

# **External Evaluation of UN-HABITAT's Water and Sanitation Trust Fund**

**Part 2: Regional and Country Reports**

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## Country Report Ethiopia and India Zozan Kaya

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## Abbreviations

ASCI	Administrative Staff College of India
ADB	Asian Development Bank
CMWSS	Community Managed Water Supply Scheme
CTA	Chief Technical Advisors
DDSBA	Dire Dawa Sanitation Beautification Agency
DDWSSA	Dire Dawa Water Supply & Sewerage Authority
GMS	Gender Mainstreaming Strategies
HQ	Head Quarter
HVWSHE	Human Value in Water Sanitation and Hygiene Education
HWSSA	Harar Water Supply and Sewerage Authority
MDG	Millennium Development Goal
M&E	Monitoring & Evaluation
Microsan	Micro credit for Sanitation
MP	Madhya Pradesh
MSF	Multi Stakeholders Forum
NGO	Non Governmental Organization
NHB	National Housing Bank
RWH	Rain Water Harvesting Tank
SESI	Slum Environmental Sanitation Initiative
UN-HABITAT	United Nations Human Settlements Programme
UNSWEEP	Urban Water Supply & Environmental Improvement Project
WATSAN	Water and Sanitation
WAC	Water for African Cities Programme
WAC	The Water for Asian Cities Programme
WDM	Water Demand Management
WASH	Water, Sanitation and Hygiene
WSTF	Water and Sanitation Trust Fund

## 1. Introduction

The report is based on field visits to Ethiopia (November 25<sup>th</sup>, 2010) where the consultant undertook two days of fieldtrips as part of the external evaluation of the Water and Sanitation Trust Fund (WSTF). The mission in India took place in the period January 14<sup>th</sup>- January 20<sup>th</sup>, 2011. Chief Technical Advisor and his colleague from UN-Habitat in India facilitated the consultant's visit. The consultant executed a series of interviews with various partners and local organisations in Delhi, and the cities of Madhya Pradesh; Indore, Bhopal and Gwallior. This also included visits to many of the slums that are targeted in the Water for African Cities Programme (WAC). The purpose of the report is to present and discuss the experiences of selected projects from the two countries. As such, these case studies seek to describe the main characteristics of the projects, the achievements, moreover, the lessons learned for UN Habitat.

### 1.1. Cases and Experiences from Ethiopia

Since 1999, UN-Habitat has assisted African countries to improve the management of water and sanitation (WATSAN) through the WAC Programme. The main objective of the WAC is to tackle the urban water crisis through efficient and effective water demand management, build capacity to mitigate the environmental impacts of urbanization on freshwater resources and boost awareness and information exchange on water management and conservation. The second phase of the WAC Programme was launched in December 2003 with the focus to assist in the international effort to reduce poverty as embodied in the goals and targets of the Millennium Declaration and other United Nations commitments (RGA Synthesis Report: WAC II, 4). In Ethiopia, implementation of WAC II started in 2005.

### 1.2. Sanitation Improvement Projects

#### **"Dire Dawa Urban Sanitation Improvement"**

The Dire Dawa Urban Sanitation Improvement is funded by UN-Habitat with USD 51,500 and co-financed by DDSBA with USD 5,000, further, implemented by Dire Dawa Sanitation Beautification Agency (DDSBA). The objectives of the project has been to construct public toilets and a shower service complex near by the old railway station with a total number of beneficiaries stated as up to 30,000. Some of the achievements include the training of 40 small scale service providers in waste collection; and provision of solid waste disposal facilities (2 garbage bins and 20 mobile waste collection equipments).

**Observations:** The project effectively targets an area that is frequented by many people on a daily basis, thus delivers the overall objective of the project, namely to contribute towards the improvement of the sanitation conditions of the city. Further, the sanitation complex has been given to operators who are unemployed, the latter forming an association which is able to generate profits from the running of facilities. Yet, a challenge that remains is septic waste removal, a procedure that is costly. More attention needs to be put on this issue.

#### **"Small scale community based water supply & sanitation project for Goro-Sabian and Gende-Gerada Communities"**

The above project has been implemented by Dire Dawa Water Supply & Sewerage Authority (DDWSSA). Here, mobile toilets have been installed in the outskirts of Dire Darwa. The daily running of the facility has been outsourced to youth members of the area through their association.

In another informal setting, public water points have been installed in the peri-urban settlements of Dire Dawa. These informal settlements were suffering from poor water supplies prior to interventions. There was a lack of solid waste collection, and people here paid more for provision of

water than in other areas. In a settlement like this, typically 4000 people would live, yet, numbers remain unofficial. The government can at any time erase or decide to build roads through the area as none of the settlements are “legally built”. As such, when selecting vulnerable communities, UN Habitat officials found that it was critical to address this area.

More specifically, achievements have been the provision of 4 mobile toilets (benefiting up to 200 people per day), 4 solid waste/garbage collection bins and construction of community toilet complex including shower facilities. Further, the construction of 8 public water supply points is stated as benefiting over 5000 people. The project has also included the training of 25 public tap operators.

**Observations:** The pro-poor rationale and location of infrastructure seems well balanced. Furthermore, the target beneficiaries are poor groups and communities, representing the most vulnerable on the beneficiary level. As mentioned above, more attention needs to be put on the septic waste removal. An important albeit not resolved issue is the lack of land rights of poor residents in poor urban informal settings. Through UN Habitat’s involvement, the municipal authorities have shown a will to cooperate, allowing the construction of facilities but also subsidizing and monitoring developments. For instance, the Dire Dawa City Administration's role has been overseeing all the projects implemented by different implementing partners of the city. This is a positive development that may enhance the rights of poor and landless, and suggests that UN Habitat’s models are welcomed and aligned with local authorities. The potential for future replication of the models is thus high.

**“Small Scale Community Based Water Supply and Sanitation Improvement Project for ‘Dehoch’ Community in Harar”**

The Implementing Partner has been Harar Water Supply and Sewerage Authority (HWSSA). The achievement in this community development project has been the installation of water supply and sanitation facilities and rain water harvesting tank (RWH). “Gava Ule (formerly known as “Dehoch”), was targeted because these people are amongst the most vulnerable of the poor in Harar. Further, Gava Ule Community represents one of the oldest informal settlements of the city. There are more than 300 families living here at any one time. The project component actively involved the community members as daily laborers, during the installation of the water pipe lines. On average, they have generated about 3167 birr as income (Harar HWSSA Report,2009). The community organized themselves in the “Gava-Ule WATSAN Association”; in order to manage both water and sanitation issues as well as the commercial aspect. They have managed to generate an income through the operation of the toilets and water tank, and are now selling water and sanitation services to the outer villages. Income from the latter is reportedly approximately 20 000 birr.

**Observations:** The project addresses the priority needs of the most vulnerable groups, beneficiaries have been selected by UN-Habitat staff and the selection criteria and location seem well considered. It is community driven and has thus contributed to a strong ownership feeling, given that the community groups are involved in installing, managing and maintaining the facilities. Extending upon this, the fact that they are able to generate an income from sales of water (establishing a small kiosk) is both innovative and a model that could potentially easily be replicated elsewhere.

The provision of the WATSAN facilities such as public water points, toilet facilities (both types), solid waste collection garbage bins have therefore been a significant contribution in alleviating problems the communities were facing, and the number of beneficiaries testify to this fact. The conditions could however be improved. The building that 300 people were living in was in a very dire condition and people had to sleep in turns due to lack of space. There is in other words scope for improvement in community development in Ethiopia.

### 1.3. School Programme-Awareness Raising “Gay Madrasa”

Implementing partner in this values based approach has been Harari Bureau of Education. At the commencement of the project, in 2006, 5 pilot schools were selected consisting of 4,112 students and 132 teachers for the participation of the WASH programme. On the technical supply side, there has been construction of water supply facilities such as a water point operator and a rain water harvesting tank. The programme also involves curriculum integration and model development; that is, training of teachers and community representatives on human values in water, sanitation and hygiene education. According to the Harar Region Education Sector Development Program, around 85% of the available schools in the region do not have drinking water supply and a majority of schools lack separate toilets for girls, boys and teachers (Harar City RGA Final Report, 2005, 33). In this sense, the selection of locations and target groups seem relevant and well considered.

**Observations:** The rationale of creating a new ethic among children, utility staff and the community-at-large is appealing, however, given that the programs focus on public and community managed schools, the places that the poorest of the poor send their children. It is moreover a positive step that value based education is being incorporated into curricula of schools, as in Ethiopia.

One issue that needs further clarification is whether installing RWH tanks in schools is considered as good value for money. These harvesting tanks normally have the capacity of 25 to 50<sup>3</sup>. Constructions are installed in an appropriate manner, however, a general impression is that many of the tanks are not being used to fullest potential, others again are not easy to maintain due to lack of maintenance trainings or technical quality. What is more, RWH is highly dependent on weather conditions, meaning that their usage is scarce in non-rainy seasons. As such, the question may be posed; to what extent is this cost-beneficial, moreover a relevant intervention in schools, elderly centers, and prisons?

## 2. Overall Findings on Achievements and Results in Ethiopia

### Water Demand Management

- A total of nine (eight in Dire Dawa and one in Harar) Public Water Points constructed for the targeted poor communities. These public water points are serving an estimated number of 5,400 people (5,000 in Dire Dawa and 400 in Harar) at the moment. In Addis Ababa 10 communal water points that are benefiting about 8,000 people are constructed. In addition, in Addis Ababa 1311 shared yard connections benefiting 20,976 people are constructed.
- The construction of 15 rainwater harvesting tanks with the capacity of 25 to 50 m<sup>3</sup> has been completed. These schemes are located in pilot schools, community centers and prisons. The total number of beneficiaries are estimated to be 9,820. Under the capacity building component of the project training manuals, technical guidelines, operation and maintenance manuals have been developed and are in use by the authorities for further rainwater harvesting initiatives.

### Sanitation for the Urban Poor

- In all the three participating cities public toilets (one per city) have been constructed. These facilities are providing services for the urban poor that are targeted through the programme.

- Apart from the public toilet complexes, six mobile toilets (four for Dire Dawa and two for Harar) have been constructed.

### **Awareness Raising and Water & Sanitation Education**

- Awareness and sensitization of the community as well as consultation of the community members on their priority needs with respect to water and sanitation services.
- Sensitization of policy decision makers was carried out at federal, regional governments as well as city-levels.
- Baseline survey of the pilot schools completed and reports produced.
- Trainings on Human Value in Water Sanitation and Hygiene Education (HVWSHE) was given for participants selected from the three cities for 12 consecutive days in Addis Ababa.

Regarding the impact on the direct beneficiaries, it is clear that the communities are actively participating in the projects, moreover, that capacity building and community approaches have generated enthusiasm in Ethiopia. As mentioned above, in the informal settlement “Gava Ule” in Harar, about 300 community members are directly benefiting from the provision of facilities, also generating a sustainable income through the operation of the latter. In this sense, the community based water and sanitation project seems to be a commendable attempt in addressing the pressing issues. The emphasis on community development approaches further allow the poor to have a voice and participate in project implementation and collective decision making, as well as giving them ownership to the project. This coincides well with the stated program goal, namely to increase the power and voice of the urban poor (HWSSA Completion Report, 2009,7). At the same time however, some projects in Ethiopia are in relatively early stages of development and there is thus scope for improvement, especially for community development.

## **3. Cases and Experiences from India**

The Water for Asian Cities Programme (WAC) is a collaborative initiative of the UN-Habitat, the Asian Development Bank (ADB) and several countries in Asia. The Government of India is a partner in the programme. The programme was launched in March 2003. Its main objective is to promote pro-poor investments in water and sanitation to support MDG’s 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.

### **UN Habitat’s Interventions in Madhya Pradesh (MP)**

The government of Madhya Pradesh is implementing a project entitled Urban Water Supply & Environmental Improvement Project (UNSWEIP), also called project UDAY, in four cities of MP, namely Bhopal, Gwalior, Jabalpur and Indore. The project focuses on sustained improvements in water supply, sanitation, garbage collection, and disposal, through city level infrastructure development.

UN-Habitat, under the WAC, is supporting pro-poor initiatives in these four cities to complement the UNSWEIP project. The activities relate to urban environmental sanitation, pro-poor water & sanitation governance, water demand management, gender mainstreaming and capacity building and involvement by communities themselves. The initiative promotes locally –managed water supply systems, private and community – managed toilets, on-site sanitation, and hygienic behavior education. More specifically this has included several initiatives: a community based project called



Slum Environmental Sanitation Initiative (SESI), Poverty Mapping Sanitation Situation Analysis, Community Managed Water Supply Scheme (CMWSS), Rejuvenation of Community Toilets, schemes for Sustainable Improvements in WATSAN status in selected slums in major cities of MP, Solid Waste Management, and Community – Managed Water purification and bottling scheme (CPWBS). Furthermore, Rain Water Harvesting Systems and Water Demand Management (WDM) strategies for the project cities have been implemented, as well as capacity building projects. Other training programmes include the development of Gender Mainstreaming Strategies (GMS) and Action Plans, as well as Human Value Based Water Sanitation & Hygiene Education (HVWSHE). UN Habitat cooperates with various partners on these initiatives, some of which will be elaborated further below.

### 3.1 National Housing Bank (NHB)

NHB is the apex level financial institution for the housing sector in India, and was established in 1988 under the National Housing Bank Act. The preamble of the National Housing Bank Act, 1987 describes the basic functions of the NHB as –

“... to operate as a principal agency to promote housing finance institutions both at local and regional levels and to provide financial and other support to such institutions and for matters connected therewith or incidental thereto ...” (Annual Report 2009-2010).

In partnership with NHB, UN-Habitat has developed a revolving fund to microfinance water and sanitation services for the poor and selected Micro Financing Institutions (MFI) have been provided funds to extend loans to the urban poor for getting water connections/developing sanitation facilities. The partnership with UN-Habitat was initiated 2 years ago in the states of Madhya Pradesh, Maharashtra, Orissa, Tamil NADDU, Uttrakand and Karnataka. UN-Habitat has provided an amount of USD 123 750 which has enabled the construction of more than 5,000 household toilets and availing piped water for more than 1000 Households. As part of the programme there have also been capacity building workshops.

Apart from this, NHB has been playing the promotional role issuing guidelines for the government in issues related to the housing – bank sector. Indeed, as Mr Jaishankar, Assistant General Manager confirms, NHB is responsible to the government, but also constantly supplying governmental ministries with inputs, being present in all working groups and bodies related to the housing-bank sector.

The Team believes this partnership is interesting. It is innovative because combining micro credit and sanitation is a relatively new approach. A key feature of the programme is the establishment of solidarity groups at the community level as well as “community banks”, which provide a facility for households to accumulate savings in order to meet the requirements to access loans from the revolving fund. The performance of the microcredit systems in India is effective, as the payback rate is good. Further, the link with National Housing Bank is strong and important in terms of policy influencing. For NHB, UN-Habitat is a valued partner because it manages to attract interest from new donors. Spin off’s from the success of micro-credit schemes can for instance be illustrated by the fact that there are now queries for meeting other needs in urban basic services, such as roads and electricity supplies, suggesting that the programme serves as catalyst creating social demand for other services as well.

### 3.2 Sulabh International Social Service Organisation

Founded by Dr. Bindeshwar Pathak in 1970, Sulabh social service organization works to promote human rights, environmental sanitation, non-conventional sources of energy, waste management and social reforms through education. Sulabh International is one of the largest non-profit organization in India, counting 50,000 volunteers. The organization works to change attitudes toward traditional unsanitary latrine practices in the slums, and have developed cost effective toilet systems now in use in more than 1.2 million residences, a technology declared a Global Best Practice by UN Habitat.

Further innovations include on-site human waste disposal technology; a new concept of maintenance and construction of pay-&-use ecological public toilets, low maintenance waste water treatment plants of medium capacity for institutions and industries. In the field of normative work, Sulabh has established a school in Delhi and also a network of centres all over the country to train boys and girls from poor families, such as offering computer and tailoring courses so that they can compete in the open job market.

The consultant finds Sulabh innovative and promising, not simply for its technical innovations, but also for its focus on research and renewable energies. The organization has generated a lot of enthusiasm nationally and internationally for its research and innovation, and has pioneered the production of biogas and bio-fertilizer through the development of several technologies that convert waste from toilets into biogas for heating, cooking and generating electricity. This is a very sustainable and environmental friendly method, an area that UN Habitat arguably could develop further. Most interestingly perhaps, is the way Sulabh manages to combine technical innovations with a human rights perspective, as the organization aims at restoring the rights of scavengers in India. In addition, there is a standing link with Sulabh International for training local staff in sanitation. The Team thus finds this partnership valuable and of mutual benefit.

### 3.3 Visit to Slums in Indore, Bhopal and Gwalior

The following is a summary of the observations made in the 7 slums areas visited in the three above cities. SESI (Slums Environmental Sanitation Initiative) under WAC, is considered to address the needs of the poor. A total of 20 000 households have been targeted, chosen on basis of a poverty mapping exercise followed by a situational analysis. The interventions further seem technically sound, and a total of 95 % of households living in poverty pockets in four cities now have access to improved water source (2006, UN Habitat WAC Brochure). Some of the other achievements in the project include:

#### **Sanitation for the Urban Poor**

- The installation of 400 demonstration toilets, 20 community toilets in each city, 32 demonstration school toilet blocks.

#### **Water Demand Management**

- Creation of water points, extension and repair of piped water supply system.

#### **Awareness Raising and Water & Sanitation Education**

- Awareness programmes for schools.
- Training the community in masonry, Water Quality Management, accounting, management of community sanitation complex etc.

- Mass awareness through exhibitions, rallies and campaigns.
- Workshops and exposure visits for selected representatives, top and middle level Municipal Corporation personnel.

One particular observation is the strong emphasis on education and capacity building, women groups tend to be mobilized and aware of their rights. Through the establishment of Community Water and Sanitation Committees and self help group formations they have elected presidents, and chairpersons, and the groups have been created as legal entities. There is further a strong emphasis on community financing in many of the slums. Community members have been trained in the technical operative aspect of managing the water and sanitation complexes, in maintenance, but also in accounting and finance management. In one slum in Indore, the committee has set the water tariff to 60 rupies per month and the latter is responsible for managing the community budgets and accounts, which are being audited.

The Municipal Corporations were initially reluctant to commit, fearing that the payback would not be successful, yet here, beneficiaries and local partners document on good payback records. Most slums programs are monitored and guided by the local Multi Stakeholders Forums (MSF). This approach is most appreciated as it ensures user participation. This participatory and innovative approach has replication potential other places as well.

A significant programmatic finding as regards India is also the level of capacity building for government officials and elected representatives at local and national level and the influence on policies and city planning. The work is well advanced. UN-Habitat partner, NGO Mahila Chetna Manch for instance, has conducted a string of stake holder workshops for women leaders and councilors, as well as developed a gender mainstreaming strategy (GMS). The fact that the GMS and action plan has been adopted by the state government shows that India has come a long way. This is innovative. The development of normative work, such as community development tools, models and processes, documentation of project approaches and volume of publications is further commendable, suggesting an overall effectiveness of the programme.

## 4. Overall Findings on Achievements and Results in India

### Meeting the Needs of the Poor

The programme similarly addresses the needs of the poor, however has come much further in implementation than Ethiopia, thus seems more organized and well-run. Apparently, more attention is paid to community-led approaches in slum areas in India compared to Ethiopia, further, a great emphasis has been on the pro-poor governance framework, and quite successfully so. Gender mainstreaming is well developed in India, and has had impacts on local and national level. In Ethiopia gender mainstreaming is also progressing, but arguably at different rate and effectiveness. It should be noted however, that it is problematic to quantitatively compare the results from the two countries, as they are in various stages of implementation, likewise, the frame conditions are very different.

### Utilizing UN Habitat's Comparative Advantages

UN Habitat's perhaps greatest asset is the organization's ability to build partnerships with a broad range of stakeholders by means of its identity as a UN body. It is able to attract interest from member organisations, banks, hire professionals and expertise from institutions and build capacity, further, convene all these actors. Indeed, there is no doubt that many of the partnerships and cooperation agreements would not have been initiated had it not been for UN Habitat's links, and the latter should thus be commended for this effort. Characteristics are not surprisingly therefore as follows; convener, network builder, capacity builder, or resource mobilisator, to mention but a few.

### **Balanced Partner Selection**

UN-Habitat's choice of partners in projects in Ethiopia and especially India seems well balanced, a mix of local NGO's and governmental authorities in the former, with India having a wider spectrum of partnerships including various local and national governmental agencies, research institutes, NGO's and pioneering with its Private – Public Partnership with Coca-Cola. The successful partnerships in India must however also be attributed to the strong local UN Habitat leadership led by Chief Technical Advisors (CTA's) and their personalities, ability to choose the relevant and good local partners, and forge partnerships across the spectrum of actors. The partnership approach in India focuses its work as part of a multi – stakeholder team.

### **Innovations**

UN-Habitat has, according to themselves initiated innovative approaches. The introduction of the MSF and the microfinance for sanitation is one such example. Another can be found in the Google H2O initiative in Zanzibar, which entails new components of monitoring and data sets such as Household Data; Urban Equity Survey Methodologies, MAJI Data, Utility Benchmarking, Community Focused Surveys, Citizens Report Cards and a Human Sensor Web. The research initiative is in collaboration with University of Twente. The purpose is testing out new monitoring methodologies and placing data where people may have access, and accordingly, track progress towards the attainment of the water and sanitation MDGs at the local level. According to UN Habitat, the initiative illustrates an innovative type of monitoring that gives a voice to the people. The Team finds the Google H2O initiative promising as well, however, due to limited funding, the pilot initiative is now phasing out. The team believes that there is an untapped potential in the field of research, however, rather than UN Habitat doing basic research, it should be concerned on developing strategic partnerships with such inventors.

The team questions to what extent the provision of rain water harvesting tanks in schools indeed can be said to illustrate “an innovative approach”. Does this introduce anything “new” as such? Further, the component of human values based water education in schools is important and shows that interventions go beyond technical assistance. This is somewhat innovative and appealing, however, the question remains whether UN Habitat should be the instigator in this field.

On the technical side, the collaboration with Sulabh International in India is fruitful, not simply for Sulabh's sanitation innovations, but also for its focus on research and renewable energies. The organization has developed several technologies that convert waste from toilets into biogas for heating, cooking and generating electricity. The team believes there is a potential for increasing this in further scope. Another interesting collaboration can be illustrated with Professor Bob Metcalfe of California State University in Sacramento and his research on Water Testing. Metcalfe is well known for his work, being able to confirm that contaminated water need only be heated to 65° C to make it safe to drink, whereas it is commonly thought that water has to be boiled for up to 20 minutes to render it safe. He has developed a simple and effective water testing kit currently available for use at the community level in developing countries to test water sources for the potential risk of disease. His workshops aim to increase water quality awareness, and this type of collaboration should be commended and continued.

### **Highly Valued Programme**

There is without doubt clear indication that partners are satisfied with UN Habitat. In discussions with partners and beneficiaries in India, they emphasize the following factors; the international clout by virtue of being a UN organization opens doors to all networks, UN Habitat's ability to attract expertise (technically and normative) by means of its UN identity gives it a role as facilitator and network builder and catalyst.

### **Evidence of Policy Influence**

The argument that UN Habitat has provided assistance in terms of affecting changes in policy and legalization is plausible in the case of India. One reason for India's success in establishing a more advanced programme is the effective cooperation with government on national and local level, and the fact that the programme is well anchored within national and local government systems. There are several examples where UN-Habitat through its partners have been able to advise and expertly guide national and municipal governments ensuring that its models can be taken up on a sustainable basis.

- For instance, the poverty mapping data and report that UN Habitat has produced has been used by the State Government and Municipal Corporations for preparing the Municipal Action Plans for Poverty Reduction and for making pro-poor investments under Jawaharlal Nehru Urban Renewal Mission of Government of India.
- The recommendations made on water demand management in MP from a TERI/WRP study commissioned by UN Habitat, have been crucial in policy papers "to suggest measures to the government for the municipal water charges collection with community capacity enhancement in municipal areas of the state" (Policy Paper by U.K Sahav, Directorate of Urban Administration and Development, MP).
- The Government of Madhya Pradesh has also incorporated UN Habitat's approaches in the making of legal framework, mobilizing and creating awareness on RWH, as cited from The Directorate of Urban Administration in Bhopal; ...."roof top rainwater harvesting compulsory for all types of buildings having plot size more than 250 sqm in urban areas".... (2006, Directorate of Urban Administration in Bhopal).
- Finally, the GMS and the RGA formulated for the WAC, developed in collaboration with the NGO Mahila Chetna Manch, illustrates the significance of policy development. The strategy has been adopted and approved by the government of MP for use at local level in 2007 (2007, Urban Ministry of Development).

### **Evidence of Capacity Development**

UN Habitat and partners in India also continuously work on building capacity of municipal staff, through capacity enhancement training programmes, also related to gender mainstreaming. This has been organized in cooperation with Administrative Staff College of India (ASCI) Hyderabad, to mobilize political will for promoting pro-poor intervention by the Municipal Corporations. Other Capacity Building topics have included HVWSHE in schools, Community Managed Environmental Sanitation and Solid Waste Management, Water Supply and Waste Water Treatment, Urban Environmental Management and Biomedical Waste Management, Grey Water Reuse and Roof Top Rain Water Harvesting as well as capacity building programme for promoting effective delivery of water and sanitation services. This has been verified through interviews with partners themselves, both NGO's and local authorities.

### **Evidence of Advocacy**

The Team finds the WAC in India programme to be innovative in awareness raising activities, advocacy and sharing information. UN Habitat along with various partners has actively produced and distributed publications, newsletters, information material, press statements, etc (See annex of

Published Materials During the period 2002 – 2010 on ‘UN-HABITAT Contribution to Water and Sanitation in Asia’) In addition, the cooperation with Coca Cola has led to nationwide TV coverage.

#### **Relevant Staff and Partners**

One of the Team’s findings in explaining India’s comparative advantage coincides with observations in the Mid Term Review namely a “combination of strong local UN Habitat leadership led by Chief Technical Advisors (CTA’s) and relevant and good local partners” (Mid Term Review p 4). A major part of the India programme’s success may also be attributed to the expertise of the staff on ground as well as the latter’s cooperating and networking capabilities, which is essential in what the Mid Term Review calls “achieving last mile delivery”.

#### **Ownership/Community led Approaches**

Another element that marks the work in India is the sense of ownership of projects, observed during field visits to the communities of MP. Beneficiaries have organized themselves in community groups actively involved in all processes of the project. This is essential in ensuring future sustainability. Focus should thus be on continuance of the community led approaches and MSF.

#### **Conclusion**

In short, the overall findings of the evaluation Team is that WSTF has made a commendable attempt to fulfill its objectives, encapsulating various programmes, vast thematic areas and geographic regions. Yet, critical challenges still remain, the latter are further elaborated in the main report.

## Annex 1: References

### General

Office of International Oversight Services (OIOS) (2009), Audit of water and sanitation trust fund activities in the United Nations Human Settlements Programme  
 UN Habitat Water and Sanitation Trust Fund Strategic Plan, 2008-2012 (2008). Nairobi, Kenya  
 UN-Habitat (2010), Kenya Country Impact Study, Nairobi, Kenya  
 UN-Habitat (2010), Nepal Country Impact Study, Kathmandu, Nepal  
 UN-Habitat Sixth Meeting of the Advisory Board (2010), Nairobi, Kenya  
 UN-Habitat Water and Sanitation Trust Fund (2009), Financial Progress Report and 2010 Budget, Nairobi, Kenya  
 Wright, A., Narayanan, R. Sijbesma, C (2007). Report of Mid Term Review of the Operations of the Water and Sanitation Trust Fund

### Program Reports: Africa

Harar Water & Sewerage Authority, Project Completion Report Small Scale Community Based Water Supply and Sanitation Improvement Project for Dehoch Community in Harar (2009).  
 UN-Habitat (2005). Managing Water for African Cities Programme (WAC) II Report on Rapid Gender Assessment of Harar City  
 UN-Habitat (2005) Water for African Cities Phase 1 Training and Capacity Building Component, Final Report  
 UN Habitat (2010). Internal Impact Assessment and Performance Review of the Water for African Cities Programme

### Program Reports: Asia

Mahila Chetna Manch, undated. Training of women SHG leaders on water and sanitation management under gender mainstreaming strategy initiative for Water for Asian Cities Program. Module. Bhopal, MP, India: Mahila Chetna Manch and New Delhi: UN Habitat  
 Mahila Chetna Manch, 2006. Training Workshops for gender mainstreaming in WAC programme in four cities of MP, India. Bhopal, Mahila Chetna Manch and UN-Habitat  
 UN – Habitat and Water Aid, undated. Baseline survey: Analysis of the baseline, conditions in the poverty pockets, Bhopal. Bhopal: UN-Habitat and Water Aid  
 WaterAid India, undated. Slum environment Sanitation Initiative: Progress Report. Bhopal: Water Aid India, Regional Office West

### Normative Documents: Asia

Framework of Action for Meeting MDGs in Asia-Pacific Region - Outcome of APMCHUD-I, (2006). Issue Paper on Water (2006). Sanitation and Human Settlements, WUF3, Vancouver, UN-HABITAT and UN-WWAP(2010). Water for Sustainable Urban Human Settlements – Joint Publication  
 UN-Habitat (2008). Sanitation: A Human Rights Imperative  
 UN-Habitat (2007). Manual on the Right to Water and Sanitation  
 UN-Habitat (2006). Social Marketing of Sanitation  
 UN-Habitat (2005). Blue Drop Series on Rainwater Harvesting - Policy Makers – I  
 UN-Habitat (2005). Blue Drop Series on Rainwater Harvesting - Capacity Building – II  
 UN-Habitat (2005). Blue Drop Series on Rainwater Harvesting - Implementing Agencies – III

### Publications Regional

UN-Habitat (2005). WAC Programme Brochure  
 UN-Habitat (2003). WAC Programme Brochure, 2003

UN-Habitat (2003). WATER - Public Awareness Campaigns  
 UN-Habitat (2003). WATER - Training and Capacity building

### **Publications ASIA**

National Housing Bank India, Annual Report 2009-2010

Policy Paper 1, undated, UN - Habitat and Directorate of Urban Administration and Development, Government of Madhya Pradesh, Community Managed System For Operation, Billing & Collection of Water Charges

Policy Paper 2, undated, UN - Habitat and Directorate of Urban Administration and Development, Government of Madhya Pradesh, Measures for Ensuring Sustainability of Rainwater Harvesting

Policy Paper (2006). UN – Habitat, Bhopal Municipal Corporation and Water Aid, Poverty Mapping- A Situational Analysis of Poverty Pockets in Bhopal

Policy Paper (2006). UN – Habitat, Indore Municipal Corporation and Water Aid, Poverty Mapping-a Situational Analysis of Poverty Pockets in Gwalior

Policy Paper (2006). UN – Habitat, Bhopal Municipal Corporation and Water Aid, Poverty Mapping-A Situational Analysis of Poverty Pockets in Indore

UN-Habitat and WaterAid India (2006). Poverty Mapping – A Situational Analysis of Poverty Pockets in Bhopal

UN-Habitat and WaterAid India (2006). Poverty Mapping – A Situational Analysis of Poverty Pockets in Jabalpur

UN-Habitat and WaterAid India (2006). Poverty Mapping – A Situational Analysis of Poverty Pockets in Indore

UN-Habitat, Mahila Chetna Manch Bhopal and the Government of MP -Water for Asian Cities (2006). Madhya Pradesh, India, Mainstreaming Gender, Water and Sanitation, Strategy and Action Plan

UN Habitat, Mahila Chetna Manch Bhopal, undated. Navigating Gender – In development of Water and Sanitation in Urban Areas, A rapid gender assessment of the cities of Bhopal, Gwalior, Indore and Jabalpur

UN Habitat and Government of Madhya Pradesh (2006). Guidelines on Revolving Funds for establishing guidelines for revolving fund on Community Managed Water Supply Schemes and Construction of Household Toilets in Urban Slums ,Madhya Pradesh, India

UN – Habitat and Water Aid, undated, Slum Environmental Sanitation Brochure

UN - Habitat and Coca Cola India, undated, The Ripple Effect-Impacting Communities through Public Private Partnerships for Water and Sanitation

Sulabh International Movement, undated. Sulabh Sanitation Movement

Water for Asian Cities (WAC) Programme and Mekong Region Water and Sanitation Initiative (MEK-WATSAN). Vision and Strategy-2008-2012.

Water for Asian Cities-Initiatives and Programmes in Four Cities

Water for Asian Cities –Annual Report South Asia (2010)

Water for Asian Cities –Annual Report South Asia (2009)

Water Aid India (2009). India Burden of Inheritance

WaterAid India (2009). Baseline Survey - Status of Water and sanitation in the Slums of Bhopal (AIF CIF component of Project Uday)

WaterAid India (2009). Baseline Survey - Status of Water and sanitation in the Slums of Gwalior (AIF CIF component of Project Uday)

WaterAid India (2009). Baseline Survey - Status of Water and sanitation in the Slums of Indore (AIF CIF component of Project Uday)



## Lake Victoria Regional Report

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## Abbreviations

BIG	Financial institute for micro loans (Kenya)
CBO	Community Based Organization
CLTS	Community Led Total Sanitation
ECOSAN	Ecological Sanitation
GIS	Geographic Information System
HH	Household
KADEFU	Tanzanian NGO
LV	Lake Victoria
LV-Watsan	Lake Victoria Water and Sanitation Initiative
M&E	Monitoring & Evaluation
MDG	Millennium Development Goal
Microsan	Micro credit for Sanitation
MoU	Memorandum of Understanding
MSF	Multi Stakeholders Forum
MWI	Ministry of Water and Irrigation (Kenya)
MWLE	Ministry of Water, Lands and Environment
NETWAS	Regional NGO for capacity building
NGO	Non Governmental Organization
NSWC	National Water and Sewerage Corporation (Uganda)
O&M	Operation and Maintenance
PIP	Project Implementing Partner
SANA	Sustainable Aid in Africa (Kenyan NGO)
SANPLAT	Sanitation Platform
SNV	Netherlands Development Organization
TOR	Terms of Reference
SWA	Sector Wide Approach
SWSB	South Water Services Board (Kenya)
UEPF	Uganda Environmental Protection Forum
UN-HABITAT	United Nations Human Settlements Programme
VIP	Ventilated Improved Pit (latrine)
WASH	Water, Sanitation and Hygiene
WASREB	Water Services Regulatory Board
WHO	World Health Organization
WS	Water Supply
WSB	Water Service Board
WSP	Water Service Provider
WSS	Water Supply System

## 1. INTRODUCTION

### 1.1. Background and Purpose

In the framework of the “External Evaluation of the operations of the Water and Sanitation Trust Fund”, an evaluation team visited UN-HABITAT activities in the Lake Victoria region from 1 December 2010 till 7 January 2011 (with a break from 25/12/10 to 1/1/11). The evaluation mission inspected the results of the activities in the field and had interviews with beneficiaries, municipal authorities, managers of Water Service Providers (WSP) and other stakeholders. The mission visited the following towns:

- Uganda (Bugembe, Kyotera, Masaka, Mutukula);
- Tanzania (Mutukula, Bukoba, Muleba) &
- Kenya (Bondo, Kisii, Homa bay).

Next to these field visits, the team had meetings with authorities in Kampala, Nairobi and Kisumu (list of key persons in annex 7) and studied background documents (annex 6). A map of Lake Victoria region is in annex 8.

The main report discusses the findings of the field visits. Annex 1 presents an overview of the LV-Watsan activities, the list of partners is in annex 2, annex 3 presents in more details the background and technical details of the project activities. Indicators of the performance of the micro loans for sanitation are in annex 4 and annex 5 presents the performance indicators of the Water Service Providers. The itinerary of this mission is presented in annex 9 of this report.

### 1.2. Limitations

The mission had 10 days to visit 10 target towns (out of 15 towns involved in the project) within the programme including travel and meetings with national authorities. Hence the team could only meet the most important stakeholders and could pay quick visits to the target areas and infrastructure. Nevertheless, it was possible to get a realistic overview of the initiative and to get an analysis of its strengths and weaknesses.

UN-HABITAT activities in the region cover a wide area both on town level, provincial level, national and international level. In view of the time constraints the evaluation focused only on the results at field level. This evaluation therefore will not go into the financial matters, because an audit of the UN-Habitat’s activities was carried out recently.

### 1.4. Acknowledgements

The consultants want to thank the UN-Habitat staff in Nairobi and the local chief technical advisors for their support to the mission. Although “stupid people can ask more than wise man can answer”, everyone did their outmost best to respond to all our questions. In addition we are grateful for the perfect organization of the field trips.

## 2. OVERVIEW OF THE LAKE VICTORIA REGION WATER AND SANITATION INITIATIVE

The LV-initiative was launched in 2004, the MOU with the three governments were signed in 2006 and the project effectively started in 2007 with the preparation of needs assessment studies of the towns. The implementation was done in two phases, the fast track (mainly physical work) and the roll out phase (mainly capacity building).

The revised proposal of the LV-Watsan of 21/1/05 identified the five key areas for intervention:

1. Attaining the water and sanitation related MDG's in smaller urban centers
2. Urban Poverty and Health
3. Integrating Infrastructure and Physical Planning
4. Capacity Building in the WSS sector
5. Solid Waste Management and Drainage

In short, the LV-Watsan carried out the following activities in response to these key areas:

1. Attaining the MDG's
  - Rehabilitation of the urban water supply system
  - Construction of new water connections and water kiosks
  - Initiating a latrine building programme, including the provision of micro loans for poor headed household, latrine in schools, and the construction of public latrines on markets.
2. Urban poverty and health
  - No specific activities other than sensitization in advance of the latrine building campaign
3. Integrating planning
  - The programme assisted the town councils with capacity building regarding urban planning
4. Capacity building in WSS sector
  - The programme invested in capacity building (training courses, equipment and coaching) for the Water Service Providers, Water Service Boards, NGO's/ CBO's and the Multi Stakeholders Forums
  - Training courses for artisans
5. Solid waste management
  - Provision of equipment, rehabilitation of drains and some capacity building activities

The total budget of the LV-Watsan is 5,888,000 \$ (see table 1)

Table 1: Budget (LV-Watsan, revised proposal, 2005)

<b>Budget from revised proposal 2005</b>	<b>\$</b>	<b>%</b>
Physical works	29,466,403	52
Consultancy for physical works	19,329,960	34
<b>Total physical works</b>	<b>48,796,363</b>	<b>86</b>

Capacity building community	310,000	1
Local WSP capacity building	430,000	1
WSB capacity building	150,000	0
Training Water Demand Management	270,000	0
Advocacy & awareness raising	315,000	1
Health & hygiene education	305,000	1
Water Res. Man. & IT training	850,000	1
Solid waste management	290,000	1
<b>Total capacity building</b>	<b>2920,000</b>	<b>5</b>
UN-Habitat support costs	5,171,637	9
<b>Total budget</b>	<b>56,888,000</b>	<b>100</b>

### 3. POLICIES AND STRATEGY

#### **Are key objectives clearly defined and understood by staff and stakeholders?**

Interviews with the main stakeholders and beneficiaries confirmed that the key objectives are well understood by all. However, the team was told some politicians had their own interpretation of some of the LV-Watsan components<sup>1</sup>.

