertilizer. Even more surprisingly, he is not the only farmer in Siddhipur who can make this claim. There are many others, like Jeevan, who only use urine and faecal manure in their farmland instead of chemical fertilizers and pesticides. Led by a research team from Eawag, Switzerland (the Swiss Federal Institute of Aquatic Science and Technology) a research project about the potentials of urine as a fertilizer, was conducted in Siddhipur. Farmers were complaining that the productivity of different crops had been decreasing over the past years, and thought it could be due to the repeated use of chemical fertilizers. Hence, farmers began to use urine to fertilize their crops because urine provided the required nutrients, in an appropriate balance, to maintain soil fertility and increase productivity. The Eawag research team held a urine use and application workshop with the farmers of Siddhipur and helped facilitate the farmers to form a urine user committee. The user committee has now established a "urine bank" in Siddhipur with the technical and financial support of Eawag and the UN-HABITAT's Water for Asian Cities Programme Nepal. The urine bank was officially launched on 17 May 2010 and was inaugurated by Dr. Roshan Raj Shrestha, CTA, UN-HABITAT South Asia. At the inauguration ceremony, he stated that the bank would be helpful for the farmers to access the required amount of urine that they needed to fertilize their crops.

Furthermore, he believes that by providing a centralized bank for urine collection and distribution, the environmental sanitation condition in the village would be improved.

Currently, the committee has appointed one employee, who has the job of going door-to-door to collect the urine and bring it to the urine bank. The collected urine is stored in two tanks, each with 1000 liters of storage capacity. The user committee plans to provide urine to the farmers at the rate NRs. 1.00 per liter to generate funds to pay for the collection, operation and management. Fifty percent of the amount raised in this way is saved by the user committee (for future construction, repairs, etc.) and the remaining 50% of the income will be used to pay the staff. The launching of the bank has made the farmers of Siddhipur hopeful that they will be able to access and use an adequate amount of urine. Although they need to pay for the urine, they are glad to have a urine collection center in their area since they see urine as an effective and efficient fertilizer which can help to increase the quality of their agricultural products and improve soil productivity.





## Turning Trash into Cash: 3R's Approach encourages Students to Manage Waste Plans in Luang Prabang, Lao PDR

The children were walking off at the playing field at the front of the Pasathipatai Primary School, still excited as they wrapped up their football game. One young boy took a last sip of water from the plastic bottle in his hand, and then without a second thought, walked over to the metal recycle bank and deposited it into one of the compartments. These recycle banks have now become a common sight on the playgrounds of many schools in Luang Prabang, Lao PDR, and are widely used by the local students and teachers alike.

Pasathipatai is one of the 24 schools participating in the School and Community Waste Management project in Luang Prabang, being coordinated by the provincial Water Resources and Environment Office (WREO) with support/funding from UN-HABITAT. One third of the participating schools are located in the downtown area of this World Heritage site, and the rest are located in the villages nearby. The province's only university, Souphanouvong University, has also joined the program. The direct beneficiaries of this project number well over 15,000 students and teachers, which is a significant number in a city with a population of only 100,000 people.

The goal of this project is to raise awareness among the students and teachers at the participating schools, along with local community members, about the health issues and environmental problems caused by improper waste disposal. The programme teaches the principles of the 3R's: Reduce, Reuse and Recycle, and encourages the students to brainstorm on their own waste management

plans. As a sustainable income generating project, user-friendly recycle banks have been set up in each of the schools, showing students how to turn trash into cash. Luang Prabang doesn't have recycling factories such as those found in the capital city of Vientiane, so WREO had to work with local buyers to ensure that the material earmarked for recycling at each school will be picked up and put to good use. Since about one-third of household and school waste is organic, another feature included in the program is training on how to turn this organic material into compost. Within about 6 weeks all the waste vegetable matter, fruit peels, rice husks and dead leaves will decompose into rich organic fertilizer, which can be added to the plants around the schools and return valuable nutrients to the soil.

Laos has a rich oral tradition, and teaching through songs, dance and games can be as important as a formal lesson in the classroom. To help inspire the teachers' creativity, WREO worked with the Participatory Development Training Centre (PADETC) to develop the training curriculum. PADETC has over 10 years experience in Lao, using participatory processes for sustainable development and were the principle trainers behind many waste management projects in Vientiane. Along with the recycling and composting activities, the teachers lead the students in weekly environmental activities which include cleaning up the school grounds, making up songs and dances about the environment, and hosting fashion shows.

## UN-HABITAT Setup Water Classroom in Phine Town, Lao PDR

A new water classroom has been established as a part of a community-based water, sanitation and hygiene project implemented by UN-HABITAT in Phine Secondary School, Savannakhet District, Lao PDR.

The classroom was officially opened on May 7th, 2010 by the district vice governor in a formal ceremony attended by the school's staff and students, as well as UN-HABITAT and the water supply officials. After the ceremony all participants were invited to visit the classroom. Ms. Inthavane Orachith, a teacher of environmental studies in the school, took her time to familiarise herself with the materials on display before expressing her gratitude for UN-HABITAT: "We are very proud and happy to have received this classroom. We will definitely be utilising this space in our lessons."

She will have a wide variety of materials to choose from, as the classroom is filled from floor to ceiling with posters, leaflets and publications on various topics related to environment, such as water conservation, rainwater harvesting and wastewater treatment.