#### **Is the programme contested? Is there a need to change direction and if so in what direction?**

In general the stakeholders appreciated the activities of UN-HABITAT in the LV region. The fast track + roll out approach by bringing resources to the target towns combined with capacity building and a pro-poor focus received high marks from the stakeholders. Also the approach to combine water supply, sanitation, storm flow and solid waste was valued. One stakeholder noted that the oversight of the procedures was critical for the tender process and the partnerships facilitated by the programme were highly instrumental in reaching the poor. The national water authorities confirmed that the UN-HABITAT approach was in line with the national reform programmes and water policies. Less positive, some stakeholders mentioned that UN-HABITAT was too much in the details and bureaucratic. According to these, UN-Habitat should be working more on a strategic level rather than on an operational level.

#### **Does the programme address the priority needs of the poor / vulnerable and in particular women in urban setting?**

The LV-Watsan interventions, especially public standpipes and toilet facilities, are of benefit to the poor and vulnerable people such as single headed households and orphans. Increased access, availability, reliability, quantity and quality of water and sanitation services will (in theory) reduce the incidence of waterborne diseases positively impacting public health, however, not all activities had reached the poor to date.

<sup>1</sup> Political interference seems to have discouraged people to pay back the micro credits for sanitation.

Concerning water supply, LV-Watsan focused on strengthening of the water supply companies, by the rehabilitation of the upstream part of the network, such as water intakes, treatment plants, main pipelines etc. (see details in annex 1). LV-Watsan also concentrated on capacity building (annex 3) for the management. The provision of water to the poorest parts of the towns is still in progress. For example, there are only about 340 water kiosks in operation (annex 5b) at the time of report writing. This means that the existing customers are the first to benefit from the enhanced water supply, but the poor should follow once the extensions of the network will be completed

This strategy can be fully justified in view of the poor performance of the water supply companies at the start of the UN-HABITAT initiative (see annex 3 & 5a). It would have made no sense to add new connections to the system when many of the existing customers do not have (clean) water. In addition if the company could not maintain the existing system, new branches to the system without strengthening the management of the company would only add to its burden.

The provision of onsite sanitation (construction of latrines) to the poor shows a mixed result. The project targeted indeed the poor informal areas of the towns and targeted women, but the latrines were often too expensive (average price 160 \$) for the real poor, even with the help of the micro sanitation programme

The high costs were partly caused by costs of the concrete superstructure and partly because of the soil and local regulations. For example in Masaka the rocky soil made construction of pit latrines difficult, while in Bugembe, municipal regulations prohibited the construction of pit latrines. However some NGO's claim that even poor beneficiaries requested "luxurious" latrines (with concrete superstructures).

The provision of water to vulnerable people and schools was especially aimed at the poorest. The beneficiaries had been selected by the local neighborhood, as vulnerable because of these families were orphan headed or had sick family members. However from observations of the team left some doubt if all the beneficiaries of rainfall harvest systems were really the "poorest of the poor" as one family lived in a well maintained stone house.

The support to the municipal collection of solid waste targeted the entire town, both formal and informal areas. However, especially in the informal areas, there is still much solid waste to be collected.

#### **Does it address critical barriers for achieving the MDGs?**

The initiative made considerable impact in achieving the MDG's on clean water and safe sanitation. Comparing the data (2004) from the revised programme proposal of 21/1/05 with data provided by the WSP (5b) would give the following programme results:

Table 2: Coverage (%) of safe water

Town	Coverage safe water in 2004 (%)	Coverage safe water in 2010 (%)
Homa bay	30	9?
Kissii	29	70
Bondo		10
Bukoba	30	76
Muleba	13	56
Bugembe	20	66
Non-weighted average; Homa bay & Bondo not included	23	55

Although the data look promising, one should consider the figures with much caution. There is no information on the source, the definitions are unclear and there is no background on the methodology of data collection & processing. For this reason it is likely that the margins of error are very high.

The initiative constructed (or is constructing) 2408 new latrines, both single latrines & blocks of 3-4 latrines (annex 1) The estimated number of beneficiaries would be 27870 persons (table 3), or about 3 % of the total population 880,000<sup>2</sup> (see annex 5b), not included the beneficiaries of the sewage rehabilitation in Kisii.

Table 3: Number of beneficiaries of the latrine construction programme

Type facility	# (1)	Persons / latrine (Estimate)	Total beneficiaries
Family latrines under Microsan scheme	2193	10	21930
Demonstration latrine for vulnerable households	164	10	1640
School / public / prison latrine	172	25	4300
Total	2529		27870

Source: Annex 1

### Are the suggested interventions technically sound?

Due to time constraints, the team could not carry out a thorough technical inspection of the installation, but from the outside, the constructions on the water supply system (installations of pumps, construction of intakes, treatment plants etc) appear to be well done. The latrines and rainwater harvesting tanks were of good quality, but most of the latrines were not “pro-poor” and some of these tanks appeared to be oversized (6 m<sup>3</sup>, for a family) and expensive (1000 \$ LV-WATSAN

<sup>2</sup> Estimate

contribution + 500 \$ user contribution). In some cases, the relevance is doubtful. For example one school had a huge rainwater tank (45M3) although it was already connected to the town water supply.

#### **Are the suggested interventions environmentally sound?**

The impact of the LV-Watsan programme on the environment of the lake itself is just modest. It is obvious that the provision of safe water does not have any environmental impact, while the direct (positive / negative) impact of the latrine construction programme on the contamination of the lake is very limited. More emphasis on offsite sanitation (rehabilitation of sewers / treatment plants / industrial effluent) and on a better collection and disposal of solid waste should have a sizeable effect on the environment of the Lake Victoria.

The provision of equipment to the towns for the collection of solid waste removal indeed increased the amount of solid waste collected. On the other hand several towns still looked very untidy with lots of waste on the streets (with the exception of Bukoba, which is the fourth cleanest town in Tanzania). Worse, even if the town council collected more solid waste, the collectors put these on environmental unsafe deposits. For example, the Kenya town of Kisii dumped its solid waste on a hill where it could easily flow into the lake during heavy rainstorms, also the neighboring town of Homa bay did not manage to get a permanent dumping ground. It is encouraging that several towns started experimenting with the recycling of biodegradable waste for agriculture.

By reducing the incidence of “free defecation”, the construction of latrines did have positive impact on the environment in the informal areas, however as the new latrines are thinly spread throughout the informal areas; the direct impact on health will be difficult to measure.

#### **Are the right procedures for installation applied?**

In the target towns, the UN-HABITAT activities have been monitored and guided by the local Multi Stakeholders Forums. Most stakeholders (both on town and community level) valued the activities of the MSF approach very much as this enhanced the cooperation between the implementers and beneficiaries.

This participatory and innovative approach should be replicated in other projects. The MSF were less involved in the latrine construction programmes and in the provision of water for vulnerable people, but these activities have been done by local NGO's in close cooperation with the local communities. more details on the MSF are in annex 3/II

#### **Are the suggested interventions socially acceptable?**

The MSF's is dynamically involved in many project activities and in some places engaged in the management of the WSP. This guidance and monitoring facilitated UN-HABITAT to get the interventions understood and accepted by the local communities. The same applies for the partner NGO's involvement in sanitation, which have close contacts with women's groups and other CBO's.

#### **Is there a right balance and time schedule between hardware and software?**

The capacity building comprised only 5 % of the project budget, while the physical implementation used 86 % (see table 1). Nevertheless, some of capacity building components were critically important for the sustainability of the project. The fast track + roll out approach in strengthening the water supply companies to provide equipment, rehabilitate the infrastructure and carry out capacity building programmes is much appreciated by the WSP's. The capacity building started when the physical construction was already in progress. Most stakeholders think that the capacity building



should have started in advance of the physical construction, however the NWSC which provided much of the training, concluded that the training started at the right time.

The programme provided tractors and skips in the framework of the solid waste removal. From the visits to the towns the team got the impression that the town councils would have benefitted from more capacity building (and motivation) in solid waste removal. Beside the technical part of the removal one should put emphasis on the community development in garbage collection.

In case of the sanitation programme, the partner NGO's did the social mobilization and hygiene promotion in advance of the latrine construction. As the programme of micro loans for sanitation (see annex 4) and the installation of public toilets on markets is only moderately successful; there apparently a need for more social mobilization and hygiene promotion.

### **Does the programme reflect and utilize UN-Habitat's comparative advantages?**

The most important comparative advantage of UN-HABITAT as a UN organization might be its international clout and its access all levels in the society. In the Lake Victoria programme, UN-HABITAT had contacts from the beneficiaries (through the MSF and local NGO's, to the municipal and provincial authorities to the national ministries. Less positive, UN-Habitat has the name to be slow and bureaucratic with some of the stakeholders.

These characteristics were probably most helpful when UN-HABITAT worked with the WSP/WSB and municipal authorities and least helpful on detailed level when dealing with simple tasks as building rainwater harvesting systems for vulnerable people. This kind of easy and political correct projects should be left to NGO's which can attract sufficient funds, but don't have the expertise for complicated jobs. UN-Habitat is also involved in water supply for prisons as these could be a source of cholera, which could spread easily to the general population. This might be a suitable UN-Habitat task as the provision of water and sanitation for prisoners may not attract funds from charities, despite the urgency of the situation

### **Is there an appropriate balance between building replicable models versus providing and scaling up services?**

The LV-Watsan initiative acted both as a *model builder* and a *model tester*. Developing new approaches can be considered as *model building* and adapting existing approaches for use in the region is the role of a *model tester*. In practice the difference are not always very clear. There are very few complete new approaches and most existing methodologies contain (small) innovative elements.

The initiative both elements of rather straightforward support and more innovative models. Several elements of the programme, such as the MSF approach, the microcredit for sanitation, the capacity building, the citizen report card approach in co-operation with Google<sup>3</sup> etc. are in a way innovative and in this respect LV-Watsan can be seen as a model builder.

Other aspects, such as the rehabilitation of the water supply systems, in combination with capacity building to the WSP / WSB are solid, but not very innovative. As it is a reasonable successful approach it functioned as a model tester for the region. Now this approach can be scaled up and applied to other WSP in the regions.

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<sup>3</sup> Community Score Cards are qualitative monitoring tools that are used for local level monitoring and performance evaluation of services, projects and even government administrative units by the communities themselves

**Does the development of manuals, tools, standards get sufficient attention?**

In the framework of the capacity building and to support the training courses, UN-HABITAT and its partners (annex 2) developed an impressive number of training materials and guidelines (see annex 3/III).

**Any involvement in advocacy and policy development?**

The involvement of UN-HABITAT in the development of the water policy hasn't been reviewed in this mission. In any case, this is a field of which the involvement of UN-HABITAT should be encouraged. Unlike small NGO's, UN-HABITAT has the standing and the experience to promote water sector reform on all political levels (from municipalities to the central governments). In addition, the speed of the reform process in the water sector is critical for the success and sustainability of the WSP's.

**Has the programme been able to combine effectively different forms of assistance?**

In fact, the three main components (water supply, solid waste and sanitation) run separately from each other. The programmes have different counterparts (WSP, town councils and NGO in sanitation) have different focus e.g. capacity building at management level & rehabilitations of the upstream part of the water supply system versus community approach in sanitation. Nevertheless, the team did not receive complaints about coordination constraints.

**Does the programme have the right balance between implementation and capacity building? Are implementation and capacity building hand in hand or work these on different time schedules?**

The combination of rehabilitation of infrastructure with capacity building is effective as these two parts create a synergy and motivation. For example, as a staff member explained: "Training in leak detection will not be very effective without the equipment to practise, or with the means to repair the leaks". Despite the fact that the budget for capacity building is only 5 % (table 1), training was integrated in all components of the project and the progress in performance of the WSP can be attributed for a large part to the capacity building.

**Is the programme sufficiently focused?**

Several stakeholders in the water sector and partners of UN-HABITAT expressed their appreciation of the combined approach of water, sanitation, solid waste, & storm drainage. Combined provision of clean water, sanitation and environmental hygiene (solid waste) at a location could create synergy (the so-called. Community Lead Total Sanitation approach (CLTS). For this reason, the initiative is well focused and covers the right thematic areas.

However, in the present Lake Victoria initiative, the sanitation and solid waste activities are in full progress, while the provision of water to the informal areas is somewhat lagging behind. This is unfortunately, but it was unavoidable due to the poor state of repair of the infrastructure and the poor management capacities of the WSP at the start of the project as explained in annex 3.

**Are scarce resources spread on too many activities?**

One could argue that the programme is spread over too many towns (15) and countries (3) as the entire budget could easily be spent in a few towns in one country. On the other hand, environmental protection in only one part of the lake would not make much sense. Another motive for the present approach is that this project should be model for replication elsewhere and the more countries might create more the opportunities for that. And a third argument for the present approach is that the three countries are more or less in the same situation and this project could promote learning and cooperation among the three countries.

**What are the plans for future expansion/consolidation?**

The first phase, the quick impact phase concentrated on the rehabilitation of infrastructure, while in the roll out phase UN-HABITAT will focus on software (capacity building). This is a logic development and could consolidate the achievements of the first phase.

## **4. ORGANIZATIONAL PROCESSES AND FINANCIAL RESOURCES**

**Are priorities and plans realistic?**

Baseline studies have been carried out in the target areas and the revised proposal of January 2005 appears to be realistic. The programme is based on a needs assessment for water and sanitation; however, it might be that the willingness or capacity to pay for latrines had been over-estimated (annex 4). The capacity building programme for the water sector is based on extensive training needs assessment reports prepared by the NWSC.

**Are plans and projects carried out in a timely manner?**

The programme started late as according to the proposal of 21/1/05 most of the physical implementations were planned for 2007. To date, most of the construction work is completed or nearing its completion (see annex 1 for status), but some works have been delayed. For example, the construction of a water supply system in Mutukula is already 12 months behind schedule and still not completed. In addition, the town council of Bugumbe complained to the evaluation team that the signing of the MOU was long overdue. The mission received several remarks about slow procurement procedures of the UN-Habitat.

**Are activities adequately monitored and reported on?**

The LV-WATSAN initiative has a M&E system with a fairly extensive list of indicators, both on input, objective and sustainability. This provides the initiative with an overview of the progress, suitable for management purposes. However, as a model builder and tester, higher standards on performance tracking might be necessary

For example, the support to the WSP's, the project made needs assessment and performance improvement plans with indicators. The initiative, however, did not discuss the definitions of the indicators and did not systematically track the change in performance during the course of the project.

Eventually data on the change in performance could be collected (see annex 5), but performance tracking should have been given a higher priority. A rigid and detailed performance monitoring system could be a valuable instrument for both the management of the WSP and UN-HABITAT. The solid waste removal programme measure the quantity of waste removed, but did not include indicators for cleanliness of the towns. LV-WATSAN provides water and latrines for schools, but did not track the change in hygienic condition of the facilities.

The same applies for the performance of the microcredit systems (annex 4). As this is an relative new approach and as the partners appear to be struggling with the revolving part of the loan (= payback rate), closer monitoring by UN-HABITAT on its success is recommended.

In conclusion, the existing M&E system might be suitable for a "conventional" programme, but an approach which focus on model building & testing requires higher M&E standards.

**Are the channels of communication effective?**

The channels of communications between UN-HABITAT and its stakeholders appears to be good as none of the stakeholders had any complaints about this. The officials at the water ministries of Kenya and Uganda appreciated their contacts with UN-Habitat and mentioned that UN-HABITAT followed the government policy.

**5. PARTNERSHIP AND RESPONSIVENESS****What are the partners?**

The LV-WATSAN programme cooperates with an impressive number of partners; national, regional and international (see lists and activities in annex 2).

**Are programmes parts of national and sub national sector plans?**

The support by UN-HABITAT to the WSP fit well into the national water sector reform programme which is carried out in the three countries at present. Officials at both partner ministries of Uganda & Kenya<sup>4</sup> confirmed that the UN-HABITAT programme is line with their national priorities and policies.

**Are the programmes “owned” by and anchored within the national and local government systems?**

The implementation and the procurement procedure was done at the municipal level or at the managements level of the WSP’s while capacity building was focused at the local authorities and staff members of the WSP and WSB. This is a good approach to ensure ownership by the local authorities. Moreover, the rehabilitation of the water supply systems is co-financed by the three governments (nearly 13 %), although the funds seem to be forthcoming at a rather slow pace and still fall short of the targeted 20%.

The sense of ownership of the solid waste programmes is much less clear as in several town councils did not do their homework. For example, the towns of Kisii and Homa bay got new equipment for collecting solid waste, but did not assign proper dump sites for it.

The sanitation activities are done in cooperation with local NGO’s and it is not clear if the town council has a sense of ownership for these programmes.

**What are the new areas of involvement?**

Although the approaches are not entirely new, both the introduction of the MSF approach, the microfinance for sanitation and the monitoring by Google could be considered more or less as new approaches in the region.

**Is a phasing out strategy prepared?**

After the quick impact programme the roll out phase is in progress at present. This roll out phase is a logic continuation to expand and sustain the results of the first phase.

**To what extent is a system and practice of learning embedded in the programme?**

Capacity building is embedded in the LV-Watsan programme in all components. Initially, the Uganda NWSC trained the WSP’s / WSB’s and later on, the regional NGO “NETWAS” continued with the provision of training. The capacity building had been done on basis of the Situational Analysis and Training Needs Assessment Reports, which provide a clear picture of the strengths and weaknesses

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<sup>4</sup> The team did not visit the ministry of water and irrigation in Tanzania.

of the WSP's in the region. Internal evaluations on the success of the capacity building and Microsan approach are in progress.

## 6. PRODUCTS AND SERVICES

### **What are the visible results of the project on the beneficiary level, in terms of infrastructure, hygiene awareness, health benefits and new employment?**

The coverage of safe water increased from 23 to 55<sup>5</sup> % (table 2), however, the existing customers benefitted more than the people in informal areas. This is the result of the programme focus on the rehabilitation of the upstream part of the water supply system (for good reasons), rather than on extension to informal areas. Is it difficult to quantify the benefits at this stage in term of health benefits as the programme is still in progress and quality health data are lacking. It might also be possible that the number of new latrines is too widely spread to have measurable effect on health statistics (if available). The hygiene promotion activities could have some impact, but data to support this are not available.

### **What innovations/models have been introduced?**

The project introduced several interesting social innovations, such as the creation of the local MSF's and the concept of micro loans for sanitation<sup>6</sup>. Although these ideas are not completely new and not always very successful (see annex 4) the experiments are very relevant in the present situation. On the technical side of the programme, there was not much innovation, other than experimenting with Ecosan latrines. However, the introduction of these latrines met cultural resistance.

### **What is the evidence of capacity and institutional development?**

The project seems to make good progress towards the capacity building and development of the stakeholders, although this is difficult to quantify, due to a lack of hard data and proper indicators. The WSP's suffered numerous problems at all levels at the start of the intervention (see annex 3). It is obvious that the performance of the WSP improved considerable (compare annex 5a with 5b) both on operational level as on management capacity. The water production increased, the amount of non revenue water had been reduced, the income by the sale of water increased. The reporting capacity improved much (some produced good quarterly reports) and the WSP are slowly improving their capacity to maintain the system themselves. This improvement in performance of the WSP is one of the main assets of the UN-HABITAT initiative.

### **What is the evidence of replication?**

At present, there is not yet any replication of the Lake Victoria activities by other organizations, with the exception of the latrine construction on household level which is slowly taking off<sup>7</sup>.

### **Are the programme results and benefits likely to be durable?**

As mentioned above, the performance of the WSP improved considerable, but continuing external support is essential to ensure the benefits of the project will last. The fact that the WSP's are still not sustainable does not implicate any mismanagement or under-estimation of the tasks by UN-

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<sup>5</sup> Indication only

<sup>6</sup> See the SANA Project document/work plan including implementation schedule.

<sup>7</sup> SANA reported that local people started with the construction of latrines mainly in Kenya, but also in Bukoba, Muleba, & Mutukula (Tanzania).

HABITAT. In view of the gigantic challenges the WSP's faced at the start of the project (see annex 3 & 5a), it would be very unrealistic to assume everything could be solved within a few years. It is noteworthy that the "best performing" WSP of Uganda (and Uganda's showcase of proper management), the National Water & Sewage Corporation (NWSC), is still not sustainable at present<sup>8</sup>.

Complicating is the reform process of the water sector, which is still in full progress in the three countries. A delay or halting of this process might endanger the present improvements of the WSP's. Continuing support of UN-Habitat to strengthen the reform process is recommended.

The same applies to the municipal agencies which collect the solid waste. Although they have new equipment, the interest of the towns to get their act together in this is doubtful. As mentioned above two towns (Homa bay & Kisii) still do not have a proper solution for the disposal of waste. Another town requested assistance for the maintenance costs of the tractors (even if there are still new) and one town does not use the tractors as they could not afford the import duties.

The Microsan activities are not sustainable as degree of repayment of the micro loans is very low (see annex 4), even if the beneficiaries are not always the poorest of the poor. It is clear that the issue of microcredit is thorny as even microcredit for commercial activities are not as successful as some organizations claim<sup>9</sup>. The revolving loans in the MEK-Watsan programme appear to be more successful, but unlike Lake Victoria programme, the loans are interest free and are only given to the richer families in the villages. The poorest families get full or partial grants for latrine construction.

The Microsan activities in the towns around Lake Victoria should be seen as a very useful experiment and the implementing organizations learned valuable lessons, but a rethink of the strategy is recommended.

All towns have an active MSF, which facilitated the interventions of UN-HABITAT. Most members were satisfied with the working of the MSF and the authorities expressed their appreciation about the involvement of the MSF. Initial fears about political involvement in the MSF or by passing / replacing the authorities did not materialize. Still the mission received complaints from the members of the MSF. Some felt that the MSF was toothless or had no real influence; others wanted more resources to do their tasks. One stakeholder mentioned: "The MSF did a good job, but now they look a bit tired".

### **Gender mainstreaming**

The programme has made recommendable efforts in addressing the issue (through the MSF and Microsan approach) and although women are well represented at grassroots levels, they have limited representation at high levels. Such situation limits women's capacity to address strategic issues in programme planning processes as gender specific needs e.g. access to own assets such land for construction of latrines, houses if gender issues remain unsolved it defeats the intention of the programme.

## **7. CONCLUSIONS**

1. The LV-WATSAN initiative operates in a tough environment of densely populated, small towns around Lake Victoria. The initiative is challenging, but also very relevant as the informal areas

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<sup>8</sup> Remark of a senior staff member of NWSC

<sup>9</sup> See for example the Economist of 11/12/10

around the towns are poor and unstable. In this environment, the authorities have difficulties to provide a minimum service level to the rapidly growing population.

2. In general, UN-Habitat's position to carry out this programme is not much contested among the stakeholders, although some mentioned that UN-Habitat is rather slow and bureaucratic. In general, UN-Habitat has a good position to work with all levels of the society from the urban poor to the national ministers
3. At the start of the project, the main project partners, the small towns WSP's were barely functioning and could provide less than 25 % of the town with water. The WSP's struggled with a dilapidated water infrastructure, low revenues and poor management. In addition, they had (and still have) to work in an unclear legal and institutional environment.
4. To date, the main component, the rehabilitation of the water supply infrastructure is nearing completion. The WSP have a more stable base to serve their existing customers and extend the network to the poor informal areas around the towns. Thanks to the capacity building programme, the WSP's are improving their professional performance both on technical and managerial level.
5. In the 10 towns, the coverage of safe water increased from around 23 % in 2007 to 55 % in 2010. The latrine building programme (family latrines, demonstration, prison and school facilities), benefitted about 3 % of the local population. These results look promising, although the reliability of the data is unclear.
6. Despite this progress, the WSP's and WSB's still need coaching, to ensure the sustainability of the results. Likewise, a fair water price and the continuation of the water sector reform process are critical for survival of the achievements.
7. The success of the solid waste removal programme is moderate. Indeed, more tons of solid waste has been removed, but the results on the ground are not always visible. It appears that many town councils still lack the capacity and / or motivation to manage the operations efficiently.
8. The micro credit scheme for sanitation is relevant and innovative. However, the scheme is not yet sustainable, as the pay-back rate of the loans is very low. The scheme is beneficial for women, but reaching the poor is still a challenge.
9. The provision of water and sanitation to vulnerable people and schools is quite expensive, has no innovative elements and is not sustainable. Local NGO's are probably better suited for these activities than UN-Habitat.
10. One of the most successful new approaches is the creation of the MSF. The MSF facilitated the acceptance of the programme; it encouraged gender mainstreaming and ensured ownership of the water supply infrastructure.
11. The present M&E of the project is suitable for conventional projects, but for model building & testing M&E is should have been more detailed with better definitions.
12. The impact of the project on the environment of the lake is modest as clean water and proper onsite sanitation do not have much effect on the lake itself. In this respect it is unfortunate that solid waste removal and disposal still leave room for improvement.

13. LV-Watsan acted mainly as a service provider and capacity builder. To a lesser degree it acted also as a model tester and occasionally as a model builder. The main component, the support to the WSP does not contain real innovative aspects, but the approach is sound and as a tested model it be applied in similar small towns.
14. LV-Watsan experimented with the MSF approach and with the micro credit scheme for sanitation and, hence, acted as a model builder in these.

## 8. RECOMMENDATIONS

1. Although, the process to improve the performance of the WSP & WSB makes good progress, these institutions are still fragile and need continuing support to ensure lasting effects. Interruption of this support could result in undoing of the achieved benefits. Future support should take a more holistic approach, which includes technical support (new equipment, tools), capacity building on all levels, support to strengthening the (still fragile) legal status and assistance with a fair water price policy. Coaching by the NWSC might be an option.
2. The reform process in the water sector of the three countries is still ongoing and its success is crucial for the sustainability of all WSP's in the countries. UN-HABITAT is in a good position to facilitate this process. Several stakeholders recommended a review and comparison of the reform in the three countries.
3. UN-HABITAT should encourage the town councils to take their responsibility seriously and arrange environmentally safe solid waste disposal sites. The MSF could facilitate the town councils to come to a community based approach in solid waste collection. Experiments by several towns to recycle waste, for example the use of biodegradable waste in agriculture should be encouraged.
4. Although the idea to use micro loans to construct sanitation facilities is an interesting innovative programme, the present rate of return is far too low for its sustainability. UN-HABITAT should work on a sustainable strategy for this Microsan approach.
5. The involvement of UN-HABITAT in the construction of rainwater harvesting tanks or school latrines has not much added value and should be left to NGO's. UN-HABITAT might concentrate on the more important and for the charities less attractive topics, such as water sector reform and capacity building.
6. In general UN-Habitat should stick to those tasks for which it has a comparative advantage, such a water sector reform, support to WSP / WSB and act as a model builder.
7. UN-Habitat should continue with the MSF approach, but it also should find ways to encourage or re-motivate the MSF.
8. If LV-WATSAN intends to promote present activities as models for replication elsewhere, the M&E should be more detailed and more consequent with clear definitions.
9. LV-Watsan should pay more attention to the environmental impact of Lake Victoria. More attention to offsite sanitation, solid waste (see below) as well as safe handling of industrial waste will have a higher impact on environmental condition of the lake than the present focus on water supply and onsite sanitation.





	<ul style="list-style-type: none"> <li>• Construction of additional 12,000 m<sup>3</sup> water treatment plant</li> <li>• Construction of rainwater harvesting tanks at 10 schools</li>   <li>• Construction of 10 demonstration VIP latrines</li> <li>• Construction of 63 household sanitation facilities (under sanitation revolving fund)</li> <li>• Rehabilitation of sewerage network</li> <li>• Construction of 40 VIP latrines at 10 schools</li> <li>• Supply and delivery of solid waste management equipment comprising, 4No. 60hp Tractors with skip trailers, 12 No. 4m<sup>3</sup> and 8m<sup>3</sup> containers, 2 small tractors and 32 bins.</li> </ul> <p><b><u>Training and Capacity Building</u></b></p> <ul style="list-style-type: none"> <li>• Fast Track capacity building programme for the Gusii Water and Sanitation Company focussing on: Business Planning; Billing and Revenue collection; water demand management; Block Mapping; and Customer Care</li> <li>• Supply of equipment and tools to support the implementation of the capacity building programme for the utility</li> <li>• Eleven (11) capacity development interventions (under the ongoing capacity development programme) providing a total of 29 days of capacity enhancement for 303 beneficiaries</li> </ul>	<p>completed 25% completed Completed</p> <p>Completed Completed Completed Completed Completed</p> <p>Completed Completed Completed 40% completed</p>
<b>Bondo</b>	<p><b><u>Physical Infrastructure Works</u></b></p> <ul style="list-style-type: none"> <li>• Supply and installation of pumps and ancillary equipment to increase water production capacity by 65m<sup>3</sup>/hour</li> <li>• Installation of new 6km pumping main (200mm in diameter) to the town</li> <li>• Construction of 225 m<sup>3</sup> reservoir</li> <li>• Construction of booster pumping station</li> <li>• Construction of new 2000 m<sup>3</sup>/day water treatment plant</li> <li>• Construction of rainwater harvesting tanks at 10 schools</li> <li>• Construction of rainwater harvesting facilities for 10 orphan-headed families</li> <li>• Extension of distribution network by 5km and construction of 4 water kiosks to extend services to the poor</li>   <li>• Construction of 253 household sanitation facilities (under the ongoing sanitation micro-credit scheme)</li> <li>• Construction of 40 latrines at 10 schools to provide sanitation for about 5,000 students</li> <li>• Construction of household sanitation for 10 orphan-headed household families</li> </ul> <p><b><u>Training and Capacity Building</u></b></p> <ul style="list-style-type: none"> <li>• Fast Track capacity building programme for the Siaya/Bondo Water Company focussing on: Business Planning; Billing and Revenue collection; water demand management; Block Mapping; and Customer Care</li> <li>• Supply of equipment and tools to support the implementation of the capacity building programme for the utility</li> <li>• Eleven (11) capacity development interventions (under the ongoing capacity development programme) providing a total of 29 days of capacity enhancement for 257 beneficiaries</li> </ul>	<p>Completed Completed 95% completed 95% completed 25% completed Completed Completed 30% completed</p> <p>Completed Completed Completed</p> <p>Completed</p> <p>Completed 40% completed</p>



	<ul style="list-style-type: none"> <li>• Construction of 293 household sanitation facilities (under sanitation revolving fund)</li> <li>• Construction of 38 VIP latrines for orphan-headed families</li> <li>• Supply and delivery of solid waste management equipment comprising, 1No. 40hp Tractors with skip trailers, 4 No. 4m<sup>3</sup> containers, 2 small tractors and 32 bins.</li> </ul> <p><b><u>Training and Capacity Building</u></b></p> <ul style="list-style-type: none"> <li>• Fast Track capacity building programme for the Muleba Urban Water Authority focussing on: Business Planning; Billing and Revenue collection; water demand management; Block Mapping; and Customer Care</li> <li>• Supply of equipment and tools to support the implementation of the capacity building programme for the utility</li> <li>• Three (3) capacity development interventions (under the ongoing capacity development programme) providing a total of 6 days of capacity enhancement for 84 beneficiaries</li> </ul>	<p>Completed Completed Completed 40% completed</p>
<p><b>Mutukula (Tz)</b></p> <p><b>Bunda</b></p>	<p><b><u>Physical Infrastructure Works</u></b></p> <ul style="list-style-type: none"> <li>• Construction of complete water supply system for 10,000 persons, comprising 4 No. boreholes fitted with submersible pumps, pumping stations, chlorination facilities, over 12 km of pipelines, a 125m<sup>3</sup> elevated tank, as well as meters and distribution points.</li> <li>• Construction of 20 rainwater harvesting tanks for orphan-headed households</li> <li>• Construction of 94 household sanitation facilities (under the ongoing sanitation micro-credit scheme)</li> <li>• Construction of household sanitation for 38 orphan-headed household families</li> <li>• Supply and delivery of solid waste management equipment, comprising 1 small tractor and 16 bins</li> </ul> <p><b><u>Training and Capacity Building</u></b></p> <ul style="list-style-type: none"> <li>• One (1) capacity development interventions (under the ongoing capacity development programme) providing a total of 2 days of capacity enhancement for 30 beneficiaries</li> </ul> <p><b><u>Physical Infrastructure Works</u></b></p> <ul style="list-style-type: none"> <li>• Construction of 500 household sanitation facilities (under the ongoing sanitation revolving fund)</li> </ul> <p><b><u>Training and Capacity Building</u></b></p> <ul style="list-style-type: none"> <li>• Fast Track capacity building programme for the Bunda Urban Water Authority focussing on: Business Planning; Billing and Revenue collection; water demand management; Block Mapping; and Customer Care</li> <li>• Supply of equipment and tools to support the implementation of the capacity building programme for the utility</li> <li>• Five (5) capacity development interventions (under the ongoing capacity development programme) providing a total of 12 days of capacity enhancement for 139 beneficiaries</li> </ul>	<p>60% completed</p> <p>Completed</p> <p>Completed Completed Completed</p> <p>Completed</p> <p>Completed</p> <p>Completed</p> <p>Completed 40% completed</p>

UGANDA		
Town	Activity Description	Current Status
Masaka	<p><b><u>Physical Infrastructure Works</u></b></p> <ul style="list-style-type: none"> <li>• Extension of distribution network to serve low-income area in Nyendo</li> <li>• Construction of 20 rainwater harvesting tanks for orphan-headed households</li> <li>•</li> <li>• Construction of 11 waterborne sanitation blocks (comprising toilets and bathrooms)</li> <li>• Construction of 88 household sanitation facilities (under sanitation revolving fund)</li> <li>• Rehabilitation of solid waste management equipment (trucks and skips)</li> <li>• Supply and delivery of solid waste management equipment comprising, 3 No. 60hp Tractors with skip trailers, 5 No. 4m<sup>3</sup> containers, 2 small tractors and 32 bins.</li> </ul> <p><b><u>Training and Capacity Building</u></b></p> <ul style="list-style-type: none"> <li>• Fifteen (15) capacity development interventions providing a total of 43 days of capacity enhancement for 421 beneficiaries</li> </ul>	<p>Completed Completed</p> <p>Completed Completed Completed Completed</p> <p>40% completed</p>
Kyotera	<p><b><u>Physical Infrastructure Works</u></b></p> <ul style="list-style-type: none"> <li>• Construction of a complete water supply system for a town of 15,000 persons, comprising boreholes fitted with submersible pumps, pumping stations, disinfection facilities, over 20 km of transmission and distribution mains, distribution points, meters, 200 service connections and an elevated tank of 150 m<sup>3</sup> capacity.</li> <li>• Construction of 30 rainwater harvesting tanks for orphan-headed families</li> <li>• Construction of 12 waterborne sanitation blocks at public institutions, orphanages and schools</li> <li>• Construction of 49 household sanitation facilities (under sanitation revolving fund)</li> <li>• Construction of 40 VIP latrines for orphan-headed households</li> <li>• Supply and delivery of solid waste management equipment comprising, 2 No. 40hp Tractors with skip trailers, 4 No. 4m<sup>3</sup> containers, 2 small tractors and 32 bins.</li> </ul> <p><b><u>Training and Capacity Building</u></b></p> <ul style="list-style-type: none"> <li>• Capacity building programme in utility management for the local water board and the water operator</li> <li>• Seven (7) capacity development interventions (under the ongoing capacity development programme) providing a total of 18 days of capacity enhancement for 213 beneficiaries</li> </ul>	<p>Completed</p> <p>Completed</p> <p>Completed Completed Completed Completed</p> <p>Completed 40% completed</p>
Mutukula (Ug)	<p><b><u>Physical Infrastructure Works</u></b></p> <ul style="list-style-type: none"> <li>• Construction of complete water supply system for 10,000 persons, comprising 4 No. boreholes fitted with submersible pumps, pumping stations, chlorination facilities, over 12 km of pipelines, a 125m<sup>3</sup> elevated tank, as well as meters and distribution points.</li> <li>• Construction of 30 household sanitation facilities (under the ongoing sanitation micro-credit scheme)</li> <li>• Supply and delivery of solid waste management equipment, comprising 1 small tractor and 16 bins</li> </ul>	<p>98% Completed</p> <p>Completed Completed</p>
Bugembe	<p><b><u>Training and Capacity Building</u></b></p> <ul style="list-style-type: none"> <li>• Three (3) capacity development intervention (under the ongoing capacity development programme) providing a total of 6 days of capacity enhancement for 57 beneficiaries</li> </ul> <p><b><u>Physical Infrastructure Works</u></b></p>	<p>40% completed</p>

	<p>Construction of 43 sanitation blocks under the ongoing sanitation micro-credit scheme</p> <p><b><u>Training and Capacity Building</u></b></p> <ul style="list-style-type: none"> <li>• Nine (9) capacity development interventions (under the ongoing capacity development programme) providing a total of 22 days of capacity enhancement for 242 beneficiaries</li> <li>•</li> </ul>	<p>Completed</p> <p>40% completed</p>
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**Sources of project funds:**

	\$	%
Contributions by the Government of the Netherlands	14,960,000	65.4
Contributions by UN-HABITAT	4,400,000	19.2
Contributions by national and local governments	2,900,000	12.7
Contributions by the (non-local) private sector	500,000	2.2
Contributions by the recipient communities	100,000	0.4
Total	22,860,000	100.0

## Annex 2: Lake Victoria Water and Sanitation Initiative Partners List

	<b>PARTNERS</b>	<b>PROJECT LOCATION</b>	<b>COMPONENT</b>	<b>INTERVENTION</b>
		<b>KENYA</b>		
1.	Sustainable Aid in Africa International (SANA)	Kisii, Homa Bay, Bondo and Eldama Ravine	Sanitation	Micro credit for improved sanitation facilities, Skills training in micro credit schemes and training skills in construction of improved latrine s  School WASH project
2	Community Aid International (CAI)	Bondo town	Water and Sanitation	Water and Sanitation  Rain water Harvesting for vulnerable groups orphan child headed households  Skills training in rain water harvesting tanks constructions
3	Prisoners Care Programme	Kisii and Homa Bay,	Water and sanitation	Implementation/rehabilitation of the water and sanitation facilities in Kisii and Homa Bay prisons
4	Homa Bay Municipal Council	Homa Bay town	Water and sanitation	Support the implementation of the immediate interventions and planning of the long term interventions under the LVWATSAN
5	Kisii Municipal Council	Kisii town	Water and sanitation	Support the implementation of the immediate interventions and planning of the long term interventions under the LVWATSAN
6	Bondo Municipal Council	Bondo town	Water and sanitation	Support the implementation of the immediate interventions and planning of the long term interventions under the LVWATSAN
7	Network For water and Sanitation (NETWAS)	Kisii, Homa Bay, Bondo, Masaka, Mutukula UG, Kyotera,Bugembe, Bukoba, Muleba,	Training and Capacity Building / development TCB/D	Delivery of the of the long term TCB/D programme

		Mutukula TZ and Bunda		
8	Lake Victoria South Water Services Board (LVSWB)	Kisii, Homa Bay and Bondo	Water and sanitation	Facilitate the implementation of the LVWATSAN programme (procurement process)
9	The Government of the Republic of Kenya	Kisii, Homa Bay and Bondo	Water and sanitation	Facilitate the implementation of the LVWATSAN programme and 20% contribution of the budget
<b>UGANDA</b>				
1.	The Busoga Trust	Masaka - Nyendo, Kyotera, Mutukula and Bugembe	Sanitation	Micro credit for improved sanitation facilities, Skills training in micro credit schemes and training skills in construction of improved latrine s  WASH campaign
2.	Uganda Women Efforts to Save Children (UWESO)	Masaka - Nyendo, Kyotera and Mutukula	Water and Sanitation	Water and Sanitation  Rain water Harvesting for vulnerable groups orphan child headed households  Skills training in rain water harvesting tanks constructions  Skills training in small Village Saving and Loans Association (VSLA)
3	National Water & Sewerage Corporation (NWSC)	Kisii, Homa Bay, Bondo, Masaka, Mutukula UG, Kyotera, Bugembe, Bukoba, Muleba, Mutukula TZ and Bunda	Training and capacity building	Implementation of the Fast Track Capacity Building Programme for Utilities
4	Masaka County Council	Masaka town	Water and sanitation	Support the implementation of the immediate interventions and planning of the long term interventions under the LVWATSAN
5	Kyotera Town Council	Kyotera town	Water and sanitation	Support the implementation of the immediate interventions and planning of the long term interventions under the LVWATSAN



6	Kakuuto Sub County Council (KSC)	Mutukula town	Water and sanitation	Support the implementation of the immediate interventions and planning of the long term interventions under the LVWATSAN
7	Bugembe Town Council	Bugembe town	Water and sanitation	Support the implementation of the immediate interventions and planning of the long term interventions under the LVWATSAN
8	The Government of the Republic of Uganda	Masaka - Nyendo, Kyotera, Mutukula and Bugembe	Water and sanitation	Facilitate the implementation of the LVWATSAN programme and 20% contribution of the budget

**TANZANIA**

1	Kagera Development and Credit Revolving Fund (KEDETFU)	Bukoba, Muleba, Mutukula and Bunda	Sanitation	Micro credit for improved sanitation facilities, Skills training in micro credit schemes and training skills in construction of improved latrines  WASH campaign
2.	Huduma Ya Watoto Services For the Children (HUYAWA)	Bukoba, Muleba and Mutukula	Water and Sanitation	Water and Sanitation  Rain water Harvesting for vulnerable groups orphan child headed households  Skills training in constructions of rain water harvesting tanks  And improved latrines, Skills training in small Village Saving and Loans Association (VSLA)
3.	Tanzania Women Land Access Trust (TAWLAT)	Bukoba, Kyotera and Bondo	Water and sanitation	Rain water Harvesting for vulnerable groups - orphans and children with albinism
4	Bukoba Municipal Council	Bukoba town	Water and sanitation	Support the implementation of the immediate interventions and planning of the long term interventions under the LVWATSAN

5.	Muleba Town Council	Muleba town	Water and sanitation	Support the implementation of the immediate interventions and planning of the long term interventions under the LVWATSAN
6	Misenyi Town Council	Misenyi town	Water and sanitation	Support the implementation of the immediate interventions and planning of the long term interventions under the LVWATSAN
7	Bunda Town Council	Bunda town	Water and sanitation	Support the implementation of the immediate interventions and planning of the long term interventions under the LVWATSAN
8	The Government of Republic of Tanzania	Bukoba, Muleba, Mutukula and Bunda	Water and sanitation	Facilitate the implementation of the LVWATSAN programme and 20% contribution of the budget
		<b>REGIONAL PARTNERS</b>		
1	The East African Community (EAC)	Kisii, Homa Bay, Bondo, Masaka, Mutukula UG, Kyotera, Bugembe, Bukoba, Muleba, Mutukula TZ and Bunda	Water and sanitation	Facilitate the implementation of the LVWATSAN programme
		<b>INTERNATIONAL PARTNERS</b>		
1	UNESCO – IHE Institute of Water Education	Kisii, Homa Bay, Bondo, Masaka, Mutukula UG, Kyotera, Bugembe, Bukoba, Muleba,	Training and Capacity Building / development TCB/D	Delivery of the of the long term TCB/D programme on Utility Management (UM) and Urban Catchments Management (UCM)
2	The Netherlands Development Corporation (SNV)	Kisii, Homa Bay, Bondo, Masaka, Mutukula UG, Kyotera, Bugembe, Bukoba, Muleba,	Training and Capacity Building / development TCB/D	Delivery of the of the long term TCB/D programme on Local Economic Development (LED)
3	Gender Water Alliance (GWA)	Kisii, Homa Bay, Bondo, Masaka, Mutukula UG, Kyotera, Bugembe, Bukoba, Muleba,	Training and Capacity Building / development TCB/D	Delivery of the of the long term TCB/D programme on Gender Mainstreaming and Inclusion of Vulnerable groups
4	Federation of Canadian Municipalities (FCM)	Kisii, Homa Bay, Bondo, Masaka, Mutukula UG, Kyotera, Bugembe,	Training and Capacity Building / development TCB/D	Delivery of the of the long term TCB/D programme on Good Governance and Pro Poor Water

		Bukoba, Muleba,		and Sanitation Governance (PPG)
5	Japan Habitat Association	Bukoba, Kyotera and Bondo	Water and sanitation	Rain water Harvesting for vulnerable groups - orphans and children with albinism

## Annex 3. Technical Background

### I) Sanitation

#### 1) Present status

Sanitation and hygiene status in East Africa, like other developing countries, is very minimal a factor that contributes to high morbidity and mortality rates of children due to diarrhoea. A survey conducted in Tanzania between 2000-2003 on the causes of death among children under 5 years found that 17% of all deaths were due to diarrhoea (WHO, 2006). The region has high poverty levels with high prevalence rates of HIV/AIDS, with many women headed households and orphans, while most emerging towns are over crowded with poor sewage infrastructure and inadequate refuse disposal facilities.

For example, in Bukoba 3.5% of the urban population have no toilets while 61% have poor quality facilities. Flooding of pit-latrines is often a common phenomenon, especially in situations of high water table conditions and during the rainy season, causing health jeopardy to residents. In addition, the hygiene and environmental cleanliness at is still a challenge at all levels.

#### 2) Latrine technical options

The project introduced an array of options (see table 1). But the team observed that these latrines were not always in line with client's socio economic status and were not user friendly to women, or people with disabilities. For example, in Masaka in Uganda emphasis was put on pour flash toilets while the area has acute water shortage. In the market area one facility was closed as the attendant claimed that very few people wanted to pay for the services.

Table 1: Latrine options (source: SANA presentation 15/12/2010)

Option	Suitability	Cost
Lined pit latrines	Both stable and unstable soil conditions	Full pit lining – Ksh. 18,000 Stable soils – Kshs. 12,000
Ecological Sanitation Latrines (Ecosan)	Controls ground water pollution and recommended in high water tables and spring areas	Kshs. 25,000 upwards depending on superstructure materials
Ventilated Improved Pit latrines	Peri-urban and rural areas	Kshs. 18,000 upwards depending on superstructure materials

Water Closet toilets (Sewer connections)	Urban setting where sewer lines are in place	Kshs. 5,000 upwards depending on distance to the service line
Rehabilitation / upgrading of existing dilapidated latrines.	To minimize cases of abandoned pit latrines	Ksh. 3,000 upwards for slab improvements but depends on extent of damage
Upgraded ordinary pit latrines (with clay superstructure)	Peri-urban and rural set up	Kshs. 7,500

### 3) Micro financing sanitation

Micro credit sanitation revolving fund has been introduced into the programme to enable poor female headed households to get funds to construct/improve latrine facilities. The scheme uses a variety of latrine technical options such as ECOSAN, ventilated improved pit latrines, pour flush, cistern and improved latrines. Solidarity groups consisting of five women act as a guaranty for the loans, qualify potential clients and promote hygiene.

The concept of revolving loan for sanitation is relatively new and challenging. The main problem is the low repayment rate, partly caused by political interference. In Kagera region for instance members who have started paying the loan in Kagera, Bukoba (95); Muleba (58) and Mutukula (72) which is 2.2% only. While in Kisumu the trend of repayment is as indicated in annex 4. Repayment period ranges between 1-1.5 years but members of the revolving loan requested to have an extension to up to 3 years.

The Busoga Trust in Uganda appears to operate efficiently, but suffers poor recovery rates. In Masaka and Muleba the implementing partners had direct interventions with the women groups which made it difficult for the MSF members to give advice and make follow ups on the repayment of the loan. Misconceptions on the mechanisms for revolving loan could lead to slow recovery of the loan and endanger the original purpose of the scheme.

Targeting poor women is also a challenge. Clients for the sanitation scheme in Bugembe have to contribute 20% the cost which leads to targeting the more affluent inhabitants of informal areas. For example, in Bugembe a middle class landlady received the loan and constructed four latrines for 20 people, but only one of these is operating. Hence several tenants still use the old pit latrine.

### II) Institutional Arrangements/ Multi stakeholder Forum

Multi Stakeholder Forum (MSF) is a structure introduced in UN-Habitat project area to engage all local stakeholders with different backgrounds & knowledge and skills to participate in the design, planning, implementation and monitoring of all programme activities. Its main role is to ensure that project plans are implemented in an effective manner.

The concept of the forum as outlined in the revised proposal (2005) yields:

“ In Kenya, the forum will bring together representatives of the Lake Victoria South Water Service Board, water and sanitation companies, community service providers, water users association and health inspectors.

In Tanzania, the forum will bring together representatives of water and sanitation authorities, community service providers, water users association, catchment water committee, district engineer, town clerk, health inspector and community groups.

In the case of Uganda, the forum will bring together representatives of the water and sanitation company, water users association, community service providers, district engineer, town clerk, health inspector and community groups”.

This forum was successful in running and managing water and sanitation initiatives and in motivating members of the community to make contributions such as provision of labour and construction materials to the project. The forum was involved in providing advice on sanitation, micro credit schemes, distribution of resources, the selection of locations for stand pipes, and latrines. The forums also identified vulnerable groups which potentially could benefit from the project. One of the success stories of community involvement in solid waste management is Bukoba town. In Masaka, Muleba the forum intervened with delayed repayment of the revolving loans for toilets. In Mutukula, the handing over of the water project to MSF members ensures sustainability of the venture.

However appears to be poor communication between the implementing partners and the MSF members especially on managing the micro credit scheme. The Uganda Environmental Protection Forum (UEPF) and MSF in Masaka and Bugembe in Uganda for instance does not utilize the opportunity of building synergy as government official are not involved in the sanitation micro credit scheme. This was raised as a concern from MSF members who claimed that UEPF lacks transparency, accountability/ such as sharing information about their actual loans women groups involved in the sanitation credit scheme. MSF and UEPF have to put a system in place which will promote accountability to all stakeholders. There is also need to increase women representation in the MSF.

### **III) Water sector reform**

The activities of UN-Habitat in support of the WSP to provide water for the poor are being implemented in the framework of the water sector reform process. However the progress and way the reform is being implemented differs in the three target countries. Below a short overview of the process (from GTZ, 2008)<sup>10</sup>

- Kenya

The water sector reform process in Kenya started in 1999 and The National Water Supply and Sanitation Strategy was published in 2007. Most of the new institutions provided for in the Water Act

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<sup>10</sup> GTZ, 2008, Water Supply and Sanitation Sector Reforms in Kenya, Tanzania, Uganda and Zambia

2002 were established in 2004 and have started operations. Responsibility for policy and resource mobilisation rests with the Ministry of Water and Irrigation (MWI). The water supply and sanitation sub-sector is regulated by the Water Services Regulatory Board (WASREB).

Since 2004 the WASREB has issued licenses to the 7 WSBs. The main regulations (guidelines, rules, standards) and a sector wide information system are in the process of being developed and implemented. There are a number of commercialised local government schemes in secondary towns and attempts are being made to cluster services in a number of towns wherever feasible. The initial experiences of commercialisation and clustering are very encouraging and are now being regarded as forerunners of large scale implementation.

Since 2004 efforts have been made to develop an investment plan for the WSS sub-sector through a Sector Wide Approach to planning (SWAp).

- Tanzania

Reforms started with the first National Water Policy in 1991, and the revised National Water Policy, 2002. Since 1997, 19 Urban Water Supply and Sewerage Authorities (UWSAs) have operated services in larger urban centres under a Memorandum of Understanding with MoW. This MoU contains a large number of performance indicators and other data to be reported to the MoW. Until recently the UWSAs had autonomy over the setting of their tariffs.

An additional 98 entities operating in small and medium towns have been declared as Water Supply Boards since 2002 and are operating either under a Memorandum of Understanding with MoW, or are in the process of being established and still being operated by the respective Town or District Council. In 2006 the national Water Sector Development Programme, a SWAp including a basket financing mechanism, was established for the period from 2006 to 2025.

The first Joint Water Sector Review in 2006 was seen as the starting point for this more harmonised approach. However, the process is being driven to a significant extent by development partners and ownership not yet been fully assimilated by the relevant Tanzanian authorities.

- Uganda

The main elements of the water sector framework are in place with the Water Act (1995), a Water Policy (1999), a sector strategy (2001), an institutional reform strategy and the investment plan for the urban water and sanitation sub-sector (2003).

The Ministry of Water, Lands and Environment (MWLE) is responsible for policy making, issuing national standards, regulation regarding tariffs, and performance contract management. The technical arm of the Ministry, the Directorate of Water Development, is responsible for managing water resources, policy guidance, coordination, technical regulation, and provision of support services to the local government authorities and other service providers.

The National Water and Sewerage Corporation (NWSC) is responsible for water supply and sewerage services in 19 out of 41 large towns, i.e. 55% of the urban population. Local governments are responsible for service provision in the remaining 155 towns and are supported by the MWLE to build up capacity.

Although, the reform is moving forward in all of the three countries there is still a long way to go and the process is still fragile. As GTZ (2008) warns: “Reform processes can be significantly disrupted if governments do not succeed in focussing the input of development partners in line with the national policy for the sector”.

There are still many issues to be resolved and some of these have direct consequences for the UN-HABITAT initiatives.

#### **IV) Water supply & sanitation providers**

##### **1) Status at the start of the project (see assessment reports of NWSC)**

- **WS Infrastructure**  
Existing reticulation system in a poor state of repair  
High water loss (non revenue water)  
Low service coverage, even in the formal areas of the town, due to frequent breakdowns and low water pressure  
Very low coverage of informal settlements  
Frequent breakdowns in equipment  
Aging and inefficient pumping stations causing high electricity costs  
Large number of illegal connections or non paying customers  
Lack of functioning water meters  
Number of pumping hours restricted and frequent power cuts  
None or only partial water treatment  
Inadequate laboratory facilities  
Inadequate preventive maintenance  
Inadequate storage capacity  
Lack of plans and drawings  
Lack of tools and repair facilities
- **Management & human resources of the WSP**  
Lack of performance indicators because of insufficient management information systems  
Lack of competent staff and inadequate HR management  
Lack of agreed procedures  
Staff belongs to different organizations
- **Legal status of the WSP**  
Unclear legal status
- **Financial status of the WSP**  
Low revenue collection and high O&M costs causing that income does not cover the O & M costs  
High expenditures because of inefficient pumping stations and high water losses  
Manual billing systems  
Water price often too low and management has no authority to raise the water prices
- **Status of the sewerage system**  
Coverage only in the formal part of the town (if exists at all)  
Small number of connections  
Vandalism



Inadequate treatment facilities  
 Sewers in a poor state of repair  
 Sewers often blocked by solid waste  
 Sewers insufficient for storm drainage.

The efforts of UN-Habitat to provide water and sanitation for the poor should be seen in the light of the poor performing WSP's operating in a still unclear legal situation caused by the still incomplete water sector reform process

## **2) Present status**

The programme achieved much in the last years: The rehabilitation of the infrastructure is nearly completed, and both the technical and managerial capacity of the WSP's improved (see annex 1 & 5).

Nevertheless many thorny issues remain, to name a few:

District officers paid by the government instead of the water board  
 Influence of the municipality in the water service providers is still too strong  
 Community based organizations are in general not very strong  
 Subsidies for electricity / staff by the government to WSP  
 Parallel performance control  
 Transfer of assets from local authorities to WSP is still pending  
 Water price is still too low to allow costs recovery  
 Staff retention is still a serious problem in many WSP  
 The legal situation of the WSP is still unclear

## **V) List of Guidelines and Training Materials Prepared under LVWATSAN**

### **A. Guidelines/Terms of Reference for Institutional Arrangements**

- i) Terms of Reference for establishment of Project Management Unit (PMU)
- ii) Terms of Reference for establishment of Project Implementation Unit (PIU)
- iii) Step-by-Step Guide for Setting up and Running a Multi-Stake Holder Forum (MSF)

### **B. Training/Guidance Manuals for Fast Track Capacity Building Programme (prepared for each of the 6 water utilities)**

- i) Finance Policies and Procedures Manual
- ii) Water Audit Operations Manual
- iii) Illegal Use Reduction Operations Manual
- iv) Leak Detection and Repair Guidelines
- v) Block Mapping Guidance Manual
- vi) Customer Service User Manual.

### **C. Sanitation Micro-Credit Scheme (prepared for each country)**

- i) Savings and Credit Manual
- ii) Manual on construction and maintenance of household sanitation facilities

**D. Rainwater Harvesting**

- i) Guidelines on Construction of Rainwater Harvesting Tanks
- ii) Technical Design and Bills of Quantities for construction of rainwater harvesting tanks

**E. Solid waste Management**

- i) Guidelines on operation and maintenance of solid waste management equipment
- ii) Planned Preventative Maintenance Programme for Solid Waste Management Equipment

**F. Training Materials for Capacity Building Programme**

- i) Governance and Management of Watsan Services
- ii) Environment, Public Health and Hygiene
- iii) LED Opportunities in SWM and WATSAN
- iv) Business Skills In WATSAN & SWM
- v) Environment, Public Health and Hygiene
- vi) Inclusive Participatory Water and Sanitation Management
- vii) Revenue Mobilization for Services Delivery
- viii) Household Water Supply Systems
- ix) Protection of the Urban Environment
- x) Creation of enabling environment for business expansion
- xi) Management of Water Losses in the Distribution System
- xii) Municipal Land Issues, Planning Systems and Legislation
- xiii) Procurement processes and contract management
- xiv) Financial and Commercial Management of Watsan Services
- xv) Solid Waste Management and Treatment
- xvi) Operation and Maintenance of Water Treatment Plants

#### Annex 4. Performance Indicators of Micro Loans for Sanitation

Performance indicators of micro-san projects					
Tanzania					
Town	Muleba	Bukoba	Mutukula	Bunda	Total
Inhabitants(As per 2002 census) except Mutukula town	10,701	81,221	6,013	45,185	
NGO	1	1	1	1	
Start date constructions	April,2009	April,2009	April,2009	Feb,2010	
Latrines planned	300	500	100	900	1800
Latrines constructed	293	445	94	500	1332
Latrines in progress	10	10	-	-	20
Average price / latrine	160	160	160	160	
Funds from Habitat \$	Total for Bukoba, Muleba & Mutukula =US \$ 178,650			179,550	3582001
Savings from beneficiaries	-	-	-	1281	1281
Total loan (\$)	58,190	75,429	25,524	76,923	236066
Returned amount (\$)	1,250	2,107	1,226	1,340	5923

Returned amount (%)	2.2%	2.8%	4.8%	1.7%	2.5
Outstanding amount (\$)	56,940	73,322	24,298	75,583	230143
HH which received loans	303	455	94	500	1352
HH back fully	-	4	-	-	4
HH partially paid back	60	113	74	77	324
HH which did not start payment	243	338	20	423	1024
Latrine = latrine block (3/4)					

Performance indicators of micro-san projects Kenya & Uganda	Kenya	Kenya	Kenya	Kenya	Uganda
Town	Kisiii	Homa bay	Bondo	Total	Bugembe
Inhabitants	75889	106153	37381		50.000
SANA International					
Bank	1	1	1		
Start date constructions	March, 09	July,09	March, 09		August,10
Latrines planned	300	300	300	900	50
Latrines constructed	63	330	253	646	43
Latrines in progress	27	47	40	114	19
Average price / latrine	157	93	125		193
Funds from Habitat ( \$ )	39,900.00	39,900.00	39,900.00	119,700.00	32593
Savings from beneficiaries	2,950.00	3,750.00	2,953.75	9,653.75	8915
Total loan (\$)	17,619.79	43,763.27	45,657.25	107,040.30	13907
Returned amount (\$)	150	552.5	381.25	1083.75	3250

Returned amount (%)	0.85	1.26	0.84	1.01	23
Outstanding amount (\$)	17,469.79	43,210.77	45,276.00	105,956.55	10657
HH which received loans	63	330	253	646	118
HH back fully	0	0	0	0	0
HH partially paid back	12	39	9	60	118
HH which did not start payment	51	291	244	586	0
Latrine = latrine block (3/4)					
Population projected at 2.5% growth rate with 1999 census as base year					

## Annex 5: Baseline Data of Selected WS Companies

		Bukoba	Muleba	Bondo	Homa bay	Kisii
	Unit	BUSWA	MLUWASA	SIBO- BONDO	SNWSL	GWASCO
Inhabitants	#	81000	15000		56000	85000
People with water service	#	24000	2000		17000	25000
People with water service	%	30	13		30	29
<b>WATER DEMAND MANAGEMENT/AUDIT</b>						
Water produced	m3/d	842	450	575	7,579	
Water sold	m3/d	397		275		3000
Non Revenue Water	%	53	40	53	35	60
Meter connections	No.	660	10	390	1,210	
Metering Efficiency	%	59	23	55	51	30
<b>LEVEL OF SERVICE INDICATORS</b>						
Average hours of service	No.	8				
New Water Connections	No./Month	8	6	4		
Active Water Connection	No.	856	245	507	60	2000
Inactive	No.	265	19	203	1,960	2700

Total No. of Account	No.	1,121	264	710	400
% no. of samples complying to the bacteriological standard	%	100	270		2,360
Number of kiosks	No.		2		9

**STAFF PRODUCTIVITY**

No. Staff	No.	21		15	27
Staff productivity	No./1000c	19	45	21	11

**FINANCIAL INDICATORS**

Total Billed Revenue	\$/ yr	42,212		56,016,000	211,248
Total Revenue Collection	\$/ yr	38,295	10,108	53,568,000	240,480 38,400
Total Arrears	\$/ yr	101,543		196,546,752	
Recurrent Expenditure	\$/ yr	142,221	14,454	51,782,112	544,752
Working ratio	Exp/Rev (%)	27	70	96	44



## Annex 6: Performance Indicators of WSP's at 12/10

Name of town		Bukoba	Muleba	Bondo	Bugembe	Homa Bay	Kisii
Name of WSP		Buwasa	Mluwasa	SIBO W&S	Nat.W &S Com.	SN WS Ltd.	GWASCO
		Tanzania	Tanzania	Kenya	Uganda	Kenya	Kenya
Number of inhabitants		104,000	18,402	282,780	50,000	93,155.00	251,953
<b>Indicator WSP</b>	<b>Unit</b>						
Average produced volume	m3/d	6203	736	1100	5,680	684,441.00	4,000
Active connections	#	5242	406	601	4,423	3,504.00	2,500
Inactive connections	#	1036	53	331	1,073	484	2,000
Water kiosks (operational)	#	35	17	NIL	274	10	5
Water kiosks (under construction)	#	Nil	NIL	NIL	2	0	2
Area covered by network	%	62.5	53	758 Sq.Km	65	66	60
Population covered by network	%	76	56	10	66	9 (xi)	70
Non revenue water	%	47.2	40	49	53	39.5	46
Hours of supply / day	#	23.4	15	18	24	20	20
Total revenues in 2010 (est.)	\$	638,781	41,020	51,960	328	303,561.83	(xii) 616655

Total O&M costs in 2010 (est)	\$	579,469	73,778	29,977	269	296,784.48	(xiii)	663743
Tot Rev / O&M	%	110.2	56	173.33	122.04	102	(xiv)	
Staff	#	65	9	11	23	43		128
Metering ratio (operational meters)	%	94	13	827	100	60		40
Water treatment in operation	Y/N	N	N	Y	N/A	Y		Y
Water price private connections	\$ / M3	0.38	0.612	2.4	1	0.36		Varied
Water price water kiosks	\$ / 20 liter	0.005	0.014	2.4	1	0.06		0.024
Water price commercial consumers	\$ / M3	0.44	0.8	2.4	1	0.48		
Fee for private connections	\$/ month	10-68	14	12	1	22.80	(xv)	36
Sanitation coverage (area)	%	N/A	N/A	non		20		52
Sanitation coverage (population)	%	N/A	N/A	non	0	9		58

## Annex 7: References

### UN-Habitat documents

Lake Victoria Region Water and Sanitation Initiative, LVWATSAN, Programme Proposal (Revised January 2005). Supporting Secondary Urban Centres in the Lake Victoria Region to Achieve the Millennium Development Goals

LVWATSAN (June 2010). Narrative Progress Report Submitted to the Government of the Netherlands

LVWATSAN (February 2008) UWESO Progress report

Improving of housing, water and sanitation facilities for HIV/AIDS orphans and other vulnerable groups. Final report. Undated

Main report of the first WSTF Impact Study Document 1 (March 2010)

Kenya Country Impact Study Document 2 (January 2010)

The UN-Habitat Water and Sanitation Trust Fund Strategic Plan 2008 -2012 (2008)

The UN-Habitat Water and Sanitation Trust Fund Annual report 2009

UN Human Settlements Program. Report of mid-term review of the operations of the water and sanitation trust fund. August 2007

Lake Victoria Water and Sanitation Initiative, Overview of the pro poor approaches for improved access to affordable water and sanitation initiative of UN-Habitat (2010)

Lake Victoria Water and Sanitation Initiative, How to set up and manage a town level multi stakeholder forum

Second Meeting of EAC ministers of Water, finance and development partners of the LVWATSAN (April, 2009)

Expert group meeting for African Cities Phase II, Summary report

Training and capacity building LV Watsan initiative Proposed Time plan and participants for all CDIs

Capacity development for improved water and sanitation delivery in towns around lake Victoria

UN-Habitat Water and sanitation trust fund, April 2003

Lake Victoria Water Supply And Sanitation Program Phase II, Program Appraisal Report AfDB, July 2010.

### Partner documents

Africa Leadership Institute, Implementation of citizen report card on water and sanitation services in secondary urban centers in the lake Victoria region in southern Uganda. June 2009

Africa Leadership Institute, Citizen Report Card Project Users perspectives on water sanitation solid waste management and drainage services in the urban centres of Mutukula, Kyotera and Maska located along Lake Victoria in Southern Uganda Interim report, June 2010

Google.org Regional Training Workshop on Citizen Report Card concept and Methodology, Dec 2009

Ministry of Water and irrigation Kenya. The role of NGO's in Urban Water Supply and Sanitation further to the water sector reform

National Water and Sewerage Corporation, LVWATSAN Fast track capacity building programme for utilities final project report Sept 2008

Gender & Water Alliance, 2009. Synthesis Report: Gender and Vulnerability in Water and Sanitation: Mapping the Issues in the 7 Secondary Towns of the Lake Victoria.

## Reports on the target towns

LV Regional Water and Sanitation programme. Appraisal Report Bondo town, July 2008

Muleba Urban Water Supply Sanitation Authority. First Quarterly Performance Report for July – Sept 2010

Upgrading plan for Kagabiro informal settlement Muleba township Tanzania 2010

Bukoba Municipal Council. Report on promoting principle and the techniques of participatory community solid waste management project in urban areas – Bukoba Dec 2010

Lake Victoria Water and Sanitation Initiative, Kyotera town Uganda Summary report, Dec 2005

Bukoba Municipal Council, The lake Victoria City development strategies project city self assessment report (2010?)

Masaka City report? Undated

Bukoba City report? Undated

Mutukula Matrix summary report, Dec 2005

Bukoba Matrix summary report, Dec 2005

Masaka (Nyendo / SSenyange) Matrix summary report, Jan 2006

Infrastructure interventions in water and sanitation, solid waste management and drainage Homa Bay Consolidated draft Final field report V 1 Main report, Nov 2005

LV Kenya, Monthly progress report June 2010

LV Kenya, Monthly progress report August 2010

LV Kenya, Monthly progress report September 2010

LV South Water Services Board. Status report to the chief executive officer on LV watsan projects in Homa Bay, Kisii and Bondo. Dec 2010

LV Watsan Status of physical immediate interventions in Tanzania, Dec 2010

LV Watsan Tanzania Monthly progress report Augustus – Sept 2010

Sibo – Bondo Performance Improvement plan 2009/10

Buwasa Performance Improvement plan 2009/10

Buwasa Performance Improvement plan 2007/08

Homa bay Performance Improvement plan 2007/08

Kisii Performance Improvement plan 2007/08

Muleba Performance Improvement plan 2007/08

NWSC Gap analysis and capacity assessment Bondo and Bunda, June 2009

NWSC Evaluation of the annual performance improvement plan July – Sept 2009

## Annex 7: People met

Name	Institute	Position
<b>UN</b>		
Bert Diphooorn	UN Habitat	Direct. Human Settlements Finance Div.
Pireh Otieno	UN Habitat	Associate programme Officer
Robert Goodwin	UN Habitat	Chief Lake Victoria Section
Angela Hakizimana	UN Habitat	Progr. officer Watsan / infrastructure
Rose Mureithi	UN Habitat	Secretarian
Daniel Adom	UN Habitat	Chief techn. advisor Water for African Cities
James Murage	UN Habitat	Infrastructure consultant
Philbert Ishengoma	UN Habitat	Chief techn. advisor Tanzania
Anne Malebo	UN Habitat	human settlement officer
Mbabaali James Lumbuye	UN Habitat	Chief techn. advisor Uganda
Laban Oyuke Onongno	UN Habitat	Chief techn. advisor Kenya
<b>Partners</b>		
Harm Duiker	SNV	Act. Country director
Reint-Jan de Blois	SNV	Senior advisor Watsan
Masaka Maganga	SNV	Advisor Watsan
Chemisto Satya Ali	SNV	Senior advisor Watsan
Njoroge Robert	Netwas	Executive Director
<b>Government of the Netherlands</b>		
Pim van der Male	DGIS	Senior policy officer
Dick van Ginhoven	DGIS	Senior watsan advisor
Job Meijer	Netherlands Embassy	Deputy perm. repr. to UN Habitat
<b>Government of Kenya</b>		
Ing Patrick Ombogo	Min of water & sanitation	Director for sector wide approach

**Government of Uganda**

Kavutse Dominic	Directorate of Water Dev.	Commissioner
Dr. Rose Kaggwa	NWSC	Senior Manager
Allan Mugabi	min. of water & Environment	Engineer
Kato Paul	min. of water & Environment	Branch manager

**Kisumu**

Alfred Adongo	SANA	Team leader
Paul Agwanda	LV South water services board	Manager asset Dev
Joseph Omolo	LV South water services board	Asset Devpt Officer
Stanley B. Matowo	LV Basin commision	Deputy executive secretary
Dan Oduor Owore	LV Basin commision	Technical assistant
Samuel Kerunyu Gichere	LV Basin commision	Deputy executive secretary

**Bukoba**

Yusto Mucuruza	Kadetfu	Executive director
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**Bugembe**

Batambuze Abdu	Bugembe Town council	Town clerk
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**Kisii**

John Magoba	Gusii water & sanitation comp	Managing director
Macoyano	Kissii Prison	Deputy director
Reuben Masese	MSF Kisii	Chairman
Jim Ohra	Kissii	Town Clerk

**Homa Bay**

Irene Kerubo	Mazingra Bora Community bank	Bank manager
Rollins Dickens	MSF Homa bay	Secretarian
Sophie Obop	MSF Homa bay	Member
John Magoba	Gwasco	Managing Director
Adams Wilson Kirowo	South Nyanza water services	Managing director

### Annex: 8 Map of the LV-Watsan Area





## Mekong Regional Report

**Anton Rijdsdijk and Nguyen Danh Soan**

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## Abbreviations

CA	Cooperation Agreement
CBO	Community-based organisation
CfD	Centre for Development (Cambodia)
CLTS	Community Led Total Sanitation
CSCS	Cooperation for a Sustainable Cambodian Society (Cambodia)
DoS	Department of Statistics (Lao PDR)
DPWS	Department of Potable Water Supply
GM	Gender Mainstreaming
GMS	Greater Mekong Sub Region
GoS	Government Statics Office (Vietnam)
GRET	Group of Research and Technological Exchange
GWA	Gender Water Alliance
HH	Household
HVWSHE	Human Values Based Water Sanitation and Hygiene Education
ECOSAN	Ecological Sanitation
IEE	Initial Environmental Examination
MDG	Millennium Development Goal
Microsan	Micro credit for Sanitation
M&E	Monitoring & Evaluation
MEK-Watsan	Mekong Region Water and Sanitation Initiative
MIME	Ministry of Industry, Mines and Energy (Cambodia)
MoC	Ministry of Construction (Vietnam)
MoU	Memorandum of Understanding
MPWT	Ministry of Public Works and Transport (Lao PDR)
MRC	Mekong River Commission
MRD	Ministry for Rural Development (Cambodia)
NGO	Non Governmental Organization
NPSE	Nam Papa State-owned Enterprise (Lao PDR)
O&M	Operation and Maintenance
PPC	Provincial People Committee (Quang Tri-Viet Nam)
PPME	Project Performance Monitoring and Evaluation
PPP	Public-Private Partnership
QTWASUCO	Quang Tri Water Supply and Construction One Member Limited Company (Vietnam)
RBM	Results Based Management
SC	Steering Committee
TNA	Training Needs Assessment
TOR	Terms of Reference
ToT	Training of Trainers
UIS	Urban Inequities Survey
WCDM	Water Conservation and Demand Management
WS	Water Supply
WSB	Water Service Board
WSP	Water Service Provider
WSS	Water Supply System
WSTF	UN-HABITAT Water and Sanitation Trust Fund
UN-HABITAT	United Nations Human Settlements Programme
WTTC	Waterworks Technical Training Centre (Lao PDR)

## 1. INTRODUCTION

### 1.1 Background and Purpose

In the framework of the “External Evaluation of the operations of the Water and Sanitation Trust Fund”, an evaluation team visited UN-HABITAT activities in the Mekong region. In the period from 8 to 25 January 2011 and team visited 7 small towns; 1 in Cambodia, 3 in Vietnam and 3 in Laos (see itinerary in annex 6).

The evaluation mission studied background literature, inspected the activities of MEK-WATSAN in the field, and had interviews with the stakeholders, which included beneficiaries, partners and authorities on both local and national level (see list in annex 5). This report is partly based on the findings of a recent study on the MEK-WATSAN initiative: “Assessment report of the Mid-term Review (Mills, Nov 2010)”.

### 1.2 Limitations

The mission had 10 days to visit all the three countries including field visits, travel and meetings with national authorities. Therefore, the team could only meet the most important stakeholders and pay quick visits to the target areas and infrastructure. Nevertheless, the team could get a realistic overview of the initiative to analyze its strengths and weaknesses.

Translation from Khmer and Lao language into English (done by UN-HABITAT officers) in some degree considered as limitation in getting information from local people

The conclusions about the initiative are preliminary as the initiative started effectively in April 2009 and is still in full operation to date.

An audit had been carried of UN-HABITAT recently. This evaluation therefore will not go into the financial details.

### 1.3 Acknowledgements

The consultants want to thank the UN-Habitat staff in Vientiane and the local chief technical advisors for their support to the mission. Although “stupid people can ask more than wise man can answer”, everyone did their outmost best to respond to all our questions. In addition we are grateful for the perfect organization of the field trips

## 2. OVERVIEW OF THE MEKONG REGION WATER AND SANITATION INITIATIVE

The MEKWATSAN initiative was formulated in response to the Greater Mekong Sub Region (GMS) initiative as a collaborative effort between UN-HABITAT, the Governments of the Greater Mekong Sub-region and ADB. The objective of this initiative is to support the participating countries in attain their water and sanitation related Millennium Development Goals (MDGs), to halve the proportion of people without access to improved water supply and sanitation services by 2015.

On 10th December 2008, a Contribution Agreement was signed between the Government of the Netherlands and UN-HABITAT to implement a scaling up of The Mekong Region Water and Sanitation Initiative. The budget of the initiative is 8.6 million \$ (table 1).

Table 1 Budget MEK-WATSAN for the period 2009 - 2011

	\$	%
Capital	7,125,231	83
Capacity	343,974	4
M&E	234,960	3
Travel	117,700	1
Support	779,971	9
Total	8,601,836	100

The initiative's preparatory phase started with a dialogue with the three respective Governments followed by MEK-WATSAN Regional Consultations in April 2009 in Hanoi, Vietnam. After this, the "Hanoi Declaration" was signed by the participating countries. The implementation is done in two phases, the fast track phase (the pilot phase in 11 towns) and the roll out phase 1 (see overview of activities in annex 2).

MEK-WATSAN promotes:

- Pro-poor urban water governance
- Urban water conservation and demand management
- Integrated urban environmental sanitation
- Income generation for the urban poor through community-based water and sanitation services

The following activities are included:

1. Extend water and sanitation systems to achieve MDG target 10 through improved infrastructure and management systems.
2. Enhance Institutional and Human Resource Capacities at local and regional levels to sustain water and sanitation services.
3. Operationalise upstream sector reforms at the local level.
4. Enhance capacities of local private sector entities in service delivery.
5. Reduce the adverse environmental impacts of urbanisation on local river catchments.
6. Support economic development in secondary towns through improved water and sanitation, and related income generating activities.
7. Support cooperation between the countries of the Mekong region, and thus economic development.
8. Gender Mainstreaming and Social Inclusion.
9. MDG Monitoring.
10. Fraud and Corruption Awareness and Prevention.
11. Sustainability

## 2. POLICIES AND STRATEGY

### Are key objectives clearly defined and understood by staff and stakeholders?

From interviews, it became clear that most of the stakeholders (UN-HABITAT staff, government and non government) stakeholders understood the key issues and are committed to apply these in practice<sup>11</sup>. The project publications such as official reports, brochures, and training material are also clear on the above mentioned key objectives.

### Is the initiative contested? Is there a need to change direction and if so in what direction?

Stakeholders, ranging from ministry to beneficiary level expressed their appreciation about the activities of MEK watsan initiative. In general, the authorities preferred continuation of the existing activities following more or less the same approach. However, some stakeholders suggested focusing more on soft issues such as capacity building and assistance with water sector reform in the future. The minister of PWT (Lao PDR) mentioned that UN-HABITAT support is small in comparison to other donors, but it is less bureaucratic and the implementation is faster. In his words, “The program is small, but beautiful”. He suggested support for capacity building and the impact of climate change in the coming period.

## 3. RELEVANCE

### Does the initiative address the priority needs of the poor / vulnerable and in particular women in urban setting?

MEK-WATSAN is relevant in view of the poor coverage of water and sanitation in the small towns comparing the coverage in the rest of the countries. Table 2 shows the differences:

Table 2. Coverage of water supply and sanitation (source MEK-WATSAN brochure)

National coverage in water supply and sanitation (%)			
	Cambodia	Laos	Vietnam
Water	55	75	70
Sanitation	60	80	50
Secondary town coverage in water supply and sanitation (%)			
	Cambodia	Laos	Vietnam
Water	16	18	33
Sanitation	11	10	10

<sup>11</sup> At least the main ones. Not all key issues have been discussed during the mission

According to the MEK Watsan activity plan and Budget 2011-1012 (15/10/10) the target towns were selected to the following criteria:

- Need expressed in terms of service coverage;
- Poverty incidence;
- Consistency with the Government's plans and policies;
- Accessibility;
- Availability of raw water source;
- Commitment and ability of local authorities to support the proposal.

The focus is also on the towns along the economic corridors<sup>12</sup> as they have a rapidly increasing population and on the towns with ethnic minorities in the region.

Especially projects aimed at ethnic minorities are relevant as minority villages are less developed than the "mainstream" villages. For example, the initiative covers 8 villages in the Luang Prabang region with the Lao Theung-tribe, where families appear to have an average monthly income of 50 \$.

The activities are based on town assessments, feasibility studies and stakeholder consultations. Most of the target villages are in semi urban – semi rural settings and do not look overcrowded, dirty or chaotic as typical slum areas. In general, the houses are well maintained (and often had satellite dishes), but the differences in living standards in the village were clearly visible.

The initiative included all inhabitants in the villages, both poor and less poor in the water supply and sanitation activities. The initiative was not especially focused on women or vulnerable, but the poor got financial support from the project. Very poor received grants (about 100 \$ for a latrine) from the project, less poor receive a combination of grants and a revolving loan, while the better off only received loans. The renovation of the market drainage in the Cambodia town of Praek Thmei was useful; however it did not address the very poor.

**Are the suggested interventions technically sound (built on the most recent knowledge and experience)?**

Due to time constraints, the team could not carry out a thorough technical inspection of the installation, but from the outside the constructions on the water supply system (installations of pumps, construction of intakes, treatment plants etc.) appear to be well done. The project introduced 3 types of latrines (simple to more advance), ensuring that all families could get a latrine suitable for their budget.

The latrines were of good quality (only the substructure as the superstructure was the responsibility of the owners. On the other hand, the water supply infrastructure would benefit from a "finishing touch". For example one treatment station did not have a proper chlorine dosing system and the finish of the taps stands in several villages looked shoddy.

**Are the suggested interventions environmentally sound (built on the most recent knowledge and experience)?**

The latrines initiative will improve the environmental situation in the villages, by reducing open defecation. However, some water stand posts did not have proper drains or soak-away pits, causing

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<sup>12</sup> Economic corridors, expected to be completed by 2012, are being developed along transport routes of the six GMS countries to link infrastructure with production and trade

wet zones around the posts. In general, the MEK-Watsan initiative does not have environmental impacts beyond small town level. The district governor of Luang Prabang (Lao PDR) suggested assistance from UN-HABITAT to prevent deforestation in order to protect the water sources.

#### **Are the right procedures for installation applied?**

The initiative initiated the construction work of the water supply and the sanitation by community meetings and hygiene promotion, which is a well accepted approach by international NGO's in the water sector.

The sensitization of the communities is carried out by the implementing partners, MIME and CfD (Cambodia) in partnership with the commune and village representatives; the water utilities, Provincial People's Committees of the areas and the Women's Union (Vietnam), and in Laos, the Public water utilities, Department of Health and Hygiene, and the Lao Women's Union. In all three countries, the community leaders are also involved in this process. These procedures ensured active participation of the local beneficiaries (for example assistance with the digging of trenches). These procedures could make the project social acceptable, create ownership and will have a positive effect on the sustainability of the MEK-WATSAN assets.

On a higher level, MEK-Watsan got credits for dealing with the (mainly governmental) implementing agencies.

To cite the assessment report of the midterm assessment (Mills 2010): "The review also confirmed that the disbursement of funding directly to implementing agencies rather than channelled through layers of bureaucracy, together with mobilisation of communities to engage in meaningful consultation sessions and to participate in project implementation, are effective ways of delivering WATSAN projects".

"It was apparent from discussions that the revolving fund for WATSAN was administered differently in each country, and it demonstrates that projects are catering to the specific needs of the communities in a particular country".

In interviews authorities explained that the bigger donors, such as ADB did the tender procedures at the main office, while in MEK-WATSAN initiative, the implementing partners did the tenders themselves, supervised by UN-HABITAT.

**Is there a right balance and time schedule between hardware and software with the introduction of Watsan infrastructure?** The construction of water and sanitation infrastructure started only after the social preparation of the villages. As explained above this is the way to do it.

#### **Does the initiative reflect and utilize UN-HABITAT's comparative advantages?**

The most important comparative advantage of UN-HABITAT as a UN organization is its international clout and its access to ministers of the national governments and fellow international organizations. In the Mekong region UN-HABITAT has contacts and partnerships on all levels in the society from the beneficiaries to women organizations, WSP's municipal and provincial authorities and national ministries.

Regarding the MEK-WATSAN initiative, most authorities confirmed that UN-HABITAT made good use of its position, although some stakeholders suggest UN-HABITAT should increase its efforts on capacity building and assisting with water sector reform in the coming period. In other words, moving from involvement construction work to more advanced tasks as capacity building and institutional reform in the water sector.

**Is there an appropriate balance between building replicable models versus providing and scaling up services?**

The main part of the project was simple construction work (extension of pipeline system and construction of latrines) and institutional capacity building (4 % of the budget). Hence MEK-Watsan acted mainly as a service provider and to a lesser degree as capacity builder.

The first phase (fast track) has some innovative features such as the revolving funds for sanitation. Hence, it acted as a model builder. The other component such as building of water infrastructure, the community sensitization preceding the latrine construction initiative and the community participation with the installation of the water pipelines are effective and well accepted, but are not new approaches. These components can be seen as a tested model for the Mekong and other regions.

**What is the significance of up-stream policy advocacy and development and operational activities?**

The MEK initiative developed manuals and brochures on a wide range of topics, such as empowering communities, biogas, revolving funds etc. The participation of UN-HABITAT on the development of the water sector (strategies, policies, legislation water pricing) in the three countries is limited. In meetings, authorities suggested that the involvement of UN-HABITAT in water sector reform / water price reform should be more pronounced in the coming period.

**Does the initiative have the right balance between implementation and capacity building? Are implementation and capacity building hand in hand or work these on different timeschedules?**

The budget for capacity building is 4 % of the total budget (table 1). It is probably too early to assess the achievements of the capacity building as 30 % of the capacity building to the private sector and 50 % of the institutional capacity building is completed in November 2010, (Mills, 2010). According to the UN-Habitat staff the WSP's functioned reasonable, but the assessment report of the midterm review (Mills, 2010) recommended more capacity building programmes to address the issue of poor management capacities among the implementing partners.

**Is the initiative sufficiently focused? Does it cover too many thematic areas?**

All activities of the MEK-Watsan are directly or indirectly related to the water and sanitation sector in (semi) urban settings and create a synergy. The exception might be the HIV/AIDS sensitization activities. The synergy between HIV/AIDS activities and the watsan initiative is not very clear.

**Are scarce resources spread on too many activities?**

In view of the needs in Watsan, the initiative could easily have been concentrated to one country. However, model building has a wider impact if done in more countries and working in the three closely related countries could enhance the much needed international cooperation.

**What are the plans for future expansion/consolidation?**

UN-HABITAT started with the fast track approach in 2008. Now the activities are concentrated on the rollout of the activities in "roll out phase 1".

## **4. ORGANIZATIONAL PROCESSES AND FINANCIAL RESOURCES**

**Are priorities and plans realistic?**

The initiative is based on town assessments, feasibility studies and stakeholder consultations, suggesting that the project priorities are those of the main stakeholders. In the meetings and interviews, the authorities and beneficiaries agreed with the MEK-WATSAN priorities. The project



suffered some delays (see below), but there is no evidence that the project has been over optimistic in planning.

#### **Are plans and projects carried out in a timely manner?**

The implementation suffered from some delays as the assessment report of the impact review (Mills, Nov 2010) mentioned: " This resulted in a roll out phase to about 62 % of the initiative time with on a average disbursement to about 47 % of the work completed" This delay in progress caused by:

- Delay in signing of the MOU's
- Mobilizing communities and community contribution
- Limiting capacity of the implementing partners

The Midterm review (Mills, 2010) concluded that the overall initiative has made satisfactorily progress. Indeed, the delay does not look very dramatic and could possibly be solved with a no costs extension.

#### **Are plans based on sound analysis and judgment?**

The investments are based on baseline surveys and training needs assessments. It was not possible to assess these studies in detail, but the results of the field visits and interviews with stakeholders did not suggest improper judgements or wrong assumptions.

#### **Are activities adequately monitored and reported on?**

The project partners prepare standardized quarterly reports (Country Technical Advisor) reports on progress. The MEK-WATSAN has an impressive data base management system (PPME) to contain data on activities and on indicators. M&E takes a fairly large part of the project budget (3%) and UN-HABITAT assigned a special staff member to keep the PPME up to date. It is quite comprehensive system with all relevant project data and indicators and has a accurate tracking of the MDG goals (see section 6). The data base manager keeps track of input, output, and outcome indicators. This might be sufficient for conventional projects; however for model building and testing as the MEKWATSAN project pretends to be, impact indicators, such as WATSAN related health, should be included as well<sup>13</sup>.

#### **Are evaluation carried out in order to learn from successes and mistakes and change accordingly?**

A midterm assessment had been done recently (Mills, Nov 2010), but did not find major reasons for concern, other than a slight delay in progress. The assessment did not propose any major shifts in the approach.

## **5. PARTNERSHIP AND RESPONSIVENESS**

### **Selection of Partners**

According to the project document, UN-HABITAT is working closely with the Mekong River Commission (MRC) on gender mainstreaming and water and sanitation sector and is carrying out ongoing dialogue with other relevant stakeholders, like the International Union for Conservation of Nature, the World Wildlife Fund and the Asian Development Bank (ADB). A Partnership with private sector such as Coca Cola is being formulated. At national level, UN-HABITAT has formalized

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<sup>13</sup> The provincial health authorities have their health statistics, but a standardized system in the three countries (indicators & methodology) would be best for M&E purposes and model replication.

agreements (MOU's) with the following ministries: MIME in Cambodia, MPWT in Lao PDR and with MoC in Vietnam.

At local level, it cooperates with PPC Quang Tri in Vietnam, NPSE in Lao PDR. In addition, UNHABITAT has partnerships with local organizations such, Women Union of Vietnam and Laos (community mobilization), national statistical offices (M&E) and CfD and GRET (PPP on water supply and sanitation), WTTC (capacity building). Mills (2010) recommended extending the donor base to the private sector, in view of the expected reducing in aid from governments and development banks

#### **Are initiatives parts of national and sub national sector plans?**

According to the authorities UN-HABITAT initiative is in line with the national decentralisation programmes. The Cambodian minister of MIME confirmed that UN-HABITAT is in line with the action plan to strengthen and all public water supply utilities. However, the UN-HABITAT has not deeply been involved in the organisation and reform of the water and sanitation sector. In the activity plan, there is no discussion about the involvement of UN-Habitat in the institutional reform process.

#### **Are the initiatives "owned" by and anchored within the national and local government systems?**

As explained above, UN-HABITAT has formalized agreements (MOU) with the responsible following ministries in the three countries and on local level with the provincial water supply utilities in Cambodia, Lao and Vietnam. In indicator for the interest is of the three governments in this project is sizable counterpart contribution (27% of the total project costs), while both the ministers of MIME (Cambodia) and MPWT (Lao PDR) expressed their support for the initiative. The work on the extension of the WSS is a task of the WSP, which also have the benefits of water sold to new users.

## **6. PRODUCTS AND SERVICES**

### **Results and Achievements**

The initiative is making progress in provided a safe water supply and sanitation (see table 3/4 and annex 2) in villages and small towns. When interviewed, families confirmed that they well understood the health effects of proper hygiene and could show bars of soap used for hand washing. Most villages looked quite tidy without much waste on the streets, but it is not clear if this is the result of project activities.

The project put as initial targets for the roll out phase 1: 90,775 and 190,365 beneficiaries for water resp. Later on these figures have been increased to **97,252 and 200,539** (see table 3). These figures are according the Contribution Agreements signed between UN-HABITAT and the implementing partners.

Table 3: Planned # of beneficiaries of improved water supply and sanitation

	Fast track		Roll out I		Total	
	Water	Sanitation	Water	Sanitation	Water	Sanitation
Laos	38,208	37,233	38,640	34,551	76,848	71,784
Cambodia	7,500	21,220	26,982	80,988	34,482	102,208
Vietnam	27,000	34,800	31,630	85,000	58,630	119,800
<b>Total</b>	<b>72,708</b>	<b>93,253</b>	<b>97,252</b>	<b>200,539</b>	<b>169,960</b>	<b>293,792</b>

The fast track resulted in 37,690 beneficiaries for water and 45,310 for sanitation (Dec 2010) and it still in progress.

Table 4: Results roll out phase per Dec 2010

	Water	Sanitation
Cambodia	0	14596
Laos	0	11674
Vietnam	8150	7340
Total	8150	33610

#### **What innovations/models have been introduced?**

On the technical side, (WS and latrine construction) the initiative did not introduce any innovations. On the social side, social approaches such as community participation are useful, but not new in development projects. The exception might be the revolving fund for sanitation (microsan), which is to a certain degree an innovation.

#### **What is the significance of policy advocacy and policy development at global and national level?**

The UN-HABITAT contribution to the water sector policy is quite modest. The activities were limited to the development of pro-poor approaches, communication strategies and some institutional support to local partners. In interviews some authorities indicated that more involvement of UN-HABITAT would be appreciated.

#### **What is the evidence of capacity and institutional development?**

On the basis of training needs assessments, the initiative carried out a number training courses and workshop on a both technical and social issues targeting water utilities, municipal authorities, CBO's & NGO's. The present performance and coverage could be compared with the base line surveys, but it is probably premature to assess the results of the training in this stage.

#### **To what extent are regional and local networks strengthened?**

The initiative had some initiatives on strengthening of the regional and local networks. There have been international exchanges between the Quang Tri water utility of Vietnam and the water utility in the Savannakhet province in Laos. CfD in Cambodia shared experience with water utilities in Vietnam and Cambodia. In October 2009, MEK-WATSAN organized a regional sanitation workshop in Vientiane. The minister of MPWT (Lao PDR) suggested more support with information sharing and learning process from the neighboring countries through tours, workshops, meetings.

#### **What is the evidence of replication?**

At this stage there is yet no replication of the project activities, although during interviews, authorities expressed their interest in replicating these community based initiatives.

#### **Are the initiative results and benefits likely to be durable?**

The interventions were done with ample community participation, for example when digging the trenches for the water pipe line, ensuring a maximum sense of ownership. The interviews in the field confirmed that the activities of the initiative were valued by the small town people and the beneficiaries will take responsibility for the maintenance of the facilities.

However there are some (minor) concerns about the quality of the tap stands, which should be dealt with to render the system sustainable from a technical point of view.

The management of the WSP providers hasn't been reviewed in detail, but according to the UN-HABITAT staff, the WSP are functioning reasonably well and there is no major concern about the maintenance of the water supply system.

At the first sight, the revolving fund scheme looks successful as the pay-back rate is good<sup>14</sup> (see annex 3), but the loans are interest free and the real poor are excluded as they get grants for water connections or latrine construction. This is no problem as long as donors keep on topping up the loan scheme and providing the grants, but the approach in this form cannot present a sustainable model which can be taken over by governments.

## 7. CONCLUSIONS

1. The mission confirms the view from the previous evaluation (Mills, 2010) that the initiative was on the right track and did not yet encounter serious constraints. The execution suffers from delays, but these look manageable and probably could be addressed with some extra time.
2. Beneficiaries and authorities in the three countries confirmed their appreciation about the activities of UN-HABITAT and preferred the continuation and extension of its activities in more or less the same way. Especially the tender procedures at the level of implementing agencies rather than at the head office of the donor (as major donors, such as ADB do) received good remarks from the authorities.
3. Most frequently cited as strong points: community participation (+ contribution), relative fast project implementation, connected to all levels in society, small scale, good cooperation with project management
4. Advanced tasks, such as institutional capacity building and support to water sector reform are better suited to UN-Habitat's position than low tech construction work
5. The present M&E system is suitable, but more emphasis on impact (for example WATSAN related health) indicators is required in order to promote models for replication
6. The combination of revolving micro-loans and grants for the construction of sanitation facilities is not sustainable in its present form
7. The participatory approach in the provision of water and sanitation could lead to sustainable results, provided that (minor) technical flaws will be corrected.
8. The environmental impact of the project is only effective on small town level and not on a regional scale.
9. MEK-Watsan acted mainly as a service provider and capacity builder. To a lesser degree it acted also as a model tester and occasionally as a model builder. The main component, the provision of water and sanitation to small towns does not contain real innovative aspects, but the approach is sound and as a tested model it can be applied in similar small towns. MEK-Watsan experimented with the micro credit scheme + grants for sanitation and, hence, acted as a model builder in these.

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<sup>14</sup> In Lao PDR the average pay-back for water connections is 93% and for sanitation is 82%, (annex 3)

## 8. RECOMMENDATIONS

1. In view of the delay in implementation, a no cost extension might be necessary to ensure all targets will be met
2. UN-HABITAT should consider the possibility to focus more on advanced tasks such as institutional capacity building and water sector reform. Stakeholders suggest putting more emphasis on the following tasks (in this priority):
  - O&M of water treatment plants
  - Financial management
  - Water analysis
  - Procurement of materials
  - Accountancy
  - Control & management of reticulation systems
  - Study tours to other countries
3. In order to promote models, the MEK-WATSAN initiative should put more emphasis on the standardization of impact indicators among the three countries.
4. The revolving fund / grant approach for the finance of water supply and sanitation facilities should be reviewed to render these more sustainable.
5. The MEK-Watsan initiative should inspect the water supply systems and address its (minor) flaws.
6. MEK-Watsan should put more emphasis on the regional environment. For example, in Laos (Luang Prabang) the drying up of water sources due to deforestation was mentioned as a serious problem. Community project in forest protection might be a valuable long term investment.

## Annex 1: MEK Watsan Overview by Country

### Cambodia

Total Budget	3,420,538 \$
UN-HABITAT contribution	1,783,508 \$
Partner (in-kind/cash) contribution	438,134 \$
Community (in-kind/cash) contribution	1,198,896 \$
Total partners' contribution	1,637,030 \$
Beneficiaries (water)	26,982
Beneficiaries (sanitation)	80,988

### Laos

Total Budget	3,064,575 \$
UN-HABITAT contribution	1,979,974 \$
Partner (in-kind/cash) contribution	663,868 \$
Community (in-kind contribution)	76,000 \$
Community contribution (in-kind/cash)	147,076 \$
Total partners' contribution	1,084,601 \$
Beneficiaries (water)	38,640
Beneficiaries (sanitation)	34,551

**Vietnam**

Total Budget	2,721,050 \$
UN-HABITAT contribution	2,176,301 \$
Partner (in-kind/cash) contribution	349,100 \$
Community (in-kind contribution)	
Community contribution (in-kind/cash)	195,650 \$
Total partners' contribution	544,750 \$
Beneficiaries (water)	31,630
Beneficiaries (sanitation)	85,000

## Annex 2: Project Overview Fast Track Phase

Mekong Water and Sanitation Initiative MEK-WATSAN Fast track phase								
	Projects	Partner	UN-HABITAT Contribution	Counterpart Contribution	Date Signature (UN-HABITAT)	Date Signature (Counterpart)	Beneficiaries (Water)	Beneficiaries (Sanitation)
Lao PDR	Xiang Ngeun (Luang Prabang Pr.)	NPSE Luang Prabang	250,000 \$	200,000 \$	12-Jul-05	12-Jul-05	6,766	6,490
	Sayabouly (Sayabouly Pr.)	NPSE Sayabouly	170,000 \$	89,000 \$	25-Jan-07	27-Jan-11	3,678	3,147
	Phiang (Sayabouly Pr.)	NPSE Sayabouly	297,000 \$	287,733 \$	17-Mar-08	7-Apr-08	6,529	6,830
	Vilabouly (Savannakhet Pr.)	NPSE Savannakhet	590,000 \$	547,940 \$	28-Apr-08	30-Oct-08	8,517	8,543
	Phine (Savannakhet Pr.)	NPSE Savannakhet	347,000 \$	156,500 \$	16-Jul-07	16-Jul-07	4,884	5,523
	Cross-border (Savannakhet Pr.)	NPSE Savannakhet	127,000 \$	74,350 \$	10-Dec-07	6-Feb-08	3,046	3,116
	Bolykhamay (Bolykhamay Pr.)	NPSE Bolykhamay	171,000 \$	160,490 \$	29-May-08	29-May-08	3,364	3,116
	Houay Khoun (Bolykhamay Pr.)	GREP	15,000 \$	149,500 \$	9-May-08	27-May-08	3,400	3,400
Cambodia	Kampot (Kampot Pr.)	HME	214,300 \$	79,500 \$	8-Apr-08	30-Apr-08	7,500	7,500
	Preak Thmei (Kandal Pr.) / Snoul (Kratie Pr.)	OTD	245,000 \$	245,000 \$	20-Nov-08	8-Dec-08		13,720
Vietnam	Lao Bao (Quang Tri Pr.)	QWATSUCO	213,000 \$	224,000 \$	14-May-08	14-Jul-08	3,500	10,800
	Dong Ha (Quang Tri Pr.)	QWATSUCO	189,000 \$	198,000 \$	27-May-08	14-Jul-08	8,500	9,000
	Cam Ranh (Khanh Hoa Pr.)	QWATSUCO	250,000 \$	450,000 \$	5-Feb-07	1-Mar-07	15,000	15,000



## Annex 3: Overview Activities Roll Out Phase

### MEK-WATSAN initiative Roll Out Phase I

### Projects Overview

Project	Partner	Main Intervention	Total Budget	UN-HABITAT Contribution	Signature of Agreement (UN-HABITAT)	Signature of Agreement (Counterpart)	Beneficiaries Water	Beneficiaries Sanitation
L - Xieng Ngeun	NPSE Luang Prabang	Expansion of water supply system and improved sanitation	254,523	159,951	16-Sep-09	16-Sep-09	2,613	1,992
L - Sayabouly	NPSE Sayabouly	Expansion of water supply system and improved sanitation	308,131	208,935	16-Sep-09	16-Sep-09	3,796	2,183
L - Kongsedone	NPSE Saravane	Expansion of water supply system and improved sanitation	248,776	154,427	16-Sep-09	16-Sep-09	2,866	1,756
L - Atsaphangthong	NPSE Savannakhet	New water supply system and improved sanitation	801,366	506,952	16-Sep-09	16-Sep-09	5,050	3,788
L - Lamam and Thateng	NPSE Sekong	L - Rehab of water supply system and improved sanitation / T - Improved sanitation	452,335	331,368	16-Sep-09	16-Sep-09	9,154	10,258
L - Samakhixay	NPSE Attapeu	Rehab of water supply system and improved sanitation	479,168	355,952	16-Sep-09	16-Sep-09	10,608	6,762
L - Paksan	NPSE Bolikhamxay	Improved sanitation	71,350	44,836	03-Sep-09	03-Sep-09	0	2,411
L - Thakkek	NPSE Khammouane	Improved sanitation	116,973	77,423	10-Sep-09	10-Sep-09	0	4,301
L - PPP	GRET	Implementation of water and sanitation project under public-private partnership	177,700	25,000	01-Dec-09	06-Dec-09	4,553	1,100

Project	Partner	Main Intervention	Total Budget	UN-HABITAT Contribution	Signature of Agreement (UN-HABITAT)	Signature of Agreement (Counterpart)	Beneficiaries Water	Beneficiaries Sanitation
L - WTTTC	WTTTC of NPSE Lao PDR	Building and strengthening local capacity towards achieving the MDGs in water and sanitation in 8 provinces in Lao PDR	56,500	41,400	21-Oct-09	28-Oct-09	0	0
L - DoS	Department of Statistics (DoS)	Monitoring the MDG targets 10 and 11 in 8 areas of intervention benefiting from improved water and sanitation services in 7 provinces in Lao PDR	97,753	73,730	21-Oct-09	10-Nov-09	0	0
C San - Kampong Thom	CFD	Improved sanitation	752,014	296,760	29-Dec-09	31-Dec-09	0	36,316
C San - Pursat	CFD	Improved sanitation	589,242	235,993	29-Dec-09	31-Dec-09	0	27,773
C San - Kampong Cham and Svay Rieng	CFD	Improved sanitation	422,732	185,755	29-Dec-09	31-Dec-09	0	16,899
C Wat - Kampong Thom	MIME	Community-based water supply, capacity building and MDG monitoring	498,825	326,000	21-Dec-09	19-Mar-10	8,250	0
C Wat - Pursat	MIME	Community-based water supply, capacity building and MDG monitoring	466,325	304,000	21-Dec-09	19-Mar-10	7,700	0
C Wat - Kampong Cham	MIME	Community-based water supply, capacity building and MDG monitoring	401,325	256,000	21-Dec-09	19-Mar-10	6,500	0
C Wat - Svay Rieng	MIME	Community-based water supply, capacity building and MDG monitoring	290,075	179,000	21-Dec-09	19-Mar-10	4,532	0
V - Lao Bao	QIWASUCO	Expansion of water supply system and improved sanitation	493,800	397,950	05-Nov-09	07-Dec-09	7,590	8,800

Project	Partner	Main Intervention	Total Budget	UN-HABITAT Contribution	Signature of Agreement (UN-HABITAT)	Signature of Agreement (Counterpart)	Beneficiaries Water	Beneficiaries Sanitation
V - Cua Viet	QTWASUCO	Expansion of water supply system and improved sanitation	486,800	397,750	05-Nov-09	07-Dec-09	8,105	13,500
V - Dong Ha	QTWASUCO	Expansion of water supply system and improved sanitation	646,150	519,250	05-Nov-09	07-Dec-09	7,230	18,200
V - Quang Tri	QTWASUCO	Expansion of water supply system and improved sanitation	1,094,300	861,351	05-Nov-09	07-Dec-09	8,705	44,500

## Annex 4: MEK- WATSAN - Results Revolving Funds (completed projects)

Location	Purpose	Start date of project	End date of project	Total funds provided by UN-HABITAT (\$)	Amount spend for rev loan (\$)	Revolving loan returned (%)	N. of HHs using revolving funds (#)	Remarks
<b>Lao PDR</b>								
<b>Xieng Ngeun</b>	Loan for water connection	12-7-2005	11-7-2008	3,000	15,912	98%	156	5 cycles (HH water connection: 102\$)
Luang Prabang Pr.	Loan for latrine construction	12-7-2005	11-7-2008	3,000	6,935	91%	73	2 cycles (latrine: 95\$)
<b>Phine</b>	Loan for water connection	16-7-2007	15-7-2010	8,000	7,980	88%	76	1 cycle (HH water connection: 105\$)
Savannakhet Pr.	Loan for latrine construction	16-7-2007	15-7-2010	6,000	5,750	73%	46	1 cycle (latrine: 125\$)
<b>Sayabouly</b>	Loan for water connection	25-1-2007	24-7-2009	5,000	19,291	94%	191	4 cycles (HH water connection: 101\$)
Sayabouly Pr.	Loan for latrine	25-1-2007	24-7-2009	5,000	10,780	81%	98	2 cycles (latrine: 110\$)



## Annex 4: List of Key Persons Met

<b>Name</b>	<b>Institute</b>	<b>Position</b>
<b>UN</b>		
Bert Diphooorn	UN Habitat	Direct. Human Settlements Finance Division
Pireh Otieno	UN Habitat	Associate programme Officer
Andre Dzikus	UN Habitat	Chief Watsan section II
Ms Angela Hakizimana	UN Habitat	Programme officer Watsan / infrastructure
Kulwant Singh	UN Habitat	Advisor capacity building
Avi Sarkar	UN Habitat	Chief techn. Adv. SE Asia region
Vanna Sok	UN Habitat	Programme manager for Cambodia
Kmariko Sato	UN Habitat	Chief UN Habitat Bangkok
Le Huu Ti	UN ESCAP	Chief water Security section
Nopakane Bouaphin	ADB	Project officer infrastructure
Leik Boonwaat	UNODC	Deputy regional representative
Eeva Nyssonen	UN Habitat	Progr. & comm. officer Watsan sec.
Pham Thi Thu Huong	UN Habitat	Chief techn. Adv. Vietnam
Pham Sy Hung	UN Habitat	Technical assistant of Vietnam
Stefania Grasso	UN Habitat	Monitoring and evaluation officer
Joyce Mmaitisi	UN Habitat	Regional project officer
Buahom Sengkhamyong	Un-Habitat	Chief Technical Advisor Laos
<b>Partners</b>		
Ms. Tep Ketsiny	Center for development	Project coordinator
Lay Soheat	HVWSHE	Project coordinator
An Sokpheap	HVWSHE	Technical officer
<b>Gov. of the Netherlands</b>		
Pim van der Male	DGIS	Senior policy officer
Dick van Ginhoven	DGIS	Senior watsan advisor

Job Meijer	Netherlands Embassy	Deputy permanent representative to UN Habitat
<b>Gov. of Cambodia</b>		
Suy Sem	Ministry of Industry, Mines and Energy	Minister
Tan Sokchea	Ministry of Industry, Mines and Energy	Director of potable water supply department
Meng Saktheara	Ministry of Industry, Mines and Energy	Director general dep. of Energy
Cheap Sour	Ministry of Industry, Mines and Energy	Dep Director General of Energy
Heng Sokkung	Ministry of Industry, Mines and Energy	Under Secretary of State
Sorn Savnin	Ministry of Industry, Mines and Energy	Dep Director General of potable water
<b>Cambodia reg. project</b>		
Keo Bunly	Prek Thmei	Chief of Commune
Ms. Sman Ny	Cham Krom	Water and Sanitation Committee
Ms. Chin Neang	Kampong Svay Krom	Water and Sanitation Committee
Ms. Sman Romas	Cham Leu	Water and Sanitation Committee
Ms. Sann Nheb	Prek Thmei	Water and Sanitation Committee
Ms. Say Hy	Sambour Krom	Water and Sanitation Committee
Touch Chak	Prek Thmei	Commune Council
Born Vanna	Prek Thmei	Commune Council
Uth Oeung	Prek Thmei	Commune Council
Chea Roeung	Sambour Leu	Water and Sanitation Committee
Touch Sreu	Svay Leu	Water and Sanitation Committee
Phatt Sarat	Prek Thmei	Commune Council
Tang Srin	Prek Thmei	Deputy Chief of Commune
Ly Marn	Prek Thmei	Commune Council
Chhin Chhang	Prek Tahing	Water and Sanitation Committee
Kong Ly	Prek Thmei	Commune Council
Heang Chea	Prek Thmei	Deputy Chief of Commune
Ms. Norng Bona	Prek Thmei	Commune Council
Chhin Loem	Koh Thom Market	Market Committee

Ly Song Hak	Koh Thom Market	Market Committee
Ham Neng	Prek Thmei	Water and Sanitation Committee
		Water and Sanitation Committee
<b>Vietnam reg. project</b>		
Mr. Nguyen Van Canh	Local Gov., People's Com. of Quang Tri Prov.	Director, Department of Construction
Mr. Le Quang Binh	Local Gov., People's Com. of Quang Tri Prov.	Deputy Director, Department of Finance
Mr. Mai Xuan Tu	Water Utility of Quang Tri Province	General Director
Mr. Dao Ba Hieu	Water Utility of Quang Tri Province	General Deputy Director
Mr. Ngo Quang Lu	Water Utility of Quang Tri Province	General Deputy Director
Mr. Le Thanh Ty	Water Utility of Quang Tri Province	Chief of General and Admin Department
		Deputy Chief of General and Admin Department
Mr. Le Quang Van	Water Utility of Quang Tri Province	Deputy Chief of Financial Department
Ms. Duong Thi Chinh	Water Utility of Quang Tri Province	UN-HABITAT Project officer
Mr. Phan Ngoc Linh	Water Utility of Quang Tri Province	UN-HABITAT Project officer
Ms. Le Thi Hoa Ly	Water Utility of Quang Tri Province	UN-HABITAT Project officer
Mr. Le Van Sam	Static Office of Quang Tri province	Officer
Ms. Vo Thi Hoa Hang	Women Union of Dong Ha City	Vice Chairwoman
Ms. Tran Thi Cuc	Women Union of Gio Linh District	Vice Chairwoman
Ms. Nguyen Hoang Lan	Women Union of Quang Tri town	Vice Chairwoman
Ms. Le Thi Thuy Van	Women Union of Trieu Phong District	Vice Chairwoman
Ms. Dang Thi Ly	Women Union of Cam Lo District	Vice Chairwoman
Ms. Le Thi Tra	Women Union of Hai Lang District	Vice Chairwoman
<b>Gov. of Laos</b>		
Sommath Phonsena	Ministry of Public Work and Transport (MPWT)	Minister
Khamthavy Thayphachanh	Ministry of Public Work and Transport	Director General of DHUP
Khanthone Vorachith	Ministry of Public Work and Transport	Director of Water Supply Division
Vorasith	Ministry of Public Work and Transport	Staff of Water Supply Division
<b>Laos reg. projects</b>		
Somsanouk	Phine District Gov. of Savannakhet prov.	Vice-Governor



Sengthong	Department of PWT of Savaankhet prov.	Director General
Phandola	Water Utility of Savannakhet	Managing Director
Bualy	Water Utility of Savannakhet	Deputy-Director
Somboun	Water Utility of Savannakhet	Chief Technical Division
Khampeng	Thakhek District Gov. of Khammouane prov.	Vice-Governor
Khanngoun	Water Utility of Savannakhet	Managing Director
Khamveuy	Water Utility of Savannakhet	Deputy-Director
Soraphong	Water Utility of Savannakhet	Chief Technical Division
Bounsay	Xieng Ngeun District Gov. of Luangprabang prov.	Vice-Governor
Soulith	Water Utility of Luangprabang	Managing Director
Somsanith	Water Utility of Luangprabang	Deputy-Director
Lada	Water Utility of Luangprabang	Chief Technical Division

## Annex 5: References

1. UN-HABITAT- Mekong Region Water and Sanitation Initiative (MEK-WATSAN). Activity Plan and Budget (2011-2012). 15 October, 2010.
2. UN-HABITAT- Mekong Region Water and Sanitation Initiative (MEK-WATSAN). Monitoring Protocol and Sustainability Checks- Project Performance Monitoring and Evaluation (PPME). Project for the Government of Netherlands Funding.
3. UN-HABITAT- Mekong Region Water and Sanitation Initiative (MEK-WATSAN). A Regional Programme of the UN-HABITAT Water and Sanitation Trust fund.
4. Water for Asian Cities (WAC) Programme and Mekong Region Water and Sanitation Initiative (MEK-WATSAN). Vision and Strategy-2008-2012.
5. Arrangement between the Netherlands Minister for Development Co-operation and United Nations Human Settlements Programme (UN-HABITAT)
6. Mekong Region Water and Sanitation Initiative (MEK-WATSAN). Assessment Report of the Mid-Term Review submitted to the Government of the Netherlands prepared by Geoff Mills- WaterMark Training & Consultancy. 45 Hawkestone Rd. Marton 470- New Zealand – November 2010.
7. Mekong Region Water and Sanitation Initiative (MEK-WATSAN). Annual Result-based Narrative Report submitted to the Government of the Netherlands. Reporting Period – 1<sup>st</sup> January 2009 through 31 May 2010. May 2010.
8. UN-HABITAT- Mekong Region Water and Sanitation Initiative (MEK-WATSAN). Activity Plan and Budget (2010-2011). 14 October, 2009.
9. The Global Water Operators' Partnership Alliance. A Global Network helping Utilities help one another to achieve the Millennium Development Goals.
10. UN-HABITAT- Mekong Region Water and Sanitation Initiative (MEK-WATSAN). Assessment Report for the Roll Out Phase I. Towards achieving the MDGs in Water and Sanitation in Secondary Towns in Cambodia, Lao PDR and Vietnam.
11. Guidelines on Revolving Funds for Constructing Latrine and Water connection in Luang Prabang, Lao PDR. Mekong Region Water and Sanitation Initiative (MEK-WATSAN). Mekong Region Water and Sanitation Initiative (MEK-WATSAN).
12. United Nations Human Settlement Programme (UN-HABITAT). Funding Proposal-Mekong Region Water and Sanitation Initiative (MEK-WATSAN) Supporting Secondary Urban Centres in the Mekong Region to Achieve the Millennium Development Goals. Nairobi, February 2008.
13. Water For Asian Cities Programme- Lao PDR.
14. Mekong Region Water and Sanitation Initiative (MEK-WATSAN). Community-Based Water Supply and Sanitation Project –Sayabouly, Lao PDR.
15. Mekong Region Water and Sanitation Initiative (MEK-WATSAN). Community-Based Water Supply and Sanitation Project –Xieng Ngeun, Luangprabang, Lao PDR.
16. MEKWATSAN: SRV Vietnam Fact Sheet.
17. Ministry of Public Works and Transport Department of Housing and Urban Planning, Northern And Central Regions Water Supply And Sanitation Sector Project. Project Performance Monitoring And Evaluation. Progress report no 12.

<b>EXTERNAL EVALUATION OF THE OPERATIONS OF THE WATER AND SANITATION TRUST FUND LATINAMERICA AND CARIBBEAN REGION</b>
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## ACRONYMS (1/2)

AID-US AID	Agency for International Development, USA
AAPS	Autoridad de Fiscalización y Control Social de Agua Potable y Saneamiento Básico [Water and Basic Sanitation Inspection and Social Oversight Authority]eliminated. Bolivia
ABIS	Bolivian Association of Water and Sanitation Engineering
AECID	Spanish Agency for International Development Cooperation
AIDIS	Interamerican Association of Water and Sanitation Engineering
ALMA	Municipality of Managua. Nicaragua
ANA	Autoridad Nacional del Agua [National Water Authority] Nicaragua
ANEAS	National Association of Water Operators in Mexico
CA	Cooperation Agreements
CCA	Water Advisory Council. Private Foundation in Mexico.
CAALCA	Water Center for Latinoamerica and Caribe
CLTS	Community Led Total Sanitation
CONAGUA	National Water Council-National Authority in Mexico
CONAPAS	Comisión Nacional de Agua Potable y Alcantarillado Sanitario [National Water and Sanitary Sewerage Commission] Nicaragua
DFID	Division for International Development
DINESVBI	Sectoral Spaces for Water and Sanitation. Bolivia
ECOSAN	Ecological Sanitation
EMAGUA	Entidad Ejecutora de Medio Ambiente y Agua [Environment and Water Executing Agency]
EMAPAS- Sacaba District	Entidad Municipal Prestadora de Servicios de Agua-Saneamiento-Sacaba District [water Sanitation service operator] Bolivia
ENACAL	Empresa Nicaragüense de Acueductos y Alcantarillados [Nicaraguan Water and Sewerage Company]
EPSA	Entidad Prestadora de Servicios de Agua [water service operator] - the term used in the law to refer to water and sanitation operators. Bolivia
EPSAS	Empresa Pública Social de Agua y Saneamiento S.A. - the leading supplier of water supply and sewerage services in La Paz and El Alto. Bolivia
FECASALC	Fondo Español de Cooperación para Agua y Saneamiento en América Latina y el Caribe [Spanish Cooperation Fund for Water and Sanitation in Latin America and the Caribbean]
FEDECAAS	Water Providers Association in Santa Cruz. Bolivia
FISE	Fondo de Inversión Social de Emergencia [Emergency Social Investment Fund] Nicaragua
GIS	Geographic Information System
GRAS	Group of Donors and International Cooperation Agencies in Water and Sanitation. Bolivia
GTZ	Gesellschaft für Technische Zusammenarbeit - German technical Cooperation Agency
IADB	Inter-American Development Bank
IADB-BID	Interamerican Development Bank
IMTA-SEMARNAT	Water Technological Institut of Mexico (Ministry of Environment and Natural Resources)
INAA	Instituto Nicaragüense de Agua and Alcantarillados [Nicaraguan Water and Sewerage Authority]
INIDE	Instituto Nacional de Información de Desarrollo [National Development Information Institute]
IWRM	Integrated Water Resources Management
JMP	Joint Monitoring Program
LAC	Latinoamerican and Caribbean Region
MARENA	Ministry of Environment and Natural Resources. Nicaragua
AMUNIC	Association of Municipalities of Nicaragua
MDG	Millennium Development Goal
MDG7	Target 7 of the MDGs

## ACRONYMS (2/2)

MDG-F	Spain Millenium Development Goals Achievement Fund
MICSA	Mecanismo de Inversión para Cobertura en el Sector de Agua Potable y Saneamiento [investment mechanism for coverage in the water and sanitation sector] Bolivia
MMAA	Ministry of the Environment and Water. Bolivia
MoU	Memorandum of Understanding
NGO	Non Governmental Organization
O&M	Operation and Maintenance
OFCAS	Oficina del Fondo de Cooperación para Agua y Saneamiento [Office of the Water and Sanitation Cooperation Fund]
OPAS 18-16	UNDP Water and Sanitation Managment Program - Mexico
OTC	Oficina Técnica de Cooperación de la AECID [AECID Technical Cooperation Office]
PAHO-OPS	Panamerican Health Organization
PCU	Program coordination unit - attached to the MMAA and responsible for program execution; subject to institutional evaluation, could be transferred to EMAGUA. Bolivia
PNSB	Plan Nacional de Saneamiento Básico [National basic sanitation plan] - part of the government's national development plan. Bolivia
RRAS-CA	Regional Network for Water and Sanitation in Central America
SAGUAPAC	Cooperativa de Servicios Públicos de Santa Cruz, Ltda. [Santa Cruz public utilities cooperative] - the leading water supply and sewerage services operator in Santa Cruz.
SARAR	NGO on Sustainable Sanitation in Urban/Semi urban settings. USA-Mexico
SEDESOL	Ministry of Social Development. Mexico
SEMAPA	Servicio Municipal de Agua Potable y Alcantarillado [Municipal Water Supply and Sewerage Service] Bolivia
SEMARNAT	Ministry of Environment and Natural Ressources-Mexico
SENASBA	Servicio Nacional para la Sostenibilidad de Servicios en Saneamiento Básico [National Basic Sanitation Sustainability Service] Bolivia
SNV	Netherlands Development Organization
UN	United Nations
UN HABIT AT	United Nations Human Settlements Program
UNAM	National University of Mexico
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UN-HABITAT	United Nations Human Settlements Programme
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VBWSHE	Values-Based Water and Sanitation, and Hygiene Education
WASH	Water, Sanitation, and Hygiene
WAT SAN	Water and Sanitation
WAT SAN-LAC	Water for Latinoamerica and Caraibe Cities
WDM	Water Demand Management
WHO-OMS	World Health Organization
WOP	Water Operator
WOPS	Water Operators Partnerships
WSB	Water Service Board
WSIB	Water, Sanitation, and Infrastructure Branch (of the UN-Habitat)
WSP	Water Service Provider
WSP-WB	Water and Sanitation Program (of the World Bank)
WSTF	Water and Sanitation Trust Fund
WTSF-ROLAC	Water and Sanitation Trust Fund- Latinoamerican and Caribbean region
WSP-LAC Net	Latinoamerican and Caribbean Water Safety Plan Network

## 1. INTRODUCTION

### 1.1 Background and Purpose

In the framework of the “External Evaluation of the operations of the Water and Sanitation Trust Fund”, an evaluation team visited UN-HABITAT activities in the Latinoamerica and Caribbean region from 10 January 2011 till 23 January 2011. This team was integrated by Victor Arroyo (CTA UN Habitat-Rolac) and Hugo Roche (Consultant).

The evaluation mission inspected program activities in the field and had interviews with UN-Habitat Rolac local staff and partners, the representative in charge of the Interamerican Development Bank in Bolivia and the AECID General Coordinator in Nicaragua, the managers of small or associations of Water service providers in Bolivia and Mexico. In the three countries the team interviewed the municipal and national authorities: Bolivia (La Paz, Cochabamba), Nicaragua (Managua), Mexico (Mexico DF, Cuernavaca y Tezplan).

Before these field visits, the Consultant had meetings with ROLAC-UNHABITAT staff in Rio de Janeiro. More details of the itinerary of this mission are presented in Annex 1 of this report.

This report contains the summary of the findings of the field visit, after the revision of all official documentation received of the Program. A more detailed report of the trip is in Annex 1; Annex 2 presents a revision of the Projects and the revision incorporates the results of the stakeholders’ interviews, while Annex annex 5 presents in more details the background and technical details of the project activities. Annex 3 and 4 is a description of the main activities developed with Watsan-Rolac’s Partners.

### 1.2 Overview of the Water for Cities Program in Latin America and the Caribbean (WatSan-LAC) Initiative

The Water for Cities Program in Latin America and the Caribbean (WatSan-LAC) is a regional operational initiative of the Water Sanitation Trust Fund (WSTF) created since 2008 in response to the consultations undertaken during the Americas’ Regional Preparatory Process and during the 4th World Water Forum, held in Mexico City, in March 2006. The Program has been conceived along the lines of other UN-HABITAT supported water and sanitation Programs also funded by the Trust Fund.

The Water Sanitation Trust Fund’s mission is to create a “hospitable environment for pro-poor investment in water and sanitation in urban areas of all sizes in the developing world and thus provide the means to improve significantly the volume and effectiveness of the Official Development Aid and local financial flows into the water and sanitation sector. Specially attention is given to vulnerable groups, especially women.”<sup>15</sup>

The Strategic Plan for the WSTF (2008-2012) proposed four strategic focus areas:

- Delivering sustainable services for the poor by developing hardware and software models to improve pro-poor accesss to water and sanitation
- Ensuring synergy between the built and the natural environment strengthening the responsiveness of programs to environmental concerns.
- Monitoring the Millennium Development Goals and beyond

<sup>15</sup> UN-HABITAT 2008 “The UN-HABITAT Water and Sanitation Trust Fund Strategic Plan (2008-2010)”

- Integrating infrastructure and housing by reinforcing synergies between watsan infrastructure and sustainable human settlements development.

The WatSan-LAC Program aims to support developing countries in Latin America and the Caribbean to achieve the water and sanitation-related Millennium Development Goal in cities in the region. The main objective of the WatSan-LAC is to contribute to the sustainable access to safe drinking water and basic sanitation for the poor, particularly in the urban and peri-urban areas.

In the pursuit of this objective, the Program has just started activities in Mexico and Bolivia in 2008, with a strategy focused on consolidating first the WatSanLAC offices in the countries of interventions, identifying and establishing a strategic partnerships with the Inter-American Development Bank (IADB) at regional and supporting normative activities as a first step for putting the Program as a key partner in the water and sanitation sector.

During 2009-2010, the Program concentrated its attention to consolidate the local programs in Mexico and Bolivia and started its activities in other countries of Central America (Nicaragua, El Salvador) and the Andean Region (Peru, Ecuador, Colombia).

During these 2 years, WatSan-LAC has achieved a good reputation at Regional and local level. It is considered as a key stakeholder in the water and sanitation issues for the poor population, particularly in periurban areas or small cities in vulnerable territories. to climate change, integrating the SolidWaste Management as an important component of the sustainable sanitation approach.

The Program has forged strong partnerships with different governments, with the IADB and international NGOs, local civil organizations, technological institutions and national and municipal water utilities and operators. WatSan LAC has supported a combination regional and normative activities and policy dialogue work with on-the-ground pilot and demonstration water and sanitation projects focusing on pro-poor water and sanitation service delivery.

Initially, the Watsan-Rolac Program was focus in the following areas:

- i) pro-poor urban water governance;
- ii) integrated urban environmental sanitation;
- iii) implementation of Integrated Water Resource Management in urban settings;
- iv) democratic governance, decentralisation and empowerment;
- v) capacity building;
- vi) water, sanitation and hygiene education; and
- vii) strengthening water operators

Since 2009 and, particularly during 2010, the strengthening of the adaptation policy to climate change has been incorporated as a strategic line in Mexico, and Andean Region.

The program's main objective is to increase the flow of investments to the water and sanitation sector in Latin America and the Caribbean through strategic partnerships with different stakeholders, including the IADB, Spanish Cooperation Agency, central governments and local authorities, the private sector, non-governmental organizations and local communities.

In short, the program carried out the following projects and activities in response to the 7 key areas

- Support pro-poor peri-urban water and sanitation service provision initiatives.
- Governance in the water and sanitation sector the framework of the millennium development goals
- Citizen water & sanitation Observatories
- Human value-based water, sanitation and hygiene education (hvbwshe)
- Water Adaptation to Climate Change at local level
- Regional Dialogue on Water Adaptation to Climate Change to support awareness-raising on the topic towards the COP-16 (Cancun) and to support initiatives to be launched
- Mainstreaming Adoption of Appropriate WatSan Technologies.
- Capacity-building of water operators and Local Authorities.
- Promotion of innovative financial mechanisms for water and sanitation service providers
- Integrated water and sanitation project to improve access to water and sanitation in periurban districts
- Community based sanitation and water supply improvement in peri-urban districts
- Pro-poor Urban Water and Sanitation (WATSAN) Governance
- Innovative water management strategies with the participation of civil society
- Integrated Urban Water & Environment Sanitation Initiatives
- Capacity Building and institutional development processes (Advocacy)
- Strengthening of Water operators

Watsan-Rolac also implemented regional projects related to cross cutting issues as gender mainstreaming and water as a human right. The Program is complemented by the global UN-HABITAT's normative activities focus on the development and dissemination of water and sanitation management publications, toolkits, sourcebooks and guidelines that set standards of practice for work in the sector.

During this period, the strategic partnership with the Inter-American Development Bank (IADB) has been consolidated. This partnership allows achieving greater leverage in the flow of investments to the water and sanitation sector and synergies in priority countries like Bolivia and Mexico. This strategic partnership was formalized in august 2008 with the signing of the memorandum of understanding (MoU)<sup>16</sup> between both institutions. Different alternatives of cooperation between both institutions are being explored at regional and country level. Particularly, the coloboration at the country level was focused in Bolivia, Colombia, Mexico, Peru and El Salvador.

In these three years WatSANLAC has grown rapidly and the main strategic lines have been consolidated at regional and country level.

### **1.3 Limitations of the evaluation**

The visits in the field began the 10<sup>th</sup> January, before the revision of the documentation and the mission was organized in just 14 days. The Agenda of the vists<sup>17</sup> included a sample of projects and institutions in four countries including travel and meetings with national authorities (see Annex 1).

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<sup>16</sup> See details in Annex 3

<sup>17</sup> See details of the Agenda of Visits and Interviews in Annex 1



Hence, the consultant could only meet a selected list of the most important stakeholders with a tight schedule to visits the target areas and institutions. Consequently, the analysis, findings and presentation of results and achievements may not be extrapolated to the whole all programs. It was necessary to complement the information with other sources: - discussions with staff of the Water and Sanitation Trust Fund (WSTF) at UN-Habitat headquarters, and in countries, and with staff of related HABITAT programs.

At the outset it is important to state another limitation. It is too early in the two years old of the WSTF-Rolac to deliver evidence-based judgements and respond all the questions that have been asked in the objectives of the External Evaluation. “The primary purpose of the review is to “focus on the effective implementation of the WSTF....The consultants will examine selected programs to assess the extent to which they have had an impact on individual beneficiaries, communities and partners.<sup>18</sup>” Many projects and activities in Rolac are in the early stages of implementation. Instead the Consultant has tried to assess the progress of the program and its main activities to date and then attempted to project their comments, views and recommendations in a forward looking framework.

The evaluation in this Report should be guided by the following principles:

- **Formative and forward looking** – the evaluation will synthesize and assess results and lessons learned until now, but also suggest changes in design, mode of implementation, governance and management.
- **Strategically-focused** - it is not a technical review of the quality and relevance of specific interventions, but should assess the relevance, efficiency and effectiveness of policies, processes, partnerships and results.
- **Build on existing information and evaluations from the Trust Fund** – in particular the Mid Term Review, the more recent impact studies and available progress reports. Complementary data and information will be collected from selected country/program visits, interview with staff, partners and beneficiaries.
- **Focus on programmatic aspects** - issues of financial management will not be covered since a financial audit was recently carried out.
- **Recognize the special character of the Trust Fund.** The program seeks to develop and introduce new replicable models and social processes in the water and sanitation sector benefiting poor people in urban settings. Increased coverage of improved and sustainable W&S services are long-term aims, but the performance indicators are different and related to what extent new models are successfully developed and introduced.

## 2. POLICIES AND STRATEGY

### Clarity

The key objectives are well defined in the concept papers of the projects, and particularly in the Cooperation Agreements and Memorandum of Understandings<sup>19</sup> related with each project. These objectives were well understood by all the main stakeholders interviewed during the field visit.

<sup>18</sup> “External Evaluation of UN-Habitat’s Water and Sanitation Trust Fund” Inception Report

<sup>19</sup> See List and more details of CA and MoUs in Annex 4 and 5.

### **Is the Program contested? Is there a need to change direction and if so in what direction?**

The national authorities confirmed that UN-HABITAT approach was in line with the National Plan of Basic Services (in Bolivia) and with National Water Plan in Mexico. The signed MoU and AoC guaranteed with the national and local authorities guaranteed the conformity with national and municipal plans.

We find out conformity with the implementation of the initiatives. Perhaps, the Ecological Sanitation alternative needs more time and more awareness and educations campaign to be better understood by the local population.

At the Municipal Government of La Paz, mentioned that UN-HABITAT administrative procedure and the procedure to sign the MoU was too rigid and inefficient It should be more flexible on a strategic level rather than on an operational level and to focus more on policy development, sanitation & capacity building in the coming phase

## **2.2 Relevance.**

### **Is the current strategy relevant?**

The strategy was found relevant in Mexico and in Bolivia because the projects and activities point out to the removal of the barriers that constrain the provision of watsan services and the flow of sustainable services to the urban poor:

- Targeting to peri-urban and urban poor areas with congestion and high population densities and unplanned growth
- Strengthening the software developments: the processes, models, and techniques appropriate for implementing pro-poor governance frameworks needed to reach peri-urban poor communities and vulnerable families with sustainable watsan services.
- Improve the efficiency at WatSan providers, reducing high levels of unaccounted water in urban areas and strengthening the capacities
- Promote community-led approaches and appropriate sewage treatment systems for small communities

In Bolivia, the program points to the objectives of improving the quality and coverage of water and sanitation services in peri-urban areas and by promoting pro-poor governance strategies. A well consolidated partnership between international Ngo\*s, technical institutions and local governments allows a testing and diffusion of sustainable sanitation solutions that could be incorporated in the IADB peri-urban program (particularly in peri-urban areas of Cochabamba).

In Mexico, the program is focused to address the needs of the poor by improving sustainable water and sanitation services in small towns and growing peri-urban areas, increasing the implementation of wastewater treatment systems, deepening transparency and accountability of water and sanitation services provision and building capacities for risk management and adaptation to climate change in the water sector. Water availability is also a major challenge in specific areas of the country, therefore the relevance of IWRM in urban settings and the development of new water culture in order to step-up awareness in society on water demand management principles.

The Program has focused on improving governance in water and sanitation management through a combination of instruments oriented to have impact on both supply and demand factors: (i) social auditing and monitoring processes through Citizen Observatories (Mexico) and (ii) development and adoption of appropriate WatSan technologies (SuSan and DSS in Cochabamba) , (iii) capacity-building for small and intermediate water operators and (iv) institutional and policy strengthening for water adaptation to climate change, through participatory vulnerability assessments at local level.

The support to the Managua municipal collection of solid waste did not target the poor or the periurban areas. In fact, it was oriented to the entire city of Managua, both formal and informal areas.

#### **Does it build on UN-Habitat's strengths (comparative advantage)?**

Certainly, it does. The WatSanLAC Program in Bolivia focuses on periurban areas, a UnHabitat comparative advantage. In Mexico others institutions, like the Interamerican Development Bank has included this target in its more recent approved loan, but the emphasis goes to the infrastructure loans which also benefit the cities, but which do not have a specific pro-poor focus.

The UN-Habitat has an acknowledged comparative advantage in the sector for partnership building. By its UN Agency nature, it is able to forge partnerships at different levels – with national and local governments, with communities targeted for sustainable service provision, with international and regional banks, and with local and international NGOs. This represents the key comparative advantage of UN-Habitat which is perceived and acknowledged by IADB and other Multilateral Organizations. The development of two regional Nodes for SuSan technologies in Centroamerican and Andean countries represents another aspect of this comparative advantage. Another comparative advantage is related to its ability to forge partnerships at different levels – with national and local governments, with communities targeted for sustainable service provision, with regional banks and with local and international NGOs. The presence of UNHabitat has facilitated the partnership of NGOs and IADB.

#### **Is it technically sound?**

We have visited the Decentralized Waste Water Treatment in Cochabamba, and its technical aspects were guaranteed by the intervention of a specialised firm. In Mexico, the AoC with IMTA (Monterrey Technological Institute of Water and Sanitation), represent an effort to guarantee an adequate technical assistance to SEDESOL (the Social Development Ministry). In Nicaragua, the contributions to the Solid Waste Management System in Nicaragua have been implemented with technical support.

#### **Is it environmentally sound, socially acceptable and sustainable?**

The Sanitation Solutions (DSS, Ecological Sanitation and SuSan) proposed in the Projects implemented in Bolivia and Mexico have been designed to guarantee a sustainable solution, also from the environmental point of view.

## **2.2 Is the strategy well balanced?**

#### **Is there an appropriate balance between building replicable models versus providing and scaling up services?**

A benefit could be derived from the work on developing models, processes, and tools like poverty mapping, community and gender empowerment processes and formation of self-help groups at community level, as well as small community managed sanitation system, or decentralized Wastewater treatment based in artificial wetlands, among others. These initiatives strengthen the pro-poor governance, and will have a use and impact well beyond the boundaries of the project. We have received indications that multilateral financial institutions like the IADB consider this benefit to be one of the most useful contributions of the WSTF-LAC.

The strategic partnership with IADB could be an instrument to providing follow up and scaling up services. WatSanLAC could participate not only at the pre-investment phase of the Project Cycle, but also at the monitoring and follow up phase.

#### **What is the significance of up-stream policy advocacy and development at national and international level versus local operational activities?**

In addition to projects specific to national contexts, the Programs include themes and activities that recur across the region and serve to integrate initiatives into a cohesive whole.

These themes and activities help to build networks between water and sanitation projects at country level that share common characteristics and challenges. By creating opportunities for practitioners to meet and discuss experiences, they also ensure that lessons can be shared and best practice can be difussed.

The main thematic areas in which WatSan-LAC has been working in the region are:

Gender mainstreaming for enhancing awareness of gender issues in water and sanitation .

WatSan-LAC collaborate with the Gender Water Alliance (GWA), which has the objective of providing tools in mainstreaming gender in water and sanitation projects and developing a monitoring mechanism for the integration of gender-related issues in ongoing projects.

Human Values Based Water, Sanitation and Hygiene Education (hvbwshe).

Through the HVBWSHE methodology, WatSanLAC integrate a new ethics and behavior change amongst service providers and users to ensure more equitable and sustainable service provision related to water and sanitation. The improvements in water management have to be accomplished by a combination of technical or regulatory measures; complemented with advocacy, awareness-raising and education activities. This values-based approach can bring about positive attitude changes and create a new water use and hygiene ethic in society.

These methodologies has been integrated in different projects within the WatSan-LAC Program through collaboration with Project Wet, to develop country-specific educational materials and resources for WatSan-LAC Programs; conduct training of trainers and school teachers in each of the countries, and; implement small demonstration projects which illustrate the objectives of water conservation and reduced use of resources.

Promotion of new approaches in sanitation in Central America and the Andean Region.

UN-HABITAT is supporting 2 knowledge nodes for sustainable sanitation in Central America (Honduras, Guatemala, El Salvador and Nicaragua) in partnership with RASSCA an the other node had benn launched in Bolivia in partnership with SNV, SEI, WFP and DINESBI . The knowledge nodes are group of entities and organizations of the water and sanitation sector, including private companies, service providers, international and national NGOS, government entities, technical institutions and other.

They work on strengthening capacity of key actors and stakeholders of the water and sanitation sector in all aspects of sustainable sanitation; advocating for including sustainable sanitation approaches in national policies, standard designs and in the formal education curricula; and validating the concept of sustainable sanitation in local context.

UN-HABITAT is collaborating with Stockholm Environment Institute (SEI), SNV, RRASCA (Central America Network for Water and Sanitation), Water for People, and others, to support the work of the knowledge nodes.

UN-HABITAT has supported networks in the Region and the following advocacy activities:

- The FOCARD-APS (Foro Centroamericano y República Dominicana de Agua Potable y Saneamiento) in the organization of the pre-LATINOSAN meeting in Costa Rica to prepare a regional common view to be presented in LATINOSAN conference.
- A Capacity Development Workshop for Water Journalists in the LAC region has been organized in partnership with UNW-DPC and UNESCO International Hydrological Program (IHP), focused on adaptation to climate change in the water resources management and water supply sectors. The workshop brought together water journalists and media professionals from LAC countries representing different print and electronic media (radio, television, newspapers, Internet, etc.) to discuss and exchange experiences and lessons learnt about water issues and better strategies of communication.

**Has the program effectively combined normative and operational activities?** Essentially, the WatSan Trust Fund has designed as a model-building and an example-setting undertaking, rather than as a coverage-service provider. However, achieving its model-building goals requires that it pursues some limited, but necessary coverage activities. This is the case in Bolivia, with the Periurban Projects in Cochabamba and particularly the ISWM in Nicaragua.

There are significant value additions from the Program activities: Making a direct contribution to improved water and sanitation coverage and to general improvement in the lives of slum dwellers in those locations where the Program is operational, it also addresses key barriers to the expansion of services to the urban poor and to small urban areas.

The WOP program and the strengthening of watsan operators efficiency projects provide capacity building componentes and is much appreciated by the utilities. The capacity building started in advance of the physical construction.

The program provided trucks and equipment to the Municipal Government of Managua in the framework of the integrated solid waste management initiative. In case of the eco-sanitation program in Cochabamba, the partner NGO's did the social mobilization and hygiene promotion as a part of the promotion and difussion of the ecosan alternative.

There is a good balance between hardware and software outputs.

Fostering experimentation on hardware outputs for pro-poor governance were impemented in a complementary way with developing tools and processes for community development and empowerment.

The use of 'software approaches' including innovative community development tools (e.g. poverty mapping), models and processes are considered to be useful complements to IADB and others regional investment projects. Water governance and civil participation is working well and is much appreciated in Bolivia and Mexico (ie Citizen Obsaervatories,...). And they are viewed by the IADB and some private entities to be of considerable value.

There is a strong emphasis on promote demand responsive household ecosanitation

The normative work has received the support of public policy and it is implemented in colaboration with Watswan partners on the ground. Value-based education is relevant and well-targeted (school children and teachers), and it is implemented with some innovations in Bolivia and integrated with other pilot projects.

### **Does the development of manuals, tools, standards get sufficient attention?**

In the framework of the capacity building, WatSanLAC has developed training materials and some guidelines in coordination with its partners. The WATSAN Normative Manuals and a selection of the most relevant UN-Habitat publications have been translated in Spanish. In 2010 the Handbook "Constructed Wetlands manual" was translated, printed and disseminated in the Region.

### **Any involvement in advocacy and policy development?**

The involvement of WatSanLac in the development of the water policy has been limited to some assistance to Bolivian Government, El Salvador and the Policy Dialogue on Climate Change and Water resources in Mexico. This is a field of which the involvement of UN-Habitat should be encouraged. Especially as the progress of the reform in the water sector in LAC countries is critical for the success and sustainability of any support to the watsan sector on all political levels (from municipalities to the central governments).

### **Has the program been able to combine effectively different forms of assistance?**

The program has successfully integrated water and sanitation and solid waste management in some projects. It is the case of Periurban projects in Cochabamba and Santa Cruz-Bolivia. There are proposals to replicate and scale up an integrated sanitation project on poor urban areas, it has not yet been incorporated on the going IADB "Periurban program".

## **2.3 Is the strategy sufficiently focused?**

### **Are scarce resources spread on too many countries, thematic areas and programs?**

WSTF-Rolac activities are being developed at an early stage of the Program consolidation. The first efforts were focused on consolidating the WatSan LAC offices in the countries of interventions, then the Program explores a wide range of areas with a cost-effective organization in the ground with a clear objective for putting the agency program as a strategic partner in the water and sanitation sector in the region.

It is time to elaborate a Regional Strategy for WatSan in ROLAC. Perhaps, the priorities and the process of expansion to other countries need to be reconsidered in view of the recent experience and the future scenario of funding the activities in ROLAC Countries. There is evidence of high productivity of program activities.

The focus of the activities in Mexico, Bolivia and Nicaragua seems appropriate at this stage of the Program implementation.

### **What are the plans for future expansion/consolidation?**

The program has grown and the Rolac Staff considered it is time to elaborate a Strategy for UN-Habitat water and sanitation programs in the region. Some key areas in which UN-Habitat can give added value are already identified as:

- Mitigation measures for climate change impact in the Andean Region and Mexico;
- Promotion of sustainable sanitation networks and technologies;
- Promotion of Human Based Values WatSan Education;
- Support the recently declared by the UN Human Right to Water among decision makers; and monitoring of the water and sanitation sector in the region.
- Water Governance and civil participation as the main line for Mexico program;
- Integral water and sanitation projects and piloting low-cost innovative technologies for sustainable sanitation in peri-urban areas as the main line for Bolivia program;
- Support to small water and sanitation service providers in Central America, through activities of technical assistance, piloting innovative financing mechanisms, and others.

### 3. ORGANIZATIONAL PROCESSES AND FINANCIAL RESOURCES

#### 3.1 Does the program have the right staff?

At the Country level, Bolivia, Mexico and Nicaragua have a minimum and highly productive staff in operation. In Bolivia, the WatSan office has been sharing the same installations with UNDP in La Paz city, and with UNIFEM in Cochabamba. There is collaboration from UNV, appointing two volunteers as part of the WatsaLac team in Bolivia. The local staff have claimed the need to strengthening the local team, with new incorporation. There is a need of technical staff specialized in monitoring and follow-up. The local staff has claimed also for training in relevant areas: climate change, decentralized and sustainable sanitation, fundraising,

#### 3.2 Does the program have adequate systems for planning and reporting:

##### Are priorities and plans realistic?

At the start up, the priorities and plans for WatSan-LAC were focused on consolidating the agency as a strategic partner in the water and sanitation sector in the region.

A strategic partnership has been forged with the Inter-American Development Bank (IADB) to achieve greater leverage in the flow of resources and concerted actions in selected countries across the region. Since the signing of the memorandum of understanding (MoU) between both institutions (2008), different forms of cooperation between both institutions are being formalized in Bolivia, Colombia Mexico, Peru and El Salvador. At regional level, this partnership has developed a collaboration network between water and sanitation operators in Latin America and the Caribbean, called WOP-LAC. This network has been established successfully also with the collaboration of AIDIS (the Inter-American Association of Sanitary and Environmental Engineering) and IWA (International Water Association).

During 2010, main focus was to consolidate the programs in Mexico and Bolivia and to expand the activities in Central America and the Andean Region. Current operational activities are ongoing in Bolivia, Colombia, Ecuador, El Salvador, Mexico, Nicaragua, and Peru.

At the country level WATSAN LAC has set the priority in the following areas:

- Strengthening Central and Municipal authorities in the pursuit of the water related MDGs;
- Support institutional development;
- Strengthening of water education and water culture, with special emphasis on themes related to public health, hygiene and water resources conservation;
- Institutionalization of a more participatory, transparent, and accountable water governance;
- Support the mainstreaming of water adaptation to climate change; and,
- Strengthening of water and sanitation operators.

WatSan LAC has developed themes and activities at regional level, integrating initiatives into a cohesive whole. These themes and activities help build regional and sub-regional relationships between water and sanitation projects that share common characteristics and challenges. By creating opportunities for practitioners to meet and discuss experiences, they also ensure that lessons can be shared and best practice can be adjusted.

The thematic areas in which UN-HABITAT has been working at the region level are:

- Gender Mainstreaming For Enhancing Awareness Of Gender Issues IN Water And Sanitation
- Human Values Based Water, Sanitation And Hygiene Education (Hvbwshe)

- Promotion of New Approaches in Sanitation in Central America and The Andean Region.
- Support To Networks in the Region And Advocacy Activities.

In summary, during these three years, WatSan LAC achieved to be considered as a key stakeholder in the region, forging partnerships with IADB, different governments, civil organizations and NGOs, technological institutions, and other actors.

The target areas and the proposals from 2009 to now, seem to be realistic related with an Entry strategy for the WatSan-LAC Program based on a strong partnership network. The partnership with IADB appears to have played a key role since the start of activities. In particular, both institutions have complementarities and potential synergies. WatSan as a model tester and implementing pilot projects on adequate solutions for urban poor. And the IADB as a Regional Development Bank financing large investments projects.

The program has successfully implemented several strategic lines at country and regional level, it is now needed to set up a Regional strategy for UN-Habitat water and sanitation programs to focus WATSAN LAC activities. The Program needs to assess the real extent of the partnership with the IADB and the potentialities to be developed with a more balanced strategy of regional and multilateral partners.

#### **Are plans and projects carried out in a timely manner?**

The schedules and deadlines have been met within an acceptable range. The Consultant found some difficulties in the timing execution of projects related with some cooperation agreement with municipal governments. This was the case of the Project Barrios de Verdad with the Municipal Government of La Paz (Bolivia) and the Citizen Observatory to be installed in the Municipality of Ecatepec (Mexico).

In addition, the Municipality of La Paz complaint of delays and lack of flexibility of global procedures in UNHabitat to take in account the timing at municipal level. The consolidation of the process of decentralization at UnHabitat can improve these difficulties with the coordination with municipalities timing.

#### **Are plans based on sound analysis and judgment?**

That projects at country level are identified from the national and local diagnose that have been done by the academic institutions, the national and local authority, the multilateral institutions and UN Agencies.

It seems the plans were based on sound analysis and judgment at the start out. The Program has grown and it needs for a Regional and Country Strategy.

#### **Are activities adequately monitored and reported on?**

WatSanLAC has instrumented a basic system of monitoring Not SMART indicators have been implemented. The reporting system is focus mainly on activity and output reporting. There is a need to implement the assessment of outcomes and impacts, including spread and sustainability of impact.

### **3.3 Does the program have an effective organizational structure?**

#### **Does the organisational structure have a clear and effective division of responsibilities at all levels?**

The organisational structure of WATSAN-LAC is based on a very cost-effective structure, and it corresponds to the start up phase of the program. The national CTAs have the responsibility of identification, design and



implementation the projects and initiatives. They have a real presence on the ground. In Bolivia, Mexico and Nicaragua the CTA has had 2 or 3 assistants.

Since 2010, the WatSan-LAC has benefitted of a greater decentralization and autonomy to ROLAC for the planning and the implementation of the Program. This has resulted in great comparative advantages in the strategic planning of the Program. The general subsidiary principle worked well, with a greater prospect of synergies and coherence between country and regional programs, and a more coherent and effective approach to regional donors and strategic partners.

There is a need to more decentralization and in particular the management of the IWSM Program, that has been implemented in Nicaragua during 2008-2010. Now, there is a need for more synergies and better coordination with other programs in LAC at Country or Region level.

#### **Are the channels of communication effective?**

The channels of communications between WatSanLAC and its partners seems to be good, as they confirmed us to be satisfied with the work modality adopted with WatSanRolac in Bolivia, Mexico and Nicaragua. There is a need to implement a clear communication strategy.

#### **3.4 What are the financial achievements?**

WatSan-LAC has financed activities through the contribution to the general Water and Sanitation Trust Fund. In all period from 2008 to 2010, WSTF has funded a total of US\$ 6.019.837, only the 59% of these financial funds have been managed from ROLAC.

Since 2009, the WatSan-LAC staff in Mexico and Ecuador has played a key role instrumenting the design and implementation of ROLAC's water sector related projects, supported by the UNDP-Spain Millenium Development Goals Achievement Fund (MDG-Fund). The funding of these activities has represented US\$ 1.852.703 in all three years (24% WatSan-LAC funding).

Table

**Total Financial Contributions by Fund**  
per/Country and per/Year (in US\$ dolar)

UN Habitat	Fund	Managed from	2008	2009	2010	TOTAL 2008-2010	
BOLIVIA	WSTF	ROLAC	647.710	450.000	239.000	1.336.710	17,0%
MEXICO	WSTF	ROLAC	115.000		363.000	478.000	6,1%
EL SALVADOR	WSTF	ROLAC		300.000		300.000	3,8%
REGIONAL	WSTF	ROLAC		560.000	330.000	890.000	11,3%
COLOMBIA	WSTF	ROLAC			252.406	252.406	3,2%
PERU	WSTF	ROLAC			300.000	300.000	3,8%
<b>Sub-Total</b>	<b>WSTF</b>	<b>ROLAC</b>	<b>762.710</b>	<b>1.310.000</b>	<b>1.484.406</b>	<b>3.557.116</b>	<b>45%</b>
<b>Solid Waste Mgmt</b>	<b>WSTF</b>	<b>W&amp;S Sec II</b>		<b>1.962.721</b>	<b>500.000</b>	<b>2.462.721</b>	<b>31%</b>
MEXICO	MDG Fund	ROLAC		212.086	332.109	544.195	6,9%
ECUADOR	MDG Fund	ROLAC		69.900	1.238.608	1.308.508	16,6%
<b>SubTotal</b>	<b>MDG Fund</b>	<b>ROLAC</b>	<b>0</b>	<b>281.986</b>	<b>1.570.717</b>	<b>1.852.703</b>	<b>24%</b>
<b>TOTAL</b>			<b>762.710</b>	<b>3.554.707</b>	<b>3.555.123</b>	<b>7.872.540</b>	<b>100%</b>

**How much additional resources are leveraged from partners?**

The WTSF-LAC had financial leverage funds for a total of US\$ 4.112.870 from partners. This funding represents the 54% of total contribution on these WatSanLAC activities. This estimation of leverage effect didn't include the IADB funding on projects like the Periurban Areas in Bolivia or Mexico.

The WatSanLAC have played also a catalytic role and leverage others funds, like the Spanish MDG-Funds for watsan initiatives.

Table

**Total PARTNERS Financial Contributions**  
per/Country and per/Year (in US\$ dolar)

Fund		2008	2009	2010	TOTAL 2008-2010
BOLIVIA	Partner	783.229	637.582	304.422	1.725.233
		55%	59%	56%	56%
MEXICO	Partner	191.500		509.000	700.500
		62%		58%	59%
EL SALVADOR	Partner		235.000		235.000
			44%		44%
REGIONAL	Partner		540.000	404.726	944.726
			49%	55%	51%
COLOMBIA	Partner			252.406	252.406
				46%	46%
PERU	Partner			255.000	255.000
				46%	46%
<b>TOTAL</b>		<b>974.730</b>	<b>1.412.584</b>	<b>1.725.556</b>	<b>4.112.870</b>
		<b>56%</b>	<b>52%</b>	<b>54%</b>	<b>54%</b>

## 4. PARTNERSHIP AND RESPONSIVENESS

The Program has started in simultaneously with the approval of the strategic partnership agreements with the IADB in 2008. This strategic partnership, have played a focus and catalytic role in the implementation of Program activities, particularly in Bolivia, Mexico, and in the others Andean Countries and CentralAmerica Countries.

WatSanLAC partnerships are working well with IADB (at regional and local level), with national and municipal governments in all project countries, with NGOs, with some private entities. This partnership strategy has been working well also with other UN Agencies that have helped with such products as pro-poor governance frameworks as well as poverty mapping and monitoring of the MDGs. However, the strength of field coordination with IADB has been variable, and there is a need to evaluate these experience and design a mid- term strategy with IADB at a country level.

This successfully partnership strategy has enable synergies and leverage effects on the implementation of the activities with the local communities in the development of tools, models and processes, but also in the implementation of software activities. This coordination has been developed and working well, especially in Bolivia and Mexico. Some small coordination problems were reported with the Municipal Governement of Ecatepec-Mexico and with de Municipal Governement of La Paz, that are related with the specificities related with the timing of local governments and the timing of international agencies.

### 4.1 Selection of partners

#### **What are the main partners (government, municipalities, private sector, NGOS)?**

The WatSanLAC Program has been conceived as a collaborative effort among the countries of the region, the Inter-American Development Bank (IDB) and UN-HABITAT. Since 2008, UN-HABITAT has made efforts to develop and manage a collaborative network for the Water and Sanitation for Cities Program in Latin America and the Caribbean with the participation of intergovernmental organizations, financial institutions, national and municipal governments, local authorities, organizations of civil society, technological institutions and research centers and community based organizations. The list of partners by country in described in Annex 4 and 5.

From the beginning, WatSanLAC has forged a strategic partnership with the Inter-American Development Bank (IADB) formalised with the signing of the MoU, with the aim of achieving a greater leverage in the flow of resources oriented to sector and concerted actions in selected countries across the region. Different forms of cooperation between both institutions are being formalized in Bolivia, Colombia, El Salvador, Mexico and Peru. In Bolivia, WatSan have collaborated in the design of the Peri-urban Program of Water and Sanitation, and there are good perspectives the future collaborations in the follow up and monitoring of the Project.

### 4.2 Harmonization and alignment

#### **Are the programs included in the UNDAF and the “One UN reform” processes?**

Yes, there is a key program in Mexico included in the UNDAF. The WatSanLAC is a lead partner of the Joint Program UN-MexicoOPAS1816 “Strengthening an effective and democratic management of the WatSan sector in Mexico to achieve the MDG targets”. (See Annex 5)

#### **Does the program participate in donor coordination processes?**

WatSanLac have been actively involved in coordinating with international donors at country level. Apart from the collaboration with IADB, the Program have developed a significant collaboration with AECID (Spanish Cooperation Agency) in Nicaragua, Bolivia and Mexico .

In Bolivia WatSanLAC is part of the local GRAS group (WatSan Donors Group - Grupo de Apoyo de la Cooperación al Sector Agua y Saneamient ) and it has explored potential synergies with other UN agencies (ie PAHO-OPS and UNIFEM).

In Nicaragua, the IWSM project have been implemented in a close collaboration with the AECID Agency, complement each other.

#### **Are programs parts of national and sub national sector plans?**

The officials interviewed at national and local governments in Bolivia, Mexico and Nicaragua confirmed that the WatSANLAC programs are in line with their national priorities and policies.

In Bolivia, all the the projects of WatSAN in the Periurban areas, are based in the National Plan of Basic Services, and they are focused on strengthening the core components of the water sector reform. In addition, the local projects in Cochabamba and La Paz have been designed in coordination with the Municipal Government, and they are part of their water plans.

In Nicaragua, the IWSM program contributed with a broader municipal program oriented to reform the sector.

In Mexico, the Water Sector Reform faces new challenges related with the adaptation of water resources to climate change. The WatSAN initiatives contribute to the development of the national and local policy response to climate change.

#### **Are the programs “owned” by and anchored within the national and local government systems?**

The design and implementation was done with the authorities of the Sector at the municipal or national level while capacity building was focused at the local authorities and watsan operators. Interviews with the authorities say that this contribution and capacity building has created a sense of ownership on local, provincial and national level.

The solid waste management project in Managua was designed and implemented with the Municipal authority, and it has strengthen the municipal capacity.

The sanitation projects in Peri-urban Areas of Bolivia have been implemented in cooperation with municipal government and local NGO's with a close relationship with the community and the neighborhood council.

### **4.3 Responsiveness**

#### **What are the new areas of involvement?**

ROLAC has considered as a relevant new area the Regional policy dialogue on climate change, the implementation of vulnerability mappings and local strategies for the adaptation of water resources to climate change. In a context of climate change and climate variability, it is generally expected that the frequency and intensity of extreme hydro-meteorological events –such as floods and droughts– will increase. Central America,, the Andean countries and Mexico have a high vulnerability to such phenomena. This vulnerability is a social construct derived from various interacting conditions, out of which the lack of coordination between the land-use planning, the risk and the water resources management systems is perhaps one of the most important.

Under the context of the SMDG-F Water Governance Project in Mexico, UN-Habitat's Mexico Country Office has developped a simple methodology to be used in the context of urban settlements, that includes the analysis of local climate variability scenarios, the implementation of a vulnerability assessment process and mapping, and the production of public policy recommendations measures that intend to bridge different policy sectors, including the water, the land-use/urban planning and the risk management policy.

In Nicaragua, the WATSAN Program has developed an integrated approach of SolidWaste Management, that have a great potential to be included in a integrated Sustainable Sanitation Strategy in the sub-regions of Central America and the Andean countries .

In Bolivia, the implementation of the Human Based Values WatSan Education Project has promoted the rescue of the ancestral Andean Vision of Water.

WatSanLAC has implemented a Pilot project on financial mechanisms and technical assistance to WatSan operators in EL Salvador. The results allow to promote and test new financing mechanism to improve water and sanitation coverage in Central America.

### **Is a phasing out strategy prepared?**

The WatSanLAC is in a phase of consolidation after two years of development of partnerships and successful strategic lines at a country and regional level.

There is a future scenario of conclusion of the Spanish funding to WSTF, this phase out strategy could limit dramatically the funding to WatSanLAC. The Program is evaluating to focus its activities to consolidate a core of partnerships and programs at a country and regional level. For the next years, the program has to increase its cost-effective target and to develop an active fundraising strategy.

### **To what extent is a system and practice of learning embedded in the program?**

The WatSanLAC has not yet included a strong training program. This was one claim of the local staff.

## **5. PRODUCTS AND SERVICES**

Most projects are in early stages of development and implementation. It is therefore difficult in the context of this consultancy to accurately predict their impact. Hence the focus of this Review will be process and forward-looking

### **5.1 Partner assessment**

In opinion of the IADB, the partnership IADB-WatSanLAC has been very successful in the implementation of the LAC chapter of the WOPs Program. At the Regional level, last year start another global collaboration related with the adaptation policy to climate change and the management of water resources. At the country level, this collaboration has been organized basically in the design and preparation of specific aspects of National Investments Programs. They considered that there are several possibilities to explore future new collaborations related with the follow-up and monitoring of national programs related with the water and integrated sanitation sector.

The Program is well valued by the national and municipal authorities contacted in the field visit and interviews, the WatSanLAC programs are aligned with national and municipal programs:

In Bolivia, the Ministry of the Environment and Water (MMAA), SENASBA and the Municipal Governments of Cochabamba and La Paz; - In Mexico, The Ministry of Social Development (SEDESOL), Ministry of Environment (SMERNAT) National Water Commission (CONAGUA), - in Nicaragua Municipality of Nagaua (ALMA), Ministry of Environment and Natural Resources (MAREWNA), AMUNIC Association of Municipalities. We received some complaints at the municipal government of La Paz about for some

The NGOs and Social Organizations appreciate WatSanLAC as a catalytic partner, facilitating and consolidating networks of public and private institutions and the financial leverage.

### **5.2 M&E systems**

The reporting and monitoring revised in situ by the Consultant focuses more on activities and outputs, and less on outcomes or impacts on people and institutions or on MDGs indicators. There are a follow-up of the Mou and

CA, but we didn't find arrangements to monitor and measure sustainability of the functioning and use of services and of institutions in and with the communities that have received service were not found to be in place.

### **5.3 Results and achievements**

In WatSanLAC Program, most projects are in a first stage of implementation. In the visits to several projects in Cochabamba-Bolivia, we have seen on the ground the real advances on the hardware and software developments. In particular We have seen a PTAR-D (Decentralized Treatment Plant for WasteWater) already installed and ready to operate at Alto Pagador neighbourhood in a peri-urban of Cochabamba.. The community has demonstrated full satisfaction and great expectation. But it is too early to assess the impact of them on infrastructure and hygiene awareness, health benefits or new employment. These watsan and wastewater treatment projects in Cochabamba are on track to accomplish their initial objectives.

#### **What innovations/models have been introduced?**

There are several innovations already commented and they are related with:

- The Vulnerability mapping for the identification of the local priorities for the Adaptation of Water resources to Climate Change (Mexico)
- The development and future implementation of Water Safety Plans (Mexico, Bolivia)
- An Integral Sanitation Approach including IWSM and a descenbtralized sustainable sanitation (Central America and Andean Region)
- The Financial mechanisms for cost recovering at Water Operators (El Salvador and others Central America countries)
- the Water and Sanitation Sector Monitoring, the development of Citizens and Water Observatories (Mexico, Bolivia)
- Strengthening the efficiency and capacity building at WatSan operators through the WOP-Lac project and the implementation of specific initiatives at a national or municipal level (Project ANEAS-UNAM in Mexico; and the Projects SENASBA-FEDECAAS

#### **What is the significance of policy advocacy and policy development at global and national level?**

Complementary with projects specific to national and local contexts, WatSanLAC support the development and diffusion of strategic themes and best practices between countries on activities that recur across the region and serve to integrate initiatives into a cohesive whole.

These themes and activities help to build networks between water and sanitation projects at country level that share common characteristics and challenges. By creating opportunities for practitioners to meet and discuss experiences, they also ensure that lessons can be shared and best practice can be honed.

The thematic areas in which UN-HABITAT has been working in the region are detailed in previous pages in this Report.

#### **What is the evidence of capacity and institutional development?**

The program is implementing several initiatives that aims to capacity building on WatSan Operators and institutional development of national and municipal activities.

This is especially clear with the WOPS-LAC, that have promoted 13 joint initiatives between several watsan operators in LAC region. Unfortunately it is difficult to quantify this progress as the WatSanLAC is in a phase of consolidation.

In Mexico the joint projects with ANEAS-UNAM and ITAM-SEDESOL are two promising initiatives based in two national technical and academic institutions with technical capacity and regional prestige.

In Bolivia, two projects focus to institutional development with the Municipality of La Paz and the Municipality of Cochabamba.

#### **To what extent are regional and local networks strengthened?**

The project is promoting several region networks that are developing synergies and complementarities between countries and institutions, but also they have an objective of spread technologies and best practices on sustainable sanitation and decentralized waste water treatment systems:

- RASSCA in Central America region
- DSS Network in Bolivia and others Andean Countries

UN-Habitat is also an active part of the Regional Dialogue on Water Adaptation to Climate Change, having participated on COP-16 and to support future initiatives in the LAC Region

#### **Gender mainstreaming**

WatSan collaborate with the Gender Water Alliance (GWA), with the objective of providing tools in mainstreaming gender in water and sanitation projects and developing a monitoring mechanism for the integration of gender-related issues in ongoing LAC projects.

Under this collaboration, ten workshops have been developed including a Training of Trainers: - eight workshops in Nicaragua, Ecuador, Mexico and Bolivia, and - one regional workshop to share experiences within this project.

WatSanLAC is contributing on the implementation of a "Gender Resource Book" in Spanish.

#### **To what extent are UN-Habitat manuals and guidelines disseminated and utilized?**

In 2010 WatSanLAC translated and published the "Manual de Construcción de Humedales" (Handbook to build wetlands for Decentralized WasteWater Plants). The development of a "Gender Resource Book" in Spanish is on track.

#### **What is the evidence of replication?**

The strategic partnership with the IADB, the coordination with national and municipal authorities, and the participation and empowerment by the community since early stages of the projects, let's be optimistic on the future replication of the pilot and demonstrative projects on Peri-urban and poor urban areas.

### **5.4 Future sustainability**

Although in their early stages, some country programs are showing signs of promise. Assured long term funding and a field management retention policy should enable continuity and enhance the prospects of sustainable impact.

After these 3 years of forging strategic partnerships and networks of stakeholders in the water sector, there is a need of a regional and country level strategy for Un-Habitat in water and sanitation programs in the region. This strategy have to be in accordance with the MDG and the comparative advantages of WatSanLAC, but also with the future scenarios of funding and the successfully experience of WatSan since 2008 in the region.

- Are the program results and benefits likely to be durable?
- Will the WSTF be sustained? If so under what conditions?

The WSTF-ROLAC relies heavily on the Spain Cooperation as the only source of funding. This represents a critical weakness for the Program. There is a need for fundraising and the exploration of news mechanisms of

funding the WATSAN activities in the Region. The IADB and others multilateral financial institutions could fund some specific contributions with the design, implementation and monitoring of the investment projects. But the main WatSanLAC activities of model setting and diffusion and software development have to be funded by the International Cooperation.

## 6. FINAL RECOMMENDATIONS

### GENERAL RECOMMENDATIONS

The WatSanLAC has grown and consolidated a cost-effective regional and country organization. The recommendations of this External Evaluation are oriented to provide a forward looking impetus to the regional programs, structured in six main axes:

- There is a need to continuing focus the program around pro-poor water governance, with an emphasis on an integrated watsan approach with community-based and community-led approach. An Integrated Water-Sanitation Approach including the ISWM has to be adopted.
- It's time to develop a medium term strategy for the LAC Region and at country level with clear and measurable goals on which to base a performance monitoring and an evaluation system including goal, outcomes and impact. All main partners have to be involved in the process of development of the strategic plans at country level.
- Move reporting systems beyond activity and process reporting to the assessment of outcomes and impacts, with gender-based disaggregation of information as an enduring feature. Include incremental growth of MDG-targeted access. Monitor capacity-building outputs incrementally by country, towns, institutions, subject areas and types, levels and sex of participants to produce progressive overviews and allow comparisons. Consider evaluation to assess spread and sustainability of impact.
- It's time to focus on consolidation and ensuring the sustainability of the program, drawing on its comparative advantages and its innovative characteristics. The program has to renew the partnership with the multilateral regional institutions and its funding strategy. The Program needs a more balanced strategic partnerships, in particular with the Regional and Multilateral Institutions.
- The need to consolidate the decentralization process, oriented by criteria of subsidiarity to improve efficiency and to promote a coherent and effective LAC Regional approach.
- The program should continue to be focused on software development issues. The hardware development should continue to be restricted at demonstrating the efficacy of the software models being developed and promoted under the program.

### Programmatic recommendations

The WatSanLAC Strategy need to focus on:

- the development and dissemination of models for pro-poor watsan governance in urban and peri-urban areas
- water demand management and community-based sanitation and waste treatment
- incorporating the adaptation of water resources to Climate Change



In addition to these key areas, the gender mainstreaming and value-based education embedded in this core business work.

There is a need to improve the M&E, introducing outcome and impact indicators and with the implementation of SMART indicators, including the monitoring of the MDG. Improving the M&E would strengthen the efficiency on project management, but it could help promote the model building capacities of WatSanLAC. The regional programs have to be assessed for their actual and potential impact in the concerned country programs in the LAC Region.

The strategic partnership with the IADB needs a second push. The recent successfully experience at a regional level (WOPS-LAC ) and in Bolivia (Periurban Project) and Mexico (ProPoor Sanitation in poor urban areas and Adaptation to Climate Change) has to be assessed, to explore news areas of collaboration to explicitly adopt the integrated approaches of sanitation more appropriate to peri-urban areas, including the scaling up of proven pro-poor approaches in scaling up.

There is need to identify new partners among other regional or international funding agencies for watsan investment projects in poor urban areas. The partnership with IADB, is not exclusive, and WatSanLAC could and have to identify another strategic partners funding investment projects on the water sector like the CAF (the Andean Financing Corporation). The development of replicable models and pilot projects can be assured only when there is a follow-up investment that incorporates pro-poor sustainable solutions. In this context, the WatSan pilot projects will serve also for capacity building for community and local stakeholders' effective participation in the follow-up investment project.

Regardless of the scenario for future funding of the Program, it is relevant to consider the formulation of exit strategies that ensure sustainability. WatSan has to coordinate with national and local authorities, NGOs and communities to monitor and manage sustainability. Each project has to identify the appropriate mechanism to ensure the technical, operational, institutional and financial sustainability.

WatsanLAC will elaborate its own publication policy and strategy to guide which documents are taken up under the normative work. The production of documents have to be linked with dissemination plans to ensure field usage and advocacy, particularly in each country context and plan dissemination and assessment of use and impact.

Maintain continuity of capacity building in, and operationalization of, gender approaches, including exchange of information between partners on constraints, problem-solving and best practices.

The continuity, with application on the ground, of capacity building, communication and media support and gender mainstreaming, deserves to be supported.

### **Managerial Recommendations**

Consolidate the subsidiarity principle related to the decentralization on the WatSanLAC management.

Ensure the recruitment and retention of CTAs in the priority countries with field experience and the capacity and credibility to work with national and municipal authorities and NGOs. Ensure the adequate staff for the development of the activities in execution. Improve the balance between technical and social expertise within the IWSM program.

Implement an internal plan for capacity building the Watsan staff in key areas: sanitation fundraising, adaptation to Climate Change, Develop standards and benchmarks for administrative work with Operating regulations and procedures manuals.

Consolidate current performance in the priority areas and develop a realistic strategy before expanding to other countries.

## ANNEX 1

### AGENDA OF FIELD VISITS AND INTERVIEWS: Hugo Roche

City	Schedule	Institution		Interviews/Participants					
Rio de Janeiro	10h00-17h00	WTSF-ROLAC	Interviews and presentations	Stein-Erik	Victor Arroyo	Celia Bedoya	Tomas López de Bufala		
	10h00-14h00	UN-Habitat ROLAC-Evaluation coordinator-	Criteria &Methodology of the Evaluation	Stein-Erik	Victor Arroyo	Celia Bedoya	Tomas López de Bufala		
La Paz		UN-Habitat Bolivia	Interview and Program presentations	Claudia Vargas					
	11h15-12h30	BID-IDB	Institutional Interview of Strategic Partner-Regional Bank	Marcelo Barros					
	14h30-15h15	Fundación Plan Internacional	Institutional Interview of Strategic Partner-NGO	Ximena Ostria					
	17h00-18h15	SNV	Institutional Interview of Strategic Partner-NGO	Julio Garret	Eduardo Quiroz				
	18h30-19h30	Water for People	Institutional Interview of Strategic Partner-NGO	Betty Soto					
	10h30-11h15	Ministry of Environment and Water- Bolivia	Meeting with National Authorities	Myragliha Giles					
	12h00-13h00	Municipal Government of La Paz (GMLP)	Meeting with Municipal Authorities	Patricia Grossman					
Cochabamba	15h30-17h00	SENASBA-I&DT Department	Meeting with National Authorities	Ema Quiroga	Lorena Ferreyra				
	8h30-9h30	EMAPAS- Sacaba District	Institutional Interview of Strategic Partner-Private Sector	Oscar Zelada					
	9h30-10h00	Municipal Government of Cochabamba	Meeting with Municipal Authorities-Water and Infrastructure	Leonardo Anaya	Claudia Vargas	Victor Arroyo			
	10h30-13h00	Water for People	Interview with NGO and Visit several Project sites	Hilda Cuentas	Claudia Vargas	Victor Arroyo			
	14h30-17h00	Fundacion Agua Tuya	Interview with NGO and Visit several Project sites	Antonio Becerra	Leonardo Manani	Pedro Barrientos	Claudia Vargas	Victor Arroyo	
Managua	8h00	UN-habitat Nicaragua	Interview and Program presentations	Jane Olley	Victor Arroyo				
	9h00-10h30	MARENA	Meeting with National Authorities	Roberto Araquiatain	Mª Gabriela Abarca	Jane Olley	Victor Arroyo		
	14h00	UN-habitat Nicaragua	Interview and Program presentations	Jane Olley	Victor Arroyo				
	9h00-10h30	Alcaldía de Managua (ALMA)	Meeting with Municipal Authorities	Daysi Torrez	Cesar Castaneda	Xochil Lacayo	Mario Asencio	Jane Olley	Victor Arroyo
	10h30-12h00	ALMA-Taller Central y Taller Los Cocos	Visit of Proyect sites at Municipal facilities	Victor Sandoval	Wilmer Aranda	Arnaldo Osorio	Jane Olley	Victor Arroyo	
	14h00-15h30	AECID	Institutional Interview of Strategic Partner-Spanish Cooperation	Jose Mariscal	Mauro Cid	Jane Olley	Victor Arroyo		
	16h00-17h00	AMUNIC Association of Municipal Authorities	Institutional Interview of Strategic Partner	Nubia Luna	Roberto Garcia	Jane Olley	Victor Arroyo		
Mexico DF	15h30-18h00	UN-Habitat Mexico	Interview and Program presentations	Roman Gomez	Diana Siller	Rosalva Landa	Victor Arroyo		
	18h00-19h30	SEDESOL	Meeting with National Authorities	Evangelina Mejia	Helene Dupre	Roman Gomez	Victor Arroyo		
	9h00-11h00	OPAS 1816-Millenium Fund- Spain	Institutional Interview of Strategic Partner	Cesar Herrera	Rosalba Landa	Roman Gomez	Victor Arroyo		
	12h00-14h00	UNAM-ANEAS	Institutional Interview of Strategic Partners	Antonio Galan	Jorge Montoya	Roman Gomez	Victor Arroyo		
	16h00-18h30	Consejo Consultivo del Agua	Institutional Interview of Strategic Partner-NGO	Eduardo Vazquez	Veronica Mendez	Roman Gomez	Victor Arroyo		
	18h30-19h30	Fund. para la Comunicación y Educacion Ambiental	Institutional Interview of Strategic Partner-NGO	Teresa Gutierrez	Roman Gomez	Victor Arroyo			
Cuernavaca-Morelos	10h00-14h00	IMTA	Institutional Interview of Strategic Partner-Technological sector		Fernando Reyna	Roman Gomez	Victor Arroyo		
Mexico DF	16h00-18h00	CONAGUA	Meeting with National Authorities - Water Sector	Estrellita Fuentes	Griselda Martinez	Collin Heron	Roman Gomez		
	9h00-10h30	ANEAS-WOP-LAC Mexico	Institutional Interview of Strategic Partner-Water Operators	Roberto Olivares	Roman Gomez				
Tepztlan-Morelos	12h00-14h30	SARAR	Institutional Interview of Strategic Partner-NGO	Ron Sawyer	Hazett Cervantes	Roman Gomez			

**AGENDA OF PERSONAL INTERVIEWS (1/2) : Hugo Roche**

Country	City	1st Name	Last Name	Institution	Institucional Function	
BOLIVIA	La Paz	Marcelo	Barros	BID-IDB	OPERACIONES	Jefe
BOLIVIA	Cochabamba	Antonio	Becerra	Fundacion Agua Tuya	Proyectos	Coordinador
BOLIVIA	Cochabamba	Leonardo	Anaya	Gobierno Municipal Cochabamba	Infraestructura Territorial	Oficial Mayor
BOLIVIA	La Paz	Patricia	Grossman	Gobierno Municipal La Paz	Direccion Cultura Ciudadana	Directora
BOLIVIA	La Paz	Niraglhia	Giles	Minsiterio Ambiente y Agua	Programa Saneamiento en areas Periurbanas	Coordinadora
BOLIVIA	La Paz	Ximena	Ostria	Plan Internacional	Finanzas	Gerente Nacional
BOLIVIA	La Paz	Gustavo	Salazar	Plan Internacional	Infraestructura	Asesor de Programas
BOLIVIA	La Paz	Lorena	Ferreyra	SEBNASBA	Unidad I&D	Jefa de Unidad
BOLIVIA	La Paz	Emma	Quiroga	SEBNASBA	Direccion	Directora Gral Ejecutiva
BOLIVIA	La Paz	Julio	Garret	SNV-LA Bolivia	Gerente Representante	
BOLIVIA	La Paz	Eduardo	Quiroz	SNV-LA Bolivia	Nodo Saneamiento Sostenible Descentralizado	Asistente Coordinacion
Bolivia	Cochabamaba	Marcelo	Encalada	UN-Habitat	WSTF-Cochabamba	Oficial Proyecto
BOLIVIA	La Paz	Claudia	Vargas	UN-Habitat	WSTF-Bolivia	CTA
BOLIVIA	La Paz	Betty	Soto	Water for People	Coordinadora pais	
BRASIL	Rio de Janeiro	Victor	Arroyo	UN-Habitat	ROLAC	Regional CTA
BRASIL	Rio de Janeiro	Celia	Bedoya	UN-Habitat	ROLAC	Programme Officer
BRASIL	Rio de Janeiro	Tomas	López de Bufala	UN-Habitat	lobal Water Operators Partnerships Alliance	Oficial de Programa

**AGENDA OF PERSONAL INTERVIEWS (2/2) : Hugo Roche**

Country	City	1st Name	Last Name	Institution	Institucional Function	
MEXICO	Mexico DF	Jorge	Montoya	ANEAS	Asuntos Nalews.	SubDirector
MEXICO	Mexico DF	Roberto	Olivares	ANEAS	Director General	
MEXICO	Mexico DF	Estrellita	Fuentes-Nava	CONAGUA	Office for Planning	Deputy Director-General
MEXICO	Mexico DF	Veronica	Martinez	Consejo Consultivo del Agua	Proyectos	Coordinadora
MEXICO	Mexico DF	Eduardo	Vazquez	Consejo Consultivo del Agua	Executive Director	
MEXICO	Cuernavaca-Morelos	Fernando	Reyna	IMTA	Comunicación	Coordinador
MEXICO	Mexico DF	Cesar	Herrera	OPAS 1816 - Fondo del Milenio	Coordinador	
MEXICO	Mexico DF	Bruno	Castillo	SEDESOL	Desarrollo Social y Comunidad	Director
MEXICO	Mexico DF	Octavio	Cerda	SEDESOL	Programa Habitat	Director Evaluacion
MEXICO	Mexico DF	Helene	Dupre	SEDESOL	Programa Habitat	Coordinadora Institucional
MEXICO	Mexico DF	Antonio	Galan	UNAM	Educacion Cont. Y a Distancia	Secretario Academico
MEXICO	Mexico DF	Maria Dolores	Franco	UN-Habitat	Coordinadora Nacional	
MEXICO	Mexico DF	Roman	Gomez	UN-Habitat	WSTF	CTA
MEXICO	Mexico DF	Rosalba	Landa	UN-Habitat	Especialista CC	
MEXICO	Mexico DF	Diana	Siller	UN-Habitat	F-ODM	PCAyS
NICARAGUA	Managua	Mauro	Cid	AECID	Asistente Coordinacion	
NICARAGUA	Managua	Jose Manuel	Mariscal	AECID	Coordinador Gral	
NICARAGUA	Managua	Mario	Asensio	Alcaldia de Managua	Proyecto Residuos Solidos	Consultor
NICARAGUA	Managua	Cesar	Castaneda	Alcaldia de Managua	Cooperacion internacional	Coordinador
NICARAGUA	Managua	Xochil	Lacayo	Alcaldia de Managua	Proyecto Residuos Solidos	Consultora
NICARAGUA	Managua	Daysi	Torrez	Alcaldia de Managua	Alcaldesa	
NICARAGUA	Managua	Wilmer	Aranda	ALMA-Taller Central	Dpto Limpieza Publica y Ornato	Tecnico
NICARAGUA	Managua	Arnaldo	Osorio	ALMA-Taller Central	Dpto Limpieza Publica y Ornato	Jefe de Seccion Transporte y Talleres
NICARAGUA	Managua	Victor	Sandoval	ALMA-Taller Central	Dpto Limpieza Publica y Ornato	Director
NICARAGUA	Managua	Roberto	Garcia	AMUNIC- Asociacion Municipalidades	Unidad Gestión Ambiental	Coordinador
NICARAGUA	Managua	Nubia	Luna	AMUNIC- Asociacion Municipalidades	Director Ejecutivo	
NICARAGUA	Managua	M <sup>a</sup> Gabriela	Abarca	MARENA	Unidad de Gestión Ambiental	Coordinadora
NICARAGUA	Managua	Roberto	Araquistain	MARENA	Vice-Ministro	
NICARAGUA	Managua	Jane	Olley	UN-Habitat	WATSAN	CTA

## LIST DE UNHABITAT DOCUMENTATION REVISED: Hugo ROCHE

INSTITUTION	Title		Date	Reference	
UN-Habitat	WatSan-LAC	Water and Sanitation in Latin America and the Caribbean	Rio de Janeiro	dic-10	Victor Arroyo
UN-Habitat	IADB	Aide Memoire Reunion de Seguimiento UN-Habitata/IADB-BID	Washington DC	jun-09	F. Basanes, V Arroyo et al
UN-Habitat	IADB	Aide Memoire: Follo Up of the collaboration IADB-BID/UN-Habitat in LAC	Medellin	oct-09	F Basanes, A Dzickus, V Arroyo et al
UN-Habitat	IADB	AideMemoire: UN-Habitat/IADB Annual Strategic Planning Meeting	Washington DC	feb-09	
UN-Habitat	WSTF	Main report of the First WSTF Impact Study	Nairobi	mar-10	
UN-Habitat	WSTF	Peer Review of the implementation of UN-Habitat's Medium-term Strategic and Institutional Plan (2008-2013)	Nairobi	Aug-2010	
UN-Habitat	WSTF	Programme Document : Improving Capacity for Solid Waste Managment in Managua	Managua	Set-2008	Jane Olley
UN-Habitat	WSTF	Programme Document : Improving Capacity for Solid Waste Managment in Managua	Managua	Jan-2009	Jane Olley
UN-Habitat	WSTF	Programme Document : Iniciativa de Asistencia Tecnica e Fortalecimiento Institucional en la Gestion de los Residuos Solidos para Centroamerica	Managua	Set-2010	Jane Olley
UN-Habitat	WSTF	Report "Informe Gestion 2010 ONU HABITAT BOLIVIA"	Bolivia	dec-2010	Claudia Vargas
UN-Habitat	WSTF	Report of Mid-term Review of the Operations of the Water and SanitationI Trust Fund	Nairobi	Aug-2010	A. Wright, R Narayanan, C Sijbesma
UN-Habitat	WSTF	Solid Waste Management Technical and Institutional Assistance Initiative for Central America Progress Report September 2010	Managua	sep-10	Jane Olley
UN-Habitat	WSTF	The UN-Habitat Water and Sanitation Trust Fund Strategic Plan (2008-2012)	Nairobi	2008	Graham Alabaster
UN-Habitat	WSTF	VI Meeting of the Advisory Board : Annual Progress Report (Jan-Dec 2009)	Nairobi	abr-10	Bert Diphooorn
UN-Habitat	WSTF	VI Meeting of the Advisory Board : Programme of Work for 2010	Nairobi	abr-10	Bert Diphooorn
UN-Habitat	WSTF	Water and Sanitation Trust Fund : Annual Report 2008	Nairobi	2009	Maggie Black
UN-Habitat	WSTF	Water and Sanitation Trust Fund : Annual Report 2009	Nairobi	2010	Bert Diphooorn
UN-Habitat	WSTF	Work Plan 2009 for WAC, MEK-WATSAN, WAC-LAC	New Delhi	Dec 2008	WSIB-Water and Sanitation II

## ANNEX 2

### MAIN COMMENTS ON THE WATSAN-LAC ACTIVITIES AT COUNTRY LEVEL

(Source: Revision of Program Documentation and Personal Interviews)

A.1 BOLIVIA WATSAN-LAC: Institutional and Projects Revision

A.2 NICARAGUA WATSAN-LAC: Institutional and Projects Revision

A.3 MEXICO WATSAN-LAC: Institutional and Projects Revision

#### A.1 BOLIVIA WATSAN-LAC: Institutional and Projects Revision

The program of water and sanitation for cities in Latin America and the Caribbean (WatSanLAC) began operations in Bolivia in 2008.

During 2009 Watsan-LAC was focused on consolidating the WatsanLac Office in Bolivia, headed by a Chief Technical Adviser and with the support of two United Nations Volunteers and a WS Specialist, who worked mainly in Cochabamba, identifying partners at local and regional level, implemented normal activities as a first step for putting the agency programme as a strategic partner in the WatSan sector in the country and at the regional level. During 2010, main focus was to consolidate the programmes in Bolivia. This staff was in charge of running the Water for Cities Programme in Bolivia and forging partnerships with different national and municipal governments, international and local NGOs, WatSan Operators and a strategic liaison locally with the IADB to materialise prospective collaborations and give follow-up to current and future projects.

WatSan LAC-Bolivia has a portfolio in the country focusing to implement projects in water and sanitation in the poor peri-urban areas of the three main cities: La Paz (through an agreement with the Municipal Government); Cochabamba (through five projects with partners such as the Municipal Government, international NGOs such as Water for People and YAKU and EMAPAS the WatSan operator at the District of Sacaba) and Santa Cruz (in cooperation with Plan International).

The Program promoted integral projects of water, sanitation and solid waste in Patacamaya, in the Andean region. Education in Human Values is a major component in almost all the projects promoting the methodology of education based on human values in water, sanitation and hygiene (HVWSHE). In the WatSan projects in peri-urban areas several alternatives for decentralized sustainable sanitation (DSS) are being tested, mainly with the construction of treatment with wetland plants. The integral sanitation management also support activities for the management and integrated management of solid waste.

The main opportunities of the program are in the consolidation of the current strategic alliances with NGOs, municipal governments, IDB (inter-American Development Bank) and developing synergies with FEDECAAS (cooperatives of Santa Cruz and other agencies of the system A.)

The main challenges are: (i) the increasing demand for infrastructure and in water and sanitation coverage, (ii) The institutional weaknesses at public and private stakeholder, (iii) requirement for specialized technical staff at WatSanLAC local Office for the monitoring and follow-up of projects. (iv) requirement of periodic training of WatSan local staff in subjects related to the projects.

TABLE : WATSAN-LAC BOLIVIA THE OF PROJECT LIST

Nº	PROJECT	Site	PARTNERS	OBJECTIVE	Main AREA	BUDGET	ONUHabitat	PARTNER
1	Improvement of sanitation and water supply based on the community, in Peri-urban areas of Cochabamba	Cochabamba Districts 7 y 8	Water for People	Improve the access of the poor in peri-urban areas of Cochabamba, Bolivia to better sanitation and water supply.	Integrated Urban Water & Environment Sanitation Initiatives	628.385	247.000	381.385
2	Interventions in water, sanitation and hygiene in the District 9 in the periurban area of Cochabamba, Bolivia	Cochabamba Districts 9	Water for People	Improving access to sanitation and water for the poor who live in the District 9 in the periurban area of Cochabamba	Human Valued Water Sanitation and Hygiene Education	200.000	100.000	100.000
3	Provision of integrated systems of water supply, sanitation and management of wastewater in the communities of Lomas de El Pagador and Higuera in Cochabamba	Cochabamba Lomas de El Pagador Higuera	Municipal Government of Cochabamba	Improve the quality of life in Lomas del Pagador and Higuera as a result of an environment healthy, clean, safe and dignified.	Urban Water Demand Management	288.014	143.440	144.574
4	Integral management of drinking water, sanitation and management of solid waste in Patacamaya program.	La Paz Patacamaya	Plan Internacional Inc.	Increase the population's access to the provision of safe drinking water and basic sanitation, safe and reliable services.	Pro-poor Urban WATSAN Governance	514.540	257.270	257.270
5	Programme integrated management of drinking water, sanitation and management of solid waste	Santa Cruz San Ignacio de Velasco	Plan Internacional Inc.	Perform an intervention integrated and comprehensive manner that seeks to address challenges in the provision of water in general, basic sanitation and solid waste management to improve the quality of global life, health, safety and dignified ambience.	Pro-poor Urban WATSAN Governance	587.582	200.000	387.582
6	Inclusion of the citizen culture to mitigate climate change and promote appropriate use of the water in the project districts of truth	La Paz 12 Neighbourhoods Periurban Areas	Municipal Government of La Paz	The population of the 12 districts carried out by the neighborhoods of truth (PBV) project and the inhabitants of the 12 districts in implementation, assume responsibly as part of its civic culture responsible water use and awareness of climate change.	Capacity Building and Advocacy	300.000	150.000	150.000
7	Project of integrated management of water and sustainable community sanitation in Sacaba, Cochabamba	Cochabamba Sacaba District	EMAPAS (Municipal Water Operator of Sacaba)	Improvement of the environment and life, in the districts of Curubamba Alto, Mayu y Molino Blanco and environmental improvements in the Maylanu River and other tributaries of the Rocha River.	Urban Water Demand Management	286.235	135.000	151.235
8	Strengthening of the node to disseminate experiences and sanitation sustainable decentralized projects	Regional: Bolivia, Ecuador, Peru	SNV (Snederslands Cooperation)	Generate favourable conditions for implementing alternative systems of DSS in Bolivia and spread the activities of the node at the national and international levels.	Human Valued Water Sanitation and Hygiene Education	159.000	79.000	80.000
9	Treatment of sewage with artificial wetlands and the rescue of the Andean vision of the water in the community of Villa Satellite Norte, in the municipality of Tiquipaya in Cochabamba,	Cochabamba Tiquipaya	Italian NGO YAKU	Improve the quality of life of the inhabitants of the peri-urban community of Villa satellite North, through direct interventions focused on the promotion of a better use and self-management of water resources and wastewater.	Integrated Urban Water & Environment Sanitation Initiatives	98.187	25.000	73.187



**Project 1.****Community based Sanitation and Water Supply Improvement in Periurban areas of Cochabamba**

*Total Budget : US\$628.385, UN Habitat \$ 247,000; Municipality US\$ 92000; Community US\$50,000*

Background and context.

The multiplicity of small operators in the city of Cochabamba generates as a result, a suboptimal use of resources, unsustainable use of groundwater and a lack of control over the quality of the water. The expansion of the coverage of the sanitation service is the PNSB (National Plan of Basic Services) as well as the universalization of services and the human right to water CPE (Constitution). Also the participation of the community is regulated in the regulations on voice (community development).

Overall Goal of the Project:

Improve the access of the poor who live in the periurban areas of Cochabamba to an improved sanitation and water supply.

Specific objectives

- Best Water and Sanitation Services for 20.000 poor people
- Demonstrate innovation and efficiency aspects of community\_based approach
- Promote sustainability in the investments included in the IDB Periurban Program
- Foster partnerships between WatSan Operators, Government, private sector and community
- Reach 100.000 People with a hygiene promotion program

Strategic Partners:

Water for the people (WFP), the municipality of Cochabamba, and the community.

Expected results:

- A Community based Action Plan for the improvement of the Environment Sanitation (CAPIES)
- WatSan Operators and Municipal Government officers trained and capacity strengthened
- Hygiene promotion: A strategy and specific modules for the promotion of hygiene implemented in connection with the preparation of the CAPIES. The hygiene education materials will be tested at Cochabamba.
- Improved the quality of the Service of the WatSan Operators
- An Analysis of the normative and institutional framework

Results of interview to Betty Soto and Water for People staff in field visit

There is an expectation about the results of the CAPIES and the first time implementation in Cochabamba of the education based on values humans in water, sanitation hygiene (HVWSHE). The lessons learned will be used to build and improve future proposals and replicate the interventions.

The Program will achieve its model-building goals, however this result requires that it pursues some limited coverage activities. The program combines software and hardware interventions.

The Project has an advance in the execution of 70% and it is expected to be completed within the time-frame. The NGO staff considered the community and the Water Operator have been involved positively.

The results of this project would contribute with innovative alternatives validated for integrated water and sanitation systems in Periurban Areas. This solutions could be scale up in the context of true IADB Periurban Program.

## Project 2

### ***Integrated Water supply, Sanitation and Wastewater Treatment for the Communities in Lomas de El Pagador and Higuera in the periurban areas of Cochabamba.***

*Total Budget: US\$288.014, WatSAn US\$143.400, Municipality US\$96.284, Community US \$48.290*

Cochabamba is a city with a large growth of the urban area as a result of rural-urban migration as well as for its consolidation as a relevant industrial and services centre in Bolivia. This two communities are situated in the southern part of the city, where there is a rapidly growing informal urban settlements. Therefore, entire communities are established in areas outside the range of the provision of Municipal Services of drinking water of Cochabamba (SEMAPA).

#### General goal

Improve the quality of life in the high paying and Higuera as a result of a healthy environment. Clean, safe and dignified.

#### Specific objectives

- Increase the access to a secure source of water and sanitation
- To support the municipality in Cochabamba and SEMAPA to expand the supply of water with the implementation of a decentralized wastewater treatment plant.
- Develop a culture and awareness of the advantages of an appropriate sewerage system
- Develop a culture and education on hygiene and conservation of water resources

#### Strategic partner

Municipal Government of Cochabamba and the Community

#### Results expected

- The community of El Alto Pagador has access to sanitation services through an autonomous, safe and functional sewerage system
- A Decentralized Treatment Plant will be operational at El Alto Pagador neighbourhood.
- The Higuera community will have a drinking water system and an eco-sanitation solution per housing unit.

#### Results of interview the Eng. Leonardo Anaya (Infraestructure Director of the Municipality of Cochabamba) and field visit of the Project .

The Municipality have some problems with the efficiency and transparency at the municipal Water Operator (SEMAPA), and the Program has not included a module of Water Management. The IADB Periurban Program will include it in the future.

The project recorded an advance of 65% , however an addendum has subscribed to extend the deadline until October 2011. In the context of this Project, the first decentralized wastewater treatment plant (PTAR-D) had been built in Cochabamba, and initially there were several technical and social challenges.

The strength of the Project is based in the political will to implement the project at the Municipal Government, and the high willingness and commitment of the community to work in collaboration with the Project and the municipality of Cochabamba. By the time, there is a low demand for ecological sanitation solutions by the targeted population (only 18 families have required sanitation modules).

The Program is testing the pilot and the demonstration model of the implementation of a integrated water management in periurban areas, including the installation of a Decentralized Wastewater Treatment Plant, a real low-cost alternative combined with the ecosanitation solution per housing unit.

The results of this project would contribute with innovative alternatives validated for integrated water and sanitation systems in Periurbans Areas. This solutions could be scale up in the context of thue IADB Periurban Program.

**Project 3:**

***Integrated Water Resource Management and Community based Sustainable Sanitation Project in Sacaba, Cochabamba***

*Budget Total US\$286.000; WatSanLAC US\$135.000, the Community US\$18.799,75; EMAPAS US\$32.435,25*

**Background and context.**

Based on the analysis of the periurban population in Sacaba municipality, and their immediate needs the Project have identified the following issues: (a) the peri-urban neighbourhood of Sacaba do not have access to appropriate sanitation services, (b) the system of Solid Waste management in the periurban areas have to be strengtened (c) the basin of the Maylancu River, tributary of the Rio Rocha requires an Environmental Action Plan (d) there is no a plan of institution development and of capacity building for the WatSan operator EMAPAS, and (e) there are suburban schools without sanitation infrastructure and they need an environmental education program.

**General goal.**

Improvement of the environment and life in the neighborhoods of Curubamba high, Mayu mill, Molino Blanco and environmental improvements in the Maylancu River and other tributaries of the Rocha River.

**Specific objectives.**

1. To improve the quality and the sustainability of the sanitation services implementing a community\_based sanitation system (Redes Vecinales de Sanemiento) in Curubamba Alto, Mayu molino and Molino Blanco.
2. To establish a sustainable solid waste management system
3. Implementation of a Municipal environmental action Plan (MEAP)
5. To improve the health infrastructure in three public schools selected Sacaba and the implementatin of the HVWSHE.

**Strategics Partners**

EMAPAS (Local Water Operator in the Municipality of Sacaba), the Municipality of SACABA and the community beneficiaries

**Expected results.**

- 100 families connected to the community\_based Sanitation System (RVS) in the areas of Alto Curubamba, Molino Blanco and Molino Mayu.
- Enhancement the capacity and the ownership of the community to manage community\_based sanitation networks RVS.
- An integrated solid waste management system impmenteds in peri-urban areas

- Integrated Management Water Resources within the framework of the MEAP (Municipal Environmental Action Plan).
  - The municipal Water Operator (EMAPAS) strengthened in its efficiency and its management capacity
  - three local schools with the Sanitation infrastructure and a sanitation education implemented.
- Progress to December 2010. The project records advance of 15% to date in mid-year report

Results of interview to Eng. Oscar Zelada, SEMAPAS technical Director and SEMAPAS staff

The RVS (Community-based sanitation system) is a new technology in Bolivia with high risks associated with technical and social issues. But the project combines initiatives oriented to the supply and demand factors, strengthen the capacity and efficiency of the Water Operator and increase empowering and the operational capacity at the Community. It combines with a good balance hardware and software solutions. The Water Operator (EMAPAS) has good leadership to carry out the project. The RVS represent a model appropriate and low-cost to periurban areas, and can be replicated in others similar areas in Bolivia.

The results of this project would contribute with innovative alternatives validated for integrated water and sanitation systems in Periurban Areas. This solutions could be scale up in the context of the IADB Periurban Program.

***Project 4.***

***Water, Sanitation and Hygiene Interventions in 9 District in periurban areas of Cochabamba.***

*Total Budget: US\$200.000, WatSanLAC US\$100.000; Water for People US\$100.000*

Background and context

According to the last Census, only 11% of the population is connected to drinking water in District 9 of Cochabamba. Recent research indicates that most of the residents buy water from private vendors with trucks, paying between 5 and 10\$Bolivian per 200 litres. Residents connected to a network of piped water in the city pay 2.5\$Bolivian per cubic meter. The 90% of the population defecates outdoors due to the lack of sanitation. Aquifers are highly overexploited in the area.

A market analysis suggests that people in the 9 District have high demand for improving the quality of water, in the reduction of the unit cost of water supply and the access to options of sanitation which will not increase their costs of water consumption.

Overall goal.

Improving access to sanitation and water for the population who live in the 9 District in the periurban areas of Cochabamba

Specific objectives.

- Improve water and sanitation to 10,000 people habitants at 9 District
- Test of new technologies for water, sanitation and treatment of waste water and methodologies of social marketing for the promotion of hygiene in the periurban area
- Alternative financial arrangements and business approach for sanitation services
- Facilitate the monitoring system for the water quality and hydrological studies in the Region

Strategic partner

Water for People

Expected results

- Coordination Team and Monitoring System in place
- Strengthened the Municipal Office of the 9 District in water and sanitation planning, in surveillance and supervision capabilities
- An Hydrological Study
- Identification of a menu of Sanitation Technologies of low-cost, good quality and validated in the field
- Promote local improvement on environmental sanitation actions based on the performance
- Monitoring of water quality. Water Security Plans implemented in three neighborhoods.
- Social marketing Strategy on the water, sanitation and hygiene developed, including validated messages, targeting to different groups (immigrants, women, youth, etc)
- Extend the coverage of HVWSHE to 15 schools.

Results of Interview to Betty Soto and WFP staff in field visit

The project recorded an advance of up to 30%.

Several models and innovations are tested in this project:

- The implementation of plans of water security is new in Bolivia
- A Menu of ecosanitation alternatives of low cost will be identified and validated
- Different methods of Social Marketing of habits of hygiene at school will be tested in the 9 District.

All these results would be replicated in other periurban areas of Cochabamba or in another cities in Bolivia.

The results of the hydrological study will be disseminated at the level of governmental and local institutions in the sector.

The Project is intensive in Model testing and in software methodology, incorporating a Social Marketing Strategy combined with a Education in Values more standard in UN Habitata projects.

The role of the ONG Water for People is very active on the field.

The results of this project would contribute with innovative alternatives validated for integrated water and sanitation systems in Periurban Areas. This solutions could be scale up in the context of the IADB Periurban Program.

**Project 5*****Wastewater treatment with constructed wetlands and the rescue of the Andean Vision of Water in the Community of Villa Satellite Norte, in the Municipality of Tiquipaya Cochabamba***

*Total Budget; US\$96.186, WatSanLAC US \$25,000; Italian NGO Yaku US\$ 73.187*

Background and context.

Today the municipality of Tiquipaya is facing one of the most serious pollution situations of the environment in the city, due to its coverage of water (65.4%) with a lack of coverage for sanitation (8%), Tiquipaya has 54.504 peri-urban people without any sanitation infrastructure for wastewater treatment.

The project was carried out in the peri-community called North Villa Satellite in the municipality of Tiquipaya. In Villa satellite, open-air defecation is a daily practice, only a small number of houses have a latrine or cesspools, causing serious environmental and health problems to the community.

The project has the support of the authorities of the Ministry of Environment and Water (MMAA) and SENASBA.

General goal

Improve the quality of life of the inhabitants of the peri-urban community of Villa satellite Norte, through direct interventions focused on the promotion of a better use and auto-management of the water or wastewater.

Specific objectives.

1. Improving hygienic-sanitary conditions of at least 420 people in the community selected, through the construction of a wetlands wastewater treatment plant
2. Strengthen the Water Committee to get an autonomous and independent management of the service
3. Build a network of sanitary sewerage
4. Implement a HVWSHS module with the Andean Vision of the water in a school.

Strategic Partner:

Italian Association YAKU, NGO with headquarters in Italy

Expected results:

- A plant of wastewater treatment using the methodology of artificial wetlands in operation in the community of Villa Satellite Norte
- An integrated and sustainable system of water, sanitation and community\_based waste water treatment
- A sewerage network buildt and operating in the area of the project
- a module of HVWSHE implemented and completed with the Andean Vision of water at the local school.

Results of Interview with WatSanLAC staff

The participatory processes require time to achieve consensus, which may affect the timetable of the project.

The strength of this Project is associated with the political will and the stability of the Tiquipaya municipal government, and the strong partnership of the NGO Yaku, the municipality and the community that have already established a working relationship and a compromise agreement to support the project.

The Association YAKU has a strong relationship with this community, built through previous experience in the project Chillimarca.

The Program will achieve its model building goals, however this result requires that it pursues some limited coverage activities. Treated water can be reused for irrigation green areas and parks...

The program combines an inovative software intervention, complementary with the hardware intervention. The HVBWSHE module incorporate the Andean water vision, and this innovation can help to generate synergies that will contribute to the rescue and the revaluation of the Andean vision of the water

**Project 6.**

***Integrated Water, Sanitation and Solid Waste Management Project in the Municipality of Patacamaya - La Paz. Total Budget: US\$579.720; WatSanLAC US\$257.270; Plan International Inc US\$130.000; Municipality US\$142.450***

Overall goal

Increase the population access to drinking water and basic sanitation and solidwaste management services provided in a secure and reliable manner.

Specific objectives

- (1) Extend the coverage of access to basic water supply and sewerage services
- (2) Support the development of the abilities of the Municipal Operator EMAPA
- (3) Support the implementation and improvement of the sanitation infrastructure in schools
- (4) Management and disposal of solid waste
- (5) Improvement and conservation of sources of supply of water.

Strategic partners

Plan International Inc, the Municipal Government of Patacamaya and the Community.

Expected results

- To increase the coverage of safe drinking water and basic sanitation
- To strengthen the efficiency and operative capacity of the WatSan Operator at the Municipality of Patacamaya (EMAPA)
- To promote practices of hygiene, sanitation and environmental conservation (HVWSHE) at the school and the local community,
- To improve the management system of solid waste in the municipality

Results of Interview to Ximena Ostria, Fundacion Internation Inc and with WatSanLAC staff

The Project registered real advances in most of the activities. But an extension of deadline until November 2011 is in process of approval.

There is a risk associated with the changes introduced recently in the governance of the municipality of Patacamaya that can modify the commitments made by the municipality.

In parallel to the implementation of the sanitation infrastructure and to prevent deterioration and damage to facilities, the Project will develop an education module HVWSHE

This comprehensive programme could be replicated in other periurban municipalities of Bolivia as a solution validated and promoted by WatSanLAC

**Project 7.*****Integrated Water, Sanitation and Solid Waste Management Project in San Ignacio de Velasco, Santa Cruz***

*Total Budget; US\$587.582; WatSanLAC US\$200.000; Plan International INC US\$387.582*

Background and context

In 2009 the Department of Santa Cruz face an epidemic of dengue fever, that affect the municipality of San Ignacio de Velasco, which presented 656 suspected cases. (SNIS 2009). One of the factors that contribute to spread this epidemic was the limited coverage of drinking water.

The implementation of a comprehensive project to improve the coverage of water and sanitation in the municipality of San Ignacio de Velasco will contribute to gradual and systematic implementation of the Master Plan of water and sewerage in the municipality (2010-2030).

Overall goal

To develop an integrated and comprehensive project of water, sanitation and solid waste management that will improve the quality of life in San Ignacio de Velasco.

### Specific objectives

- To increase access to safe drinking water sanitation in peri-urban neighborhoods
- To strengthen the capacities of the WatSan Operator COOSIV for the operation, administration and maintenance of the sewerage system and the decentralized wastewater treatment plant.
- Promote an efficient system of management and disposal of solid waste in the municipality of San Ignacio de Velasco.
- Promote an awareness plan and promote a culture of hygiene and proper disposal of solid waste and conservation of water resources.
- Improve sanitation infrastructure in the schools of the Municipality
- Promote a Strategic Plan to improve quality and the conservation of water sources

### Strategic partners

Plan International Inc. and the Municipal Government of San Ignacio de Velasco - Santa Cruz

### Expected results.

- Increase of 50% to 76% of households with access to a quality service with safe water and the 26.5% to 35% of families that have a system of adequate sanitation, in the town of San Ignacio de Velasco.
- Strengthen the capacities of the cooperative of water and sanitation supply of San Ignacio (COOSIV)
- 8 Educational units in the area of intervention with sanitation infrastructure.
- Promote practices of HVWSHE in 5 districts of San Ignacio de Velasco
- Promote an efficient system of management and disposal of solid waste.

### Results of Interview to Ximena Ostria, Fundacion Internation Inc and with WatSanLAC staff

- the Municipality of San Ignacio de Velasco is a model of good governance and local development in Bolivia, which allows for new opportunities to test innovative models of basic urban services and impement projects of other areas of work of A Habitat (housing, ...)
- Comprehensive programme can be replicated in other suburban Eastern Bolivian as an appropriated and validated solution promoted by A Habitat
- The wastewater treatment plant with technology of wetlands will be tested in other climatic conditions from Cochabamba, and the validated alternative could be replicated as a decentralized treatment solution in other cities of the Bolivian East.

### **Project 8.**

#### ***Strehtening the Bolivian Node to Disseminate Experiences and Project on Decentralized Sustainable Sanitation (DSS)***

*Total Budget; US\$159.000; WatSanLAC US\$79.000; SNV \$41.500 SEI-NSSD 38.500 US\$*

### Background and context.

The Stockholm Environmental Institute (SEI) has supported the development of a knowledge node in decentralized sustainable sanitation (DSS) in Bolivia with a role of dissemination of validated and innovative experiences in this field. The node is currently managed by SNV (Nederlands International Cooperation) but it will be transferred to the responsibility of DINESVBI (Directorate of water and sanitation sectoral areas).



The overall objective of the node is to create favourable conditions to implement DSS in Bolivia. To achieve this objective it will contribute to support the development of existing human resources capacities in the water and sanitation sector. During 2009-2019, the Bolivian Node will be consolidated to promote the implementation of these solutions and systematize experiences at the national, departmental and municipal levels with the support of universities and other research institutions.

#### Overall goal

To generate favourable conditions for implementing alternative systems of DSS in Bolivia and disseminate the activities of the Bolivian Node at national and international level.

#### Specific objectives

- Develop a strategy to promote the DSS
- Implement pilot initiatives in DSS in different regions and contexts through the training of DINESBVI human resources
- Generate DSS processes of systematization and projects related to municipal and regional levels with the support of universities and research institutions

#### Strategic partners

SNV (Dutch cooperation service), SEI (Stockholm Environmental Institute) and DINESBVI,

#### Expected results

- A Training Annual Plan for DINESBVI and other partners of the node
- A Strategic and sustainability Plan for the consolidation of the Bolivian Node
- A Report of best practices of DSS
- A pilot marketing strategy for the DSS alternatives in countries of the Andean region
- Four agreements signed at the local level and two international agreements signed at the level of the Andean region
- Dissemination of the results of the best practices of DSS

#### Results of Interview with Julio Garret, SNV Director

The SEI has to confirm its participation in the activities of the project

The transfer of the administration of the node to DINESBVI could generate modifications in the project

Opportunities

WatSanLAC has developed a similar project in Central America, and the project can be replicated and expanded to the Andean Region.

#### **Project 9.**

***Insertion of Citizenship Culture to Promote good use of water and mitigate the climate change impact within the neighborhoods of Barrios de Verdad Program La Paz***

*Total Budget US\$300.000; WatSanLAC US\$150.000; La Paz Municipal Government \$150.000*

#### Background and context.

The Plan of development Municipal JAYMA 2007-2011 promote the Project "Barrios de Verdad" in order to transform human settlements in the poorest peri-urban areas of the city through measures to integrate them into the urban area with greater equity in the provision of basic services, promoting the welfare and improving the quality of life of its inhabitants.

The objective of the Barrios de Verdad program (PVB) is contributing to improving the quality of life of the population living in conditions of urban marginality, promoting its participation in the integral development of the neighborhood "... and give them opportunities for the exercise of their citizenship through a democratic and responsible participation in neighbourhood governance."

The PVB is divided into two components, the technical component and social component, (the construction or improvement of road systems, control risks, environmental systems, community equipment, basic services and urban furniture), while the social component responds to the strengthening of the local organization and the legal and cadastral sanitation.

#### Overall goal.

The population of the 12 districts included in the PBV and the other 12 new neighbourhoods to be included, take responsibility as part of its civic culture the responsible use of water and the awareness of climate change.

#### Specific Objectives

- Increase the sense of belonging of the 12 districts including initially for the PBV and 12 districts to be included to ensure that its inhabitants take the responsible use of water resources and awareness of climate change on a daily basis.
- Strengthen the citizen culture of the inhabitants of the district to facilitate the actions of their representatives in the management, preservation and maintenance of drinking water and sewerage system.
- Develop a culture of belonging and attachment to the environment as background to the positive actions of citizens about the responsible use of the infrastructure endowed by the PVB.

Strategic partners.

Municipal Government of La Paz

Expected results.

- The inhabitants of the districts establish duties and commitments both individual and collective to the communal infrastructure (stand, headquarters, guarderías...) and individual (health modules) endowed by the PB, to ensure the responsible use of the same, as the case of the resource is water.
- The inhabitants understand that neighborhood residence is part of the urban area of La Paz, and it is inserted in a global context with global problems like climate change and conservation of water resources to which have a proactive attitude.
- The inhabitants of the neighbourhoods become pioneers in the incorporation of the themes of climate change and responsible use of water resources in the strategy of citizen culture of the GMLP.

#### Results of Interview with Patricia Grossman (Culture Directore at GMLP) and GMLP staff

They report that the progress of the project is delayed by administrative and boureaucratica factors in the formal Cooperation Agreement signed by the GMLP and UN-Habitat. The Adoption of the addendum of the project in the municipality Municipal, represent a challenge in the execution of this Project. The issue is related with flexibility and the timing for the introduction of small adecuaciones to the CA.

The initial Municipal Project has been executed succesfully, and the new projects introduce innovacions to be tested and validated, before they can be replicated at the national level and strengthen other WatSAnLAC interventions on the adaptation to the climate change.

## A.2 NICARAGUA WATSAN-LAC: Institutional and Projects Revision

Nicaragua has one of the lowest MDG set of indicators in the region. Despite recent efforts to increase water and sanitation coverage at urban level, a huge challenge remains to meet the Millennium Development Goals (MDG). IADB report a water supply coverage of 88% in urban areas and 18% in rural areas, and the sanitation service coverage is 63% and 37%, respectively. The national Water operator, ENACAL reports coverage of 92% for water supply and 51% for sanitation service. In addition to low sanitation service coverage rates, services in urban areas are characterized by the poor quality of water supply, especially in terms of continuity.

More recently, the World Bank and the IADB launched two complementary programmes:

- (1) **The Project “Greater Managua Water and Sanitation” (World Bank, 2009-2014; US\$ 20 millions)** is oriented to increase access to reliable water and sanitation services to the population of the greater Managua region. It has two main objectives:
  - a. the coverage extension and improvement for Water Supply and Sanitation (WSS) in low-income neighborhoods. This component will only include neighborhoods that either have their water sources and supply infrastructure financed under component two, or for which such infrastructure already exists. After the intervention, all inhabitants in the targeted neighborhoods should have access to a continuous or nearly continuous supply of drinking water, as well as adequate sewers. All connections will include metering.
  - b. the improvement of water supply and efficiency in selected areas. An important assumption of the Japanese International Cooperation Agency (JICA) master plan's water balance study is that the technical efficiency of the network can be quite dramatically improved until 2015, from today's estimated 55 percent to 25 percent, thereby liberating water for the additional connections needed to increase effective coverage.
  
- (2) **The Project “Water Supply Program for Managua” ( IADB Program, 2011-2016; US\$30 millions)** is oriented to improve the quality of life of people in the city of Managua through the expansion and upgrading of drinking water and sanitation services. It has three main components:
  - a. the program will renew and optimize the water network in 20 Managua neighborhoods through the installation of 54.6 kilometers of pipelines and 8,342 new metered water connections. It will also increase sewerage coverage in 16 neighborhoods, through the installation of 40.4 kilometers of networks and 5,459 new service connections. In total, these investments will benefit about 44,000 people with drinking water and 29,000 with sewage service.
  - b. The program is also expected to increase water supplies by rehabilitating 50 existing wells and building 11 new ones, and by implementing a comprehensive plan to reduce water losses from leaks and lack of proper billing.
  - c. The program will be focus to operational and institutional strengthening of the Nicaraguan Water and Sewerage Company (ENACAL). This will include the design and implementation of a preventive maintenance plan and the acquisition of equipment for maintenance of water networks, sewerage networks, and electromechanical equipment, among other activities.

Another issue related with the sanitation problems is the the Solid Waste management and in particular the Solid Waste disposal. One of the biggest dump sites in Central America, is La Chureca in Managua

city. It receives an estimated 90% of the waste from the city and is home to 15.000 poor people whose survival depends on recycling activities.

In 2008, the Government of Spain through “**the Integrated Development of the Acahualinca Neighbourhood Project**” committed funds (AECID Fund; €30 millions; 2008-2012) to support the rehabilitation of the La Chureca dumpsite, to promote more efficient waste recovery and provide to families living on and near the site improved basic services and employment alternatives. In particular, the Project includes 3 main components:

1. Environmental issues: (i) Sealing of the current dump of La Chureca, (ii) installation of an industrial plant of solid waste selection for recycling; (iii) Construction of new sanitary landfill; (iv) Installation of a composting plant; (v) Use of the methane energy.
2. Basic Services issues : (i) Relocation of 450 families at risk; (ii) Improvement and expansion of the networks of water, sanitation and road; Housing improvement program; (iii) Rehabilitation and construction of spaces and public amenities; (iv) Program of titling.
3. Socio-Economic issues: (i) gender; (ii) Improvement of the coverage and quality of health and education services; (iii) Access to vocational and occupational training; (iv) Prevention of situations of risk among young people and women; (v) Promotion and development of the local economy.

Different mechanisms have been used to operationalize this programme , including the financial contribution to UN-HABITAT Water and Sanitation Trust Fund in which the main strategic line of the Programme is framed.

<p><b>STRATEGIC LINE OF THE PROGRAMME WATSAN-NICARAGUA : AN INTEGRATED SOLID WASTE PLANNING</b></p>
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The programme was conceived in two Phases: First, the Project seeks to develop a Strategic Plan, Models and tools for the improvement of solid waste management in Managua city. Second , the results and best practices would be spread , providing information and replicating the use of these models and tools in other municipalities in Nicaragua and the rest of Central America.

The first phase is already finished and it includes mainly software elements but also some specific investments oriented to the modernization of the equipment and the workshops of the Municipality.

### **1. BUILDING CAPACITY FOR SOLID WASTE MANAGEMENT (SWM) IN MANAGUA (2008-2011)**

The aim of the UN-HABITAT project, Building Capacity for Solid Waste Management (SWM) in Managua is to integrate the activities undertaken in the framework of the La Chureca intervention into an Integrated Solid Waste Management System.

Between 2008-2010, UN-HABITAT undertook a planning process using a participatory “learning by doing” methodology which builds municipal capacity for strategic ISWM planning as well as generating a plan developed and agreed in coordination with a wide range of involved stakeholders. An ISWM pilot projects was designed and implemented including a small transfer station (STS) built in Villa Liberty station, in District VI of Managua. The STS is based on a model developed by UN-Habitat in an international level. UN-HABITAT signed an agreement with UNOPS to support procurement and implementation of these pilot projects in 2010. UN-Habitat developed a financial model (WAGS-based) to calculate costs of

collection and disposal alternatives , and have organized a WAGS training workshop. The WAGS Model have been adapted and translated in Spanish.

#### **List of Activities deloped between 2008-2010.**

- a. Strategic Plan for Integrated Management of the Solid Waste (IMSW-GIRS) for Managua
  - a.1 Providing technical assistance and building institutional capacity
    - Collection and evaluation of information studies and proposals on the system of management of solid wastes in Managua (may-2009)
    - Baseline study based on the characteristics of solid wastes, generation and densities from the different economic groups and types of generators. The study was conducted in two phases. (December 2009)
    - Study of the alternative locations of the stations transfer and the cost/benefits of transfer stations large or small. (Using WAGS Model Nov-2009)
    - The purchase of a machine to grind branches and a dump truck with special body and tow bar including an assessment of the effectiveness and a calculation of comparative costs ( Nov-2010)
  - a.2 Development of a Strategic Plan for the integrated management of the solid waste in Managua, including the plan of financing and risk analysis. (Nov-2010)
    - Analysis and recommendations for institutional arrangements improved for the Administration and operation of the service (oct-2010)
    - Design and implementation of a package of training to support the development of:
      - o business strategies for the collection of funds/marketing/relationship with donors and multi-lateral funding agencies.(2011) ; a system of performance monitoring(2011)
- b. Smal Transfer Station: provide technical assistance to design and build a STS
  - Design and build a small transfer in Villa liberty station (Jul 2010; Sept-2010)
  - Design and manufacture of primary collection tricycles to allow the separation of recyclable during primary collection. Provide small vehicles to cover a greater transfer station radio. (2011)
  - To modernise the existing municipal workshops to manufacture containers and trailer and repair vehicles of collection. (Sept-2010)
- c. Clean Development Mechanism (CDM)
  - Developing a plan of action for the development of a feasibility study of CDM (June 2010)
- d. Identification of a new site for a Sanitary landfill.
  - Study of costs and benefits of alternative sites for the final disposal (Dec 2009)
  - Development of the Conceptual design for the site selected for final disposal
  - Development and implementation of a course of sanitary landfill for municipal staff (Nov-2010-2011)
- e. Strategy of Implementation of a Pilot Composting Plant.
  - Study based on market and local initiatives of compost
  - Strategy of implementation of a pilot composting plant, including awareness-raising campaign to promote the local use of compost.
  - Study based on the current state of the art of technologies for recovery of energy including an assessment of the feasibility and mode of application. (Jan 2010)

#### **CAPACITY BUILDING AND TECHNICAL WORKSHOPS.**

UN-HABITAT also coordinated several workshops designed to increase knowledge and build capacity in key Solid Waste Management (SWM) issues at local and national level:

- Recycling. The First National Recycling Forum held in August 2010, an event which brought state, municipal, private sector and community actors together to discuss and define lines of action for the development of the sector at national level.
- Cleaner Development Mechanism in SWM Projects (CDM). high-level workshop to explore the possibilities of the integrated solid waste management in the framework of the clean development mechanism (Apr 2009. Regional experiences of CDM for Colombia, El Salvador, Mexico)
- New Sites for sanitary Landfills. High level Workshop to discuss options for the identification optimal sites for a new sanitary landfill
- Hazardous Waste Management and Integrated Sanitation
- Correct Solid Waste Management and Recycling in Schools in Managua;

## **2. SOLID WASTE MANAGEMENT IN THE CENTRAL AMERICA REGION**

The continuation of the SWM initiative in the Central American Region is the main focus of the Programme for the period 2011/2012.

UN-HABITAT signed new agreements with project partners to support the implementation of ACEPESA to undertake regional SWM study and design of SWM Technical and Institutional Assistance Initiative and Pre-investment Studies.

### **RESULTS OF INTERVIEWS WITH JANE OLLEY, CTA OF UN-HABITAT IN NICARAGUA.**

The Programme had contributed successfully to the elaboration of a model of Integrated Solid Waste Management, that could be implemented not only in the Centro America Region, but also in the Andean Region. Un-Habitat had adapted international Models (like WAGS-Model), Small Transfer Station (STS) and Handbooks to centroamerican particularities.

UnHabitat have developed in Nicaragua a good image as an international agency specialized in Solid Waste Management, and with a pilot experience developed in situ, in Managua city.

The Program has not implemented coordination activities and collaboration schemas with the IADB or World Bank at Nicaragua level. The institutional coordination had been developed mainly with the Spanish Agency AECID, and related with the mega project of La Chureca.

The Program has not yet explored the possibility to collaborate with the IADB or WB Programs in the Water and Sanitation topics like the UnHabitat Offices in Bolivia, Peru, Ecuador, Colombia or Mexico. The National and Municipal Government gave priority to water and sanitation issues. The Integrated Solid Waste Management is only a part of the Integrated Water and Sanitation Policy, with strong relevance as the water quality, the water and sanitation services and the treatment and final disposal of the wastewater.

### A.3 MEXICO WATSAN-LAC: Institutional and Projects Revision

The Programme started in 2008 when Mexico became one of the first countries where UN-HABITAT intervened in the water policy sector. The first stage was to put the agency programme as a strategic partner in the water and sanitation sector in the country and the Region.

A first MoU has been signed in 2008 with the IADB to explore ..... A second Memorandum of Understanding has been signed in 2010 with the Ministry of Social Development (SEDESOL) to agree upon a framework of collaboration at country level to integrate the use of appropriate WATSAN technologies in infrastructure development projects. Technical advice on this topic has also been provided during 2010 to the Ministry of Education and the IADB in the design and implementation of a nation-wide WatSan schools infrastructure upgrading and water education project.

The main issues of the Mexican water policy sector have been identified as: improving sustainable water and sanitation services in small towns and growing peri-urban areas, increasing the implementation of wastewater treatment systems, deepening transparency and accountability of water and sanitation services provision and building capacities for risk management and adaptation to climate change in the water sector. Water availability is also a major challenge in specific areas of the country, therefore the relevance of IWRM in urban settings and the development of new water culture in order to step-up awareness in society on water demand management principles.

The Programme has focused on improving governance in water and sanitation management through a combination of instruments oriented to have impact on supply and demand factors: (i) social auditing and monitoring processes through Citizen Observatories and (ii) development and adoption of appropriate WatSan technologies, (iii) capacity-building for small and intermediate water operators and (iv) institutional and policy strengthening for water adaptation to climate change, through participatory vulnerability assessments at local level.

#### STRATEGIC LINES OF THE PROGRAMME

The program developed five main strategic lines through several mechanisms from normative activities to Pilot and demonstrative projects.

Table : Main Strategic Lines of The UN Habitat-Mexico

WatSan Citizens Observatories	WatSanCO
Human Value Based Water, Sanitation and Hygiene Education	HVBWSHE
Appropriate and Sustainable Sanitation Solutions	SuSan
Capacity Building of Water Operators	WOP CB
Water Adaptation to Climate Change	WAdCC

The WatSan-LAC Programme in Mexico has a number of ongoing and planned projects and initiatives in the country. It has developed strategic partnerships with several institutions including: the National Water Commission, the Ministry of Social Development, the Ministry of Education, the State Governments of Veracruz, Chiapas and Tabasco, a group of municipalities across the country, the Inter-American

Development Bank, the World Bank, the National Association of Water Utilities and the Water Advisory Council, amongst others.

Its main objective is the promotion of a more democratic and transparent water governance –through its water and sanitation citizen observatory projects–; the support for the use of appropriate environmentally friendly water and sanitation technologies and hygiene and water education processes –through its HVBWSHE and technical assistance projects–; the support for capacity-building processes of water operators –through a distance-learning capacity-building diploma and water adaptation to climate change projects –through some local risk and vulnerability assessment projects, and the co-organisation of a regional dialogue on Adaptation to Climate Change and Water Resources leading to the COP-16 in Mexico.

UN Habitat support advocacy and institutional activities, as part of these efforts several workshops were organized in 2009-2010:

- (i) the Water Journalist Capacity-Building Initiative Workshop in collaboration with the Water Advisory Council, the IWA, and the Mexican Environmental Education and Communication Fund;
- (ii) the Water Demand Management Workshop in partnership with UN-DPC and the National Association of Water Utilities (ANEAS).

## **MAIN STRATEGIC LINES IMPLEMENTED IN MEXICO DURING 2008-2010**

### **- THE CITIZEN WATER & SANITATION OBSERVATORIES**

The main objective is enabling social monitoring and the evaluation of water operators' performance. The WATSAN Citizen Observatories are new social institutions in the Mexican water policy sector. Currently there is several pilot experience of Observatory implemented in the municipality of Ecatepec de Morelos (state of Mexico) and in the municipalities of Xalapa and Tuxtla Gutierrez and financed with the MDG-FUND. Two key partners have collaborated on these projects: the Water Advisory Council (CCA) and other UN-Agencies through the UN Joint Program.

A Network of WATSAN Citizen Observatories has been launched

### **- HUMAN VALUE-BASED WATER, SANITATION AND HYGIENE EDUCATION (HVBWSHE)**

The main objective is upgrading the water and sanitation infrastructure of schools in marginal urban and peri-urban areas with the use of appropriate low-cost and sustainable technologies. Public hygiene, water use and environmental conservation education are components integrated into the project. Currently, projects are ongoing in the municipality of Ecatepec de Morelos (State of Mexico) and in the municipalities of Xalapa (state of Veracruz) and Tuxtla Gutierrez (state of Chiapas), financed by the Spanish MDG-F.

### **- CAPACITY-BUILDING OF WATER OPERATORS**

A distance learning capacity building course for top and mid level managers on several relevant topics of water and sanitation policy and management is being designed to be launched in March 2011 in



collaboration with the National Association of Water Utilities (ANEAS) and the Post-graduate Division of the Engineering Faculty of the National Autonomous University of Mexico (UNAM) .

#### - WATER ADAPTATION TO CLIMATE CHANGE

The main objective is to assist local authorities of urban municipalities in the development of vulnerability assessments and the production of policy recommendations for building capacities for water adaptation to climate change at the local level. Two local projects of Water Adaptation to Climate Change projects are being implemented in the municipalities of Xalapa and Tuxtla Gutierrez. The Water Adaptation to Climate Change activities are carried out in joint collaboration with local authorities and local experts in the field. These projects are being implemented under the framework of a UN-Joint Programme on Establishing Effective and Democratic Water and Sanitation Management in Mexico.

UN-HABITAT has participated actively on the Regional Dialogue on Water Adaptation to Climate Change to support awareness-raising on the topic towards the COP-16 held in Cancun and to support initiatives to be launched thereafter.

#### **The implementation of three initiatives in Partnership with the IADB**

UN HABITAT-Mexico has supported the activities of the IADB and the Ministry of Education (SEP) in the initial stages of the preparation of the IADB Programme oriented at **upgrading schools' water and sanitation infrastructure** across the country and implementing a nationwide hygiene and water education programme.

UN- HABITAT has worked also in partnership with IADB and the ANEAS to launch the **WOP-LAC Mexico**. Both organisations are supporting the ANEAS with the financing of 5 national wops. The IADB has demonstrated interest in providing technical support in the definition of the pensum of the **Distance Learning Capacity-building Programme for Water Utilities** launched at the end of 2010 in partnership with the ANEAS and UNAM.

UNHABITAT has been working in partnership with the IADB and other organisations in the planning and implementation of the **Regional Policy Dialogue on Water Adaptation to Climate Change**. This dialogue has involved the organisation of Specialist Workshop (in Mexico), the CODIA (in Mexico) the High Level Expert Ministerial Panel (Stockholm) and a Side Event at the COP-16 (in Cancun). A draft policy brief has been produced and will be updated incrementally –through feedback during the events- in order to present a final version during the COP-16.

#### **A UN-Joint initiative with others UN Agencies in the context of the Spanish MDG-FUND**

UN-HABITAT has also been instrumental in the development of a Spanish Millennium Development Fund joint UN-Agencies bidding proposals in Mexico and Ecuador for two comprehensive water sector interventions in line with respective national water policies and the UNDAF.

These proposals have been developed and will be implemented in close collaboration with UNDP, UNESCO, FAO, and UNIFEM. Currently, UN-HABITAT is playing a pro-active role in setting-up of coordinating and implementation structures to steer these interventions in both countries and achieve greater collective action.

**An innovative Project in partnership with SEDESOL-IMTA and WATSAN-LAC:  
“Technical Assistance for the Inception of Appropriate Water, Sanitation and Wastewater  
Treatment Technologies”**

This Project is to be implemented in cooperation with the IMTA and under the framework of the MoU between UN-Habitat and SEDESOL. The project will be implemented in the Operations of the Habitat-SEDESOL Programme of the Ministry of Social Development, Mexico.

UN-Habitat will act as an enabling agent of technical assistance and inter-organisational cooperation for the Project. The SEDESOL with the support of UN-Habitat will act a coordinating entity for the Project and will provide the funding for the construction of infrastructure, under the regulatory and operative framework of the Habitat-SEDESOL Programme.

It is important to highlight that within the water and social development policy sectors it is generally recognised that the water, sanitation and wastewater treatment and environmental related MDGs will not be achieved following only traditional institutional arrays and implementing traditional technologies. Deprived and marginalised urban and peri-urban communities that are located in areas of difficult access usually fall-out from the centralised water and sanitation service networks, because it is technically and economically difficult for water and sanitation operators to provide services to such places.

Habitat-SEDESOL Programme is interested in exploring the feasibility of integrating appropriate technologies into its portfolio of options to support the expansion of water, sanitation and wastewater treatment services for poor urban communities across the country. SEDESOL is also interested in developing an appropriate model of social participation for the technological innovation projects.

The partnership WATSANLAC and IMTA will facilitate technical assistance and inter-institutional collaboration to complement the SEDESOL's activities supporting municipalities to increase the provision and improvement of water and sanitation services and wastewater treatment under the operative framework of a national-level urban poverty alleviation initiative entitled Habitat-SEDESOL Programme.

The main objectives of this initiative are:

- (i) to support the SEDESOL- UPAUP in the capacity-building and institutional strengthening of water operators and local authorities
- (ii) to facilitate technical assistance in the implementation and institutionalisation of appropriate WATSAN technologies pilot projects, and
- (iii) to facilitate technical assistance in support of participatory planning processes.

The main on going Pilots Projects are described in the followings Tables:

STATE	Municipality	PARTNER	Start	Finish	DESCRIPTION	WSTF	MDG-F	PARTNERS
MORELOS	ECATEPEC	Municipal Government	Jan-2009	Aug-2010	Watsan Observatory Committee	33.800		77.935
Chiapas Veracruz					Managment of Water and Sanitation to support the achievement of the MDG	99.000		225.000
		CCA (Water Consultivo Consejo)	jun-10	may-12	WATSAN Citizens Observatory Network	130.000		150.000
Chiapas Veracruz	XALAPA TUXLA	Civic Center of Collaboration CCC	ago-09	dic-09	Risk Managment and Adaptation to Climate Change	250.000		322.976
MEXICO DF		ANEAS Nal. Asoc. Of Water Operators UNAM University of Mexico	oct-10		Distance Learning Diploma for W&S Operators	80.000		81.750
MEXICO DF		IMTA Technological Institut SEDESOL (UPAUP)	dic-10	oct-12	Appropriate WatSan technology: design, construction, technical assistance..		757.281	3.527.149
MEXICO DF		UNDP-FAO_UNESCO-UNIDO-WHO-ECLA	dic-08		Strenghtening the effective and democratic managment of Water and Sanitation to support the Achievement of trhe MDGs	46.500		138.980

SCOPE	PARTNER	STRATEGIC LINE	Date	STRATEGIC LINES				
				WatSanCO	HVBWSHE	SuSan	WOP CB	WAdCC
Ecatepec/MORELOS	CCA Water Adviser Council	WATSAN Citizens Observatory Network	2009-2010	X	X			
	Ecatepec Municipal Gvt.	HVBWSHE		X	X			
National +Network	CCA Water Adviser Council	WATSAN Citizens Observatory Network		X				
Municipal	CCC Civil Center of Colaboration	WATSAN Citizens Observatory Network	2010-2011					
Xalapa - VERACRUZ Tuxtla Gutierrez- CHIAPAS	UNDP/UNICEF/.....	Water Resources: Risk Managment and Adaptation to Climate Change	2009-2011		X			X
	CCA Water Adviser Council	WATSAN Citizens Observatory Network HVBWSHE	2010-2011	X	X			
National Technical Assitance to SEDESOL	IMTA Mexican Institute for Water technology SEDESOL-UPAUP	Appropriate WatSan technology: design, construction, technical assistance..	2010-2011		X	X		
National Distance Learning Course	ANEAS Association of WatSan operators UNAM	Capacity Building of Water Operators Distance Learning for W&S Operators	2010-2011				x	
Regional Dialogue COP 16 (CANCUN)	CODIA/IADB/...	Water Resources: Risk Managment and Adaptation to Climate Change	2010-2011					X

**Strategic Lines in the Mid Term proposed for the Country Office.**

- Replication and up scaling of Citizen WatSan Observatories and support to the Network of Citizen Water & Sanitation Observatories.
- Replication of Human Value-based Water, Sanitation and Hygiene Education.
- Mainstreaming Adoption of Appropriate WatSan Technologies.
- Support to Water Adaptation to Climate Change in Latin America and the Caribbean Expert/Decision Makers Dialogue.
- Capacity-building Distance Learning Course for Water Operators and Local Authorities.
- Support pro-poor peri-urban water and sanitation service provision initiatives and pro-poor water regulation reforms.

## ANNEX 3

### **THE STRATEGIC PARTNERSHIP** **between the** **INTER-AMERICAN DEVELOPMENT BANK (IADB)** **and** **WATSAN-LAC**

#### **An Institutional Collaboration at a Global, Regional and Country level (2008-2011)**

WATSAN-LAC and the IADB signed a Memorandum of Understanding (MoU) in July 2008 in order to pursue more coordinated actions and synergies in the water and sanitation sector to explore opportunities of collaboration under the framework of UN-HABITAT's Water for Cities Programme in Latin America and the Caribbean and the IADB's Water and Sanitation Initiative.

This collaboration is framed in a large regional initiative implemented by the IADB.

#### **The IADB and the Water and Sanitation Initiative**

Since May 2007 the IADB implements the Water and Sanitation Initiative which aims at supporting LAC countries in achieving universal access to sustainable and quality water and sanitation services.

To reach the goal of the coverage gaps in water and sanitation services, the IADB launched in 2007 the Water and Sanitation Initiative. This initiative has developed strategic guidelines, specific targets and special financial products to support solutions tailored to each country's needs.

Between 2007 and 2011 the initiative has emphasized four programs.

- (i) 100 Cities Program  
This Program is designed to catalyze investment, financing and technical assistance for Latin American and Caribbean cities of more than 50,000 people, giving priority to their poorest communities.
- (ii) Water for 3,000 Rural Communities  
This program supports communities willing to take their own financial, technical and organizational decisions and to run their local water and sanitation systems.
- (iii) Water Defenders  
This program will provide technical assistance and financing to safeguard 20 priority micro-watersheds. The program is oriented to the protection of water sources, decontamination and treatment of waste water.
- iv) Efficient and Transparent Utilities  
This program is oriented to strengthen the management of water utilities and will develop a system to measure and certify their performance. Its main objective is to improve the efficiency of companies that run water and sanitation

services and increasing their transparency builds trust among their clients and financial agents.

### **The IADB and the Water Center for Latin America and the Caribbean and the Technological Assistance Initiatives**

In 2010 the Inter-American Development Bank and FEMSA Foundation and the Instituto Tecnológico de Monterrey-Mexico launched the Water Center for Latin America and the Caribbean (CAALCA in spanish version). This initiative represents a technological platform for capacity and knowledge development which will drive the region to a better management and use of water resources. The Center will offer training, research and information dissemination related to sustainable use and conservation of water resources.

With an extensive understanding of the problems faced by the countries in the region, the Center will foster strategic alliances and will offer a well-known technical capacity and innovative solutions to those problems.

#### **1. IADB-WATSAN-LAC Collaboration at Global and Regional Level Events**

The IADB promote several Programs at the Regional Level that are relevant with the strategic lines of WatSan-LAC. The following Table describe them:

	NAME	PROJECT NUMBER	APPROVAL DATE
Regional	Climate Change Adaptation Plans - Water Sector	RG-T1974	Dec 5, 2010
Regional	Support to Partnerships and Strategic Alliances for Water Projects	RG-T1671	Feb 26, 2009
Regional	Technical Support to the Implementation of INWAP activities	RG-T1672	Dec 17, 2008
Regional	Establishment Support of a Water Center for Latin America and Caribbean	RG-T1659	Nov 12, 2008
Regional	Efficiency and Transparency in Water and Sanitation Operators	RG-T1527	Sep 24, 2008
Regional	Project to Set up Water Operator Partnership in Latin America and the Caribbean	RG-T1528	Mar 7, 2008
Regional	Assessment of Wastewater Management in the Wider Caribbean	RG-T1529	Mar 4, 2008

In particular, two activities have been developed

#### **- Stockholm International Water Week**

In the last years WATSAN-LAC and the IADB organised successful sessions during the Stockholm International Water Week. With the level of operations of both organisations having increased in the region, it is possible to envisage a larger participation in Stockholm. It is possible to envisage a large participation of new latinoamerican stakeholders like FEMSA, the Water Advisory Council, Plan-International, Freshwater Action Network, ANEAS, etc. It was agreed that Stockholm is an important venue and both organisations will be working together in the organisation of joint events. A half-day Latin American Event have been organized in collaboration with the IADB and with other relevant stakeholders in the region.

#### **- The Water Adaptation to Climate Change**

UNHABITAT have elaborated in partnership with the IADB and other organisations in the

planning and implementation of the **Regional Policy Dialogue on Water Adaptation to Climate Change**. This dialogue has involved the organisation of a Specialist Workshop and the CODIA (in Mexico), the High Level Expert Ministerial Panel (Stockholm) and a Side Event at the COP-16 (in Mexico). The results of the Regional Policy Dialog had been published and represent will be updated incrementally –through feedback during the events- in order to present a final version during the COP-16.

The following Institutions and organizations have participated in the Regional dialogue: the National Agency of Waters of Brazil (ANA), the Inter-American Bank of Development (IDB), the World Bank (WB), the Water Center for Latin America and the Caribbean of the Tecnológico de Monterrey (CAALCA), the Conference of Water Ibero-American Directors (CODIA), Water Advisory Council, the National Water Commission (CONAGUA) Mexico, the Spanish Fund to the achievement of the Goals of the Millennium-Mexico, the Global Fund for the Conservation of nature (WWF), the Forum of the Water of the Americas (WFA), the FEMSA Foundation, the Global Water Partnership (GWP), the Mexican Institute of Water technology (IMTA), the United Nations programme for Human Settlements (UN-Hábitat), the Central American network of action of the water (FANCA), the Mexican network for action by the water (FANMex) and the International Union for the conservation of nature (IUCN).

#### - **LAC Chapter of Water Operators Partnerships (WOP-LAC)**

The Water Operators Partnership for Latin America and the Caribbean (WOP-LAC) was launched in June 2008 in Cartagena, as a joint IDB/WATSAN-LAC initiative to foster cooperation among water operators at the regional level.

The Global WOP initiatives were launched first in Asia, Africa, the Middle East and Europe and WOP-LAC is considered the most successful today. The WOP-LAC is now a multi institutional arrangement since the UN-HABITAT, IADB and the International Water Association are key players as well as AIDIS and the Catalan Water Agency that have recently joined WOP-LAC.

The Water Operators' Partnership for Latin America and the Caribbean (WOP-LAC)'s objective is to bring water utilities together to share their respective knowledge in areas such as energy efficiency, commercial management, corporate governance, non revenue water, etc. The Program intends to close this knowledge gap among utilities by supporting the ones that have little resources to be trained and enter into twinning arrangements with more experienced water operators in the region. The Beneficiary entities of this Program are the water and sanitation operators of the 26 countries of LAC countries.

WOP-LAC has a steering committee composed of 8 operators, IDB, UN –HABITAT and IWA. In 2007, the operators of the steering committee selected IDB and WATSAN-LAC to represent the WOP-LAC secretariat. The WOP-LAC Secretariat is located at IDB headquarters as requested by the operators of the WOP-LAC steering committee. The business plans for 2009 and 2010 were agreed upon with the operators of the Steering Committee and successfully implemented in terms of twinning arrangements, training workshops as well as publications.

Since its launching in June 2008, WOP-LAC achieved the implementation of 13 twinning arrangements among water operators of LAC countries, that included:

- (i) SABESP (Brazil) and SEDAPAL (Peru) on electronic procurement;
- (ii) Aguas Andinas (Chile) and SEDAPAR (Peru) on wastewater treatment;
- (iii) Empresas de Medellín (Colombia) and ENACAL (Nicaragua) on information systems;
- (iv) EMAAP-Q (Ecuador) and SADM (Mexico) on water consumption management;
- (v) SABESP (Brazil) and AyA (Costa Rica) on wastewater treatment and commercial management;
- (vi) SABESP (Brazil) and CASAN (Brazil) on best practices in management; and
- (vii) ANDA (El Salvador) and EPM (Colombia) on management practices.

WOP-LAC has organized several training workshops:

- (i) Wastewater treatment: conducted at the Water and Wastewater Caribbean Association conference in Jamaica;
- (ii) Modelization of wastewater treatment plants in Santiago de Chile at the AIDIS conference;
- (iii) Non revenue water conducted at the ANEAS conference in Mexico;
- (iv) Energy efficiency: hosted by CAESB from Brasilia, Brazil;
- (v) Energy efficiency: hosted by EMAAP-Q in Ecuador;
- (vi) Non revenue water: hosted by Guyana Water Incorporated in Guyana;
- (vii) Non revenue water conducted at the ABES conference in Recife, Brazil;
- (viii) Energy efficiency in a water utility hosted by AyA from Costa Rica in October 2009;
- (ix) non revenue water hosted by AyA in October 2009 in Costa Rica; and
- (x) Energy efficiency: hosted by AYSA from Buenos Aires, Argentina in December 2009.

#### Main Lessons learned.

The WOP-LAC program need to have a close monitoring and follow-up of the twinning arrangements between operators to ensure that the twinning will evolve as a long-term relationship and to identify potential issues that constitute an obstacle to the proper implementation of the twinning.

Previously WOP-LAC activities were financed by an IDB Technical Cooperation from INWAP, which financed the proposal to establish WOP-LAC as well as several cases of twinning arrangements. Lessons learned from this TC are very positive as all activities were completed as planned, WOP-LAC was launched successfully and has grown in recognition among water utilities in the region. INWAP is a joint effort since 2002 between the Inter-American Development Bank (IDB) and the Government of the Netherlands to promote the international principles of Integrated Water Resources Management (IWRM) and support implementation of these principles in Bank operations throughout Latin America and the Caribbean.

WOP-LAC 2011-2012

The next business plans will be implemented in partnership with IDB-BID, WATSAN-LAC and International Water Association, and it will ensure the continuity of the program including a mix of twinning arrangements as in previous years and training workshops which will be documented and disseminated. WOP-LAC is well recognized in the region among water utilities and several WOP-LAC platforms were established at the country level in Brazil (through AESB, ABCON and ABES), Colombia (through ACODAL and ANDESCO) and Mexico (through ANEAS) for which the national water associations are taking the lead to develop WOP-LAC activities among water utilities in their country.

The expected results for 2011-2012 is the identification and implementation of at least 15 twinning arrangements among water utilities and the organization and implementation of 7 training workshops for the water operators. The topics to be covered will include corporate governance, non revenue water, commercial management and new topics such as asset management and operations and maintenance.

## 2. IADB-WATSAN-LAC Collaboration at Country Level

Since 2008, WATSAN-LAC and the IADB have developed several collaboration activities in the following countries: Bolivia, Mexico, Colombia, Peru and El Salvador.

During 2009-2010, the IADB have approved several Programs in all LAC countries that relevant for the partnership with WatSan-LAC. Particularly, in the three countries visited in the context of this Evaluation. The following Table resumes the more relevant in Bolivia, Mexico and Nicaragua.

COUNTRY	PROGRAM		Status Approved	Project Budget US\$
Bolivia	<u>Water and Sanitation Program for Periurban Zones - Phase II</u>	BO-L1065	Preparation	20.000.000
Bolivia	<u>Studies for implementation of works of stormwater drainage system in El Alto</u>	BO-T1137	Nov 24, 2010	150.000
Bolivia	<u>Pilot adaptation measures to climate change in the water sector</u>	BO-G1001	Nov 5, 2010	812.500
Bolivia	<u>Drainage in the Municipios of La Paz and El Alto</u>	BO-L1028	Nov 3, 2010	30.000.000
Bolivia	<u>Solid waste system through community owned SME in Bolivian rural municipalities</u>	BO-M1045	Sep 7, 2010	950.000
Nicaragua	<u>Housing Program for Low Income Population</u>	NI-L1053	Preparation	20.000.000
Nicaragua	<u>Potable Water in Seven secondary Cities of Nicaragua</u>	NI-G1002	Preparation	33.681.000
Nicaragua	<u>Water Supply Program for Managua</u>	NI-L1029	Dec 1, 2010	30.000.000
Nicaragua	<u>Support Preparation Housing Program, Phase II</u>	NI-T1079	Nov 12, 2010	337.825
Nicaragua	<u>Stormwater Drainage and Development Management SubWatersed III Managua</u>	NI-L1010	Nov 23, 2009	13.000.000
Mexico	<u>Integrated Urban Poverty Alleviation Program</u>	ME-L1098	Preparation	400.000.000
Mexico	<u>Integrating Segregated Cities: How to Prevent Violence and Foster Sustainability</u>	ME-T1163	Jan 28, 2011	506.000
Mexico	<u>Water, Sanitation, and Hygiene Program in Basic Education</u>	ME-L1086	Jan 11, 2011	350.000.000
Mexico	<u>Program in Support of Mexico's Climate Change Agenda III</u>	ME-L1078	Nov 17, 2010	400.000.000
Mexico	<u>Development of Climate Change State Action Plan for Yucatan</u>	ME-T1170	Oct 22, 2010	255.000
Mexico	<u>Support to Climatic Change National Strategy</u>	ME-T1169	Oct 22, 2010	1.250.000
Mexico	<u>Support to the preparation of the Climate Change Action Plan in Tabasco</u>	ME-T1171	Oct 22, 2010	259.000
Mexico	<u>Identif and develop of mechanisms for the promotion of private sector part in W&amp;S</u>	ME-T1144	Aug 13, 2010	400.000



## - Bolivia

WatSan-LAC have implemented the collaboration in Bolivia with the IADB's in the context of the "WatSan Peri-Urban Loan" (see details in Addenda 1), and which included in the Phase I the investments mainly in the cities of La Paz, El Alto, Santa Cruz, and Cochabamba.

WATSAN-LAC explored contributing to the development of Water and Sanitation Master Plans for some of the participant cities of the IADB's Water Programme, particularly in Cochabamba. In 2010, WATSAN-LAC implemented a consultancy to develop the **Terms of Reference for the Master Plans** within the IADB Water Periurban Project in the cities of La Paz, Cochabamba, Santa Cruz and Tarija. In 2011, future collaborations are considered to support to the Water Periurban Programme Unit to draft **secondary regulation** (covering technical issues, governance and climate change in the Master Plans) and to **monitor implementation** of the Master Plans.

## - Mexico

UN HABITAT has supported the activities of the IADB and the Ministry of Education (SEP) in the initial stages of the preparation of a lending operation oriented at **upgrading schools' water and sanitation infrastructure** across the country and implementing a nationwide hygiene and water education programme. UN- HABITAT is also working in partnership with IADB and the ANEAS to launch the **WOP-LAC Mexico**. Both organisations will be supporting the ANEAS with the financing of 5 national wops.

The IADB has demonstrated interest in providing technical support in the definition of the pensum of the **Distance Learning Capacity-building Programme for Water Utilities** launched at the end of 2010 in partnership with the ANEAS and UNAM.

Since 2008, WATSAN-LAC and the IADB are collaborating in a pilot WATSAN project in a peri-urban area of small municipality in Mexico with the Ministry of Social Development (SEDESOL). This has been done in the context of the Habitat Program. This program is a national program implemented at SEDESOL and it was designed to improve the living conditions of urban areas where poverty indicators are high (called polygons). This is done by providing combined access to basic infrastructure (investments in paving and roads, urban planning, sanitation, drinking water supply, and the construction of social infrastructure such as community development centers) and social services (day care centers, social activities, income generating activities, entertainment programs for youth and elderly, high school equivalency classes, among other), for poor and vulnerable urban communities.

The program has become one of the major public policy instruments to address urban poverty, by improving housing and living conditions. (Phase I of the IADB Program ME-L 1098).

Habitat program outcomes include:

- (i) the improvements in the levels of access to services (infrastructure and social services);
- (ii) the increase of real estate values, as a result of the various physical investments

- in the area;
- (iii) the increase in municipal investments towards social programs, led by the Community Development Centers (CDC)<sup>1</sup>; and
  - (iv) the increase in social capital, by means of improved levels of collaboration and participation in the intervened communities.

Between 2007-2010 the program financed 31,525 projects (each project costs between US\$25,000 to US\$100,000). Habitat has been key in reducing service gaps, both for social services and for municipal infrastructure. However, municipal needs are still large; 52% of the eligible polygons in the country have not benefited from any investments yet.

Furthermore, Habitat seeks to address new challenges faced by its target communities. Municipal interventions are planned and executed without an integrated planning process, ignoring environmentally friendly technical designs, and not conducting to sustainable interventions. This is partly caused by the low level of planning and the lack of technical capacity experienced by a large number of municipalities. Sustainability of interventions is a new area that Habitat wants to support with ME-L1098. Technical assistance will be provided to municipalities so that their traditional investments adhere to the principles of sustainable planning and respecting the environment. Preliminary recommendations include projects such as: (i) rain water harvesting; (ii) sanitation connected to treatment; (iii) energy saving lighting; among others.

WatSanLAC will collaborate with this Program through the Joint Initiative for Supporting the Sustainable Management of Water and Sanitation Service Provision for Poor Urban Communities in Mexico. The main objectives of this Joint Initiative, in partnership with the Ministry of Social development of Mexico (SEDESOL) and the Mexican Institute of Water Technology (IMTA). Are the following: (i) to support the SEDESOL in the capacity-building and institutional strengthening of water operators and local authorities (ii) to facilitate technical assistance in the implementation and institutionalisation of appropriate WATSAN technologies pilot projects, and (iii) to facilitate technical assistance in support of participatory planning processes.

#### - Colombia

Both institutions have implemented activities to explore collaborations for the “Quibdo Project”. These activities included the mobilisation and discussion of the Project Document with all relevant stakeholders: the Colombian Department of National Planning, the Vice Ministry of Water, the Local Authority of Quibdo, the Colombian Office of National Action, and EPM.

In 2010 an MOU has been signed with Accion Social (Ministry of International Cooperation) for the collaboration with the IADB, the Department of National Planning and Empresas Publicas de Medellin to improve the living conditions in neighbourhoods of the city of **Quibdo**.

The project management structure is already in place (IADB, DNP, Accion social and UN HABITAT) and UN HABITAT drafted the terms of reference for the activities of **social awareness campaign** and the support to the introduction of **appropriate technologies in water and sanitation** in la Yesca (Quibdo).

## - Peru

WATSAN-LAC has recently started its Programme in the country. After several assessments of the current water and sanitation situation and the interventions of relevant actors in the Peruvian water and sanitation sector, WATSAN-LAC has selected two strategic lines of intervention in which the expertise of our agency can result in valuable projects for the country: support to small and medium water service providers for adaptation to climate change; and support for wastewater management and new alternatives for decentralized eco-sanitation facilities.

WatSanLAC and IADB have elaborated a common strategy of support to the Ministry of Housing and sanitation in Peru, in their effort to develop the **wastewater treatment sector**. WATSAN-LAC is in the final steps of discussion with the Ministry of Civil Works for assisting the government in doing a waste water treatment baseline at a national level, information that will be the basis for the development of the national strategy in this aspect.

## - El Salvador

UN HABITAT started in 2010 an initiative in **cooperation with CARE** with two components: 1) technical assistance and capacity building to the water committees 2) **test new financing mechanism** as commercial bank loans, microcredits, revolving fund etc. to assist communities in rehabilitation, improvements or extensions of the networks.

UN-HABITAT is promoting the scaling-up of the results, with other partners, mainly the IADB. IADB (Opportunities for the Majority) has quantified and classified the demand for commercial credits among the small operators in the country. A joint initiative is in its final phase of design. WATSAN-LAC would support ANDA in organizing a **Capacity Building and Technical Assistance program to support small water operators** to access credit from commercial banks.

## **ANNEX 4**

### **LIST OF MAIN PARTNERS OF WATSAN-LAC REGIONAL AND COUNTRY LEVEL**

#### **A.1 GLOBAL AND REGIONAL PARTNERSHIPS**

#### **A.2 PARTNERSHIPS AT COUNTRY LEVEL**

- MEXICO**
- BOLIVIA**
- NICARAGUA**
- PERU**
- ECUADOR**
- COLOMBIA**
- EL SALVADOR**

<b>PARTNERSHIPS AT REGIONAL LEVEL</b>
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**Inter-American Development Bank (IADB-BID)**  
**Spanish Agency of International Development Cooperation (AECID)**

Stockholm Environment Institute (SEI)

Gender Water Alliance (GWA)  
 Project Wet  
 Water for People.

**Red Regional de Agua y Saneamiento de CentroAmerica (RRAS-CA)**  
 Red de Agua y Saneamiento de Honduras (RAS-HON)  
 Red de Agua y Saneamiento de Nicaragua (RAS-NIC)  
 Red de Agua y Saneamiento de El Salvador (RAS-ES)  
 Red de Agua y Saneamiento de Guatemala (RAS-GUA)

**UNW-DPC UNESCO International Hydrological Programme (IHP)**  
 Foro CentroAmericano y de Republica Dominicana – Agua Potable y Saneamiento (FOCARD-APS)  
 Global Water Partnership-Alianza por el agua.  
 Americas Water Forum, Coordination Group  
 WASH in Schools LAC Network (Lead by UNICEF)  
 Latin America and the Caribbean Water Safety Plan

Network – WSP-LAC/Net:

- World Health Organization. (WHO)
- Pan American Health Organization (PAHO)
- Centers For Disease Control and Prevention (CDC)
- US Environmental Protection Agency (USEPA)
- International Water Association (IWA)
- Inter-American Sanitary and Environmental Engineering Association (AIDIS)

<b>MEXICO</b>
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Ministry of Social Development of Mexico (SEDESOL)

Ministry of Education of Mexico

Chiapas state Government

Veracruz State Government

Tabasco State Government

Municipality of Ecatepec de Morelos (state of Mexico)

Municipality of Xalapa

Municipality of Tuxtla Gutierrez

Mexican Institute for Water Technology -Instituto Mexicano de Tecnología del Agua (IMTA)

Engineering Faculty of the National Autonomous University of Mexico (UNAM)

Tecnológico de Monterrey

International Water Association, Mexican Chapter (IWA)

Mexican Environmental Education and Communication Fund

National Association of Water Utilities (ANEAS)

National Water Commission (CONAGUA)

SARAR

Transformación Centro del Agua de America Latina y el Caribe (CAALCA)

Femsa Foundation

Water Advisory Council (CCA)

**UN Agencies :**

UNW-DPC

UNDP/Spain Millennium Development Goals Achievement Fund

ECLAC

UNESCO-PHI

FAO

WHO / PAHO

UNIDO

UNODC

<b>BOLIVIA</b>
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Ministry of the Environment and Water

Ministry of Health

SENASBA ( Water and Sanitation Sustainability Service)

Regional Government of Cochabamba

Regional Government of Santa Cruz

Municipality of La Paz,

Municipality of San Ignacio de Velasco, Bolivia Municipality of Cochabamba,

Municipality of Patacamaya, Bolivia GRAS ( Group of Donors and International

DINESVBI (Sectoral Spaces for Water and Sanitation)

COED (Disaster and Emergency Operation Center), Santa Cruz

CODESAB (Water and Sanitation Regional Council), Cochabamba

Cooperation Agencies in Water and Sanitation (GRAS)

GTZ ( German Technical Cooperation Agency) JICA ( Japanese Cooperation Agency)

SNV ( The Netherlands Cooperation Agency)

Plan International

Water for People

NGO Yaku

ABIS (Engineering Bolivian Association)

FEDECAAS (Water Providers Asociation in Santa Cruz)

Water Research Center (CASA) –University of San Simon, Cochabamba

UNICEF

PAHO

**PERU**

Ministry of Housing and Civil Works, Peru  
Regional Government of Junin, Peru  
UNDP  
CARE International  
CENCA  
Water For People

**ECUADOR**

National Secretariat of Development and Planning (SENPLADES)  
National Secretariat of International Cooperation (SETECI)  
Ministry of Urban Development and Housing (MIDUVI)  
National Secretariat for Water (SENAGUA)  
Ministry of Public Health (MSP)  
Ministry of Education (ME)  
Spanish Agency of International Development Cooperation (AECID)  
Municipality of Esmeraldas, Ecuador  
Gender and Water Alliance - GWA  
UNDP/Spain Millennium Development Goals  
Achievement Fund  
UNDP OPS-WHO OIT UNV



<b>COLOMBIA</b>
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Planning National Department (DNP) of Colombia  
 High Commission for Social Development and International Cooperation (Alta Consejería para la Acción Social y la Cooperación Internacional)  
 Municipality of Tumaco  
 Municipality of Quibdo

Accion Contra el Hambre – Spain  
 Empresas Públicas de Medellín ESP - EPM  
 Water and Sanitation Service Provider (AQUASEO)  
 S.A.E.S.P  
 Environment Centre Costa Pacifica (Centro Ambiental Costa Pacifica)

<b>EL SALVADOR</b>
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Care International  
 ANDA (National Water Company)

<b>NICARAGUA</b>
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Municipality of Managua (ALMA) Ministry of Environment and Natural Resources (MARENA) Association of Municipalities of Nicaragua (AMUNIC)
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Spanish Agency of International Development Cooperation (AECID)
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Nicaragua National Recycling Forum (FONARE)  
 National University of Engineering – Centro de Investigación y Estudios en Medio Ambiente (UNI-CIEMA)  
 Polytechnic University of Nicaragua (UPOLI)  
 Central American Association for the Economy, Health and Environment (ACEPESA)  
 Studies and Promotion Center for the Habitat (HABITAR)  
 UNOPS  
 UNDP

## ANNEX 5

### WTSF-ROLAC AND ITS PARTNERS

#### Activity Description

**The Programme WTSF-ROLAC** is a regional operative initiative of UN-Habitat, whose overall objective is to increase the flow of investments to the water and sanitation sector in Latin America and The Caribbean through enabling strategic partnerships amongst different agents, including the Inter-American Development Bank, donor countries, central and local governments, private sector, non-governmental organisations and local communities.

The strategic Partnership agreements represent a main instrument in the pro-poor governance tool kit. UN Habitat Rolac has consolidated an extensive and wide list of partners. There are partnerships with supply side as well as demand side institutions; there are also partnerships with a wide range of technical and social intermediaries such as NGOs, research organizations, private sector entities, civil society, and political organizations.

The **Inter-American Development Bank** represent the main strategic partner in every LAC country, and a relevant opportunity to implement the pro-poor models at scale, proving their efficacy as effective tools for the pursuit of the MDGs for water and sanitation.

#### List of Memorandum of Understandings (MoU) signed (2008-2010)

1. IDB-BID (Interamerican Development Bank )
2. SEDESOL (Ministry of Social Development-MEXICO)
3. SOCIAL ACTION (Presidential Agency for the Social Action and the International Cooperation).
4. MMAA (Ministry of Environment and Water-BOLIVIA) ...in process...

#### List of Agreement of Cooperation (AoC) signed (2008-2010)

5. ACF-SPAIN (Fundación Acción contra el Hambre – España)
6. CCA (Consejo Consultivo del Agua A.C.)
7. CCC (Civic Centre for Collaboration)
8. SNV (The Netherlands Development Organization)
9. EMAPAS (Empresa municipal de agua potable y alcantarillado Sacaba) Cochabamba
10. ANEAS (Asociación Nacional de Empresas de Agua y Saneamiento de México A.C.)
11. IMTA (Instituto Mexicano de Tecnología del agua)
12. RRASCA (The Red Regional de Agua y Saneamiento de Centro América)
13. WFP (Water For People)

### Tabla

#### List of Memorandum of Understanding (MoU) and Agreements of Cooperation (AoC) signed by UN Habitat-Rolac

Country	Document	PARTNER	Partner description	SCOPE	Date Signature
USA	MoU	IADB	Interamerican Development Bank	LatinAmerica/Caraibe	ago-08
Mexico	MoU	SEDESOL	Ministry of Social Development	Mexico	oct-10
Colombia	MoU	ACCION SOCIAL	Presidential Agency for the Cooperation and Social Action	Colombia	dic-10
Bolivia	MoU	MMAA	Ministry of Water and Environment	Bolivia	processing
Bolivia	AoC	PLAN	Plan International Inc	Municipality San ignacio de Velasco	dic-09
Bolivia	AoC	LA PAZ	Municipality of La Paz	Municipality of La Paz: 12 Neighbourhoods	mar-10
Bolivia	AoC	YAKU	Italian Association YAKU	Villa Satelite Norte/TIQUIPAYA/COCHABAMBA	oct-10
Bolivia/Ecuador/Peru	AoC	W4P	Water for Peolple	Bolivia/Ecuador/Peru	nov-10
Bolivia-Cochabamba	AoC	EMAPAS	Empresa Municipal de Agua Potable y Alcantarillado	Municipality of SACABA	jun-10
Bolivia-La Paz	AoC	SNV	The Netherland Development Organization		sep-10
Colombia	AoC	ACF-Spain	ACF-S	Municipality of Tumaco	feb-10
Mexico	AoC	CCA	Consejo Consultivo del Agua AC	Veracruz-Chiapas	ago-09
Mexico	AoC	CCC	Civic Center of Collaboration	Veracruz-Chiapas	ago-10
Mexico	AoC	ANEAS	Asociacion Nacional de Empresas de Agua	WOP Mexico	oct-20120
Mexico	AC	BASF		HVBWSHE	2011
Mexico-Morelos	AoC	IMTA	Instituto Mexicano de Tecnologia del Agua	Mexico	dec-2010
Mexico-Morelos	AoC	ECATEPEC	Municipality of Ecatepec	Municipality of Ecatepec	Jan-2009
Nicaragua-Managua	AoC	AMUNIC		WOP Nicaragua	nov-10
Nicaragua-Managua	AoC	RRASCA	Red Regional de Agua y Saneamiento de Centro America (RRASCA)	Central America	sep-10
Peru	AoC	CARE/Plan International/CENCA		Junin Region	feb-10
USA	AoC	WET	Project WET Foundation	LatinAmerica/Caraibe	dic-09
Mexico	Contract	SARAS		HVBWSHE	ago-10
Mexico	Contract	Climate Change Specialist		Chiapas/Veracruz	jun-10

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## **1. INTERAMERICAN DEVELOPMENT BANK (IDB-BID)**

The IDB is a public international organization, the purpose of which is to contribute to the acceleration of the process of economic and social development of its regional developing member countries in Latin America and the Caribbean, individually and collectively.

The Bank approved a Water and Sanitation Initiative on May 23, 2007, which aims at supporting LAC member countries in achieving universal access to sustainable, reliable, quality water and sanitation services taking into consideration the population's ability to pay.

UN-Habitat and IDB will explore opportunities to create an enabling environment for new investments in the water and sanitation sector in the LAC countries, facilitating project preparation and mobilizing resources for implementing, operation and maintenance in a sustainable manner.

The objective of the MoU is to formalize a non-exclusive framework of cooperation and to facilitate collaboration between both institutions in providing assistance for programs and projects concerning water and sanitation. This collaboration will contribute to the implementation of the Bank's Water and Sanitation Initiative.

### **The following areas of cooperation are explored:**

- (a) Creating the enabling environment to strengthen regional, country and city level governance capacities for integrating water and sanitation development and management, and promote water quality, sanitation and hygiene education,
- (b) Identifying, developing and preparing investment projects consistent with the IDB's water and sanitation programs,
- (c) The possibility of co-financing projects related to urban water and sustainable sanitation including environmentally sound management of solid wastes and extending wastes service coverage to the poorer neighborhoods, as well as slum upgrading