The centerpiece of the room is two large models demonstrating household rainwater harvesting systems in Nepal and Lao PDR. The students are also able to try some hands-on activities such as purifying water through an aquifer system, testing water quality with a special kit as well as playing music with bottles. The most colourful section of the room is however an art exhibition put together from drawings made by the students themselves. They are the fruits of a drawing competition that UN-HABITAT organised a few months earlier to encourage students to express their thoughts on issues of water, sanitation and the environment. Selected drawings were framed and exhibited in the water classroom, and the winners received prizes in the opening ceremony.

UN-HABITAT's community-based water and sanitation supply project in Phine will be completed in August 2010. A total of five villages and approximately 5,400 people, mostly the poor households, have benefited under the MEK-WATSAN initiative. The water classroom is part of the Human Values-based Water, Sanitation and Hygiene Education (HVWSHE) programme, which is a key part of the wider project. The campaign aims to raise awareness on issues related to personal hygiene and sanitation among the teachers and school children in the area. The classroom has been established to create a long-term education facility in one of the project's target villages.

Students and teachers from other schools have also been encouraged to visit the water classroom and learn about water and sanitation. In this way, the messages will be able to reach a wider community and hopefully make them more aware of the problems facing the environment as well as achieve a long term and progressive attitude change towards water, sanitation and hygiene - especially now that these issues have been literally brought closer to home.



*UN-HABITAT CTA explaining the students about the newly opened water classroom in Phine town, Savannakhet province, Lao PDR, 2010. Photo © UN-Habitat*

## Editorial Board

- Toshi Noda, Director,  
UN-HABITAT ROAP, Japan
- Andre Dzikus, Chief,  
Water & Sanitation Section II,  
UN-HABITAT Headquarter
- Roshan Raj Shrestha,  
CTA, South Asia Region, WAC,  
Kathmandu, Nepal
- Avi Sarkar,  
CTA, South East Asia,  
UN-HABITAT Vientiane, Lao PDR

## Chief Editor

- Andre Dzikus, Chief,  
Water & Sanitation Section II,  
UN-HABITAT Headquarter

## Managing Editor

- Kulwant Singh, Advisor,  
MEK-WATSAN and WAC  
Programme, New Delhi, India

## Story Write-ups for ROAP

- Yumi Kumagai,  
Information Officer,  
UN-HABITAT Japan

## Design & Layout

- Jogesh Arora,  
Management Assistant,  
UN-HABITAT India

\*\*\*\*\*

## UN-HABITAT Japan Regional Office for Asia and the Pacific (ROAP)

ACROS Fukuoka Building,  
8th Floor, 1-1-1 Tenjin, Chuo-ku,  
Fukuoka 810-0001, Japan  
Tel: (81-92)724-7121  
Fax: (81-92)724-7124  
Email: [habitat.fukuoka@unhabitat.org](mailto:habitat.fukuoka@unhabitat.org)  
Web: [www.fukuoka.unhabitat.org](http://www.fukuoka.unhabitat.org)

## UN-HABITAT Headquarter Water for Asian Cities (WAC) MEK-WATSAN Programmes

UN Complex, Gigiri  
P.O. Box 30030, Nairobi, Kenya  
Tel: +254-20-7623060  
Fax: +254-20-7623588  
Email: [Andre.Dzikus@unhabitat.org](mailto:Andre.Dzikus@unhabitat.org)  
Web: [www.unhabitat.org/water](http://www.unhabitat.org/water)  
[www.unwac.org](http://www.unwac.org)

## Successful completion of "Community-based Water Supply and Sanitation" Pilot project in Vietnam

The "Community based water supply and sanitation services for urban poor in Cam Ranh", a pilot project under Water for Asian Cities Programme in Vietnam, as a cooperation between Local Government and UN-HABITAT accomplished successful by enhancing awareness of community through IEC activities and training programs, utility staff has been built capacity and improved the customer relation.

Cam Ranh is a number of ADB (VIE-2272) project towns where have most high poverty rate (16.5%) (please re-write) and is the town where the consumers have to pay to water supply service with highest cost among project towns.

Urban population is 90,897 (2005) with rate growth is 1.8%. The basic economy is agriculture, fishing and small scale-services. The average per capita monthly income is VND 300,000 - 350,000 (US\$20 approx).

About 30-35% of population have access to piped water, some of households rely on a combination of shallow wells and ponds. There is limited rain water harvesting, and water in wells is available for only around 6 months a year. Some of households in the dry season need to purchase water from vendors with high cost (VND 15,000 (US\$1) for a cubic meter of untreated water while water tariff is around VND 3,000 (US\$0.2) per cubic meter).

85% of households have used the septic tank without sewers while 15,000 people in low-income areas have no sanitation facilities. The domestic waste often discharged directly into the sea.

There has 2,831 poor households (survey data Apr 2007) live in 9 urban pockets with very poor living conditions, with unstable income. Therefore they do not afford to pay for water and sanitation connections.



*Sanitation services scenario before UN-HABITAT project, 93% of poor households used the kind of toilet above in Cam Ranh. Photo © UN-Habitat*

After intervention of project (2007-2009), a numbers of outputs are achieved as following:

- Partnership has been established in Cam Ranh with local water utility (CADO) to prepare poverty mapping, and IEE based on methodology provided by UN-HABITAT;
- Community based water supply and sanitation project provided improved water and sanitation services where 2144 poor households have access to clean water with water connections and/or saving water tanks, and 470 private toilets have been built to the poor;
- Awareness of community has been enhanced through IEC activities & training programs in the town, utility staff has been built capacity and improved the customer relation;
- WCDM Strategy developed for the town in partnership with water utility, and in consultation with relevant stakeholders.



*50% of poor households have now access to improved sanitation facility above after the project intervention in Cam Ranh, 2010. Photo © UN-Habitat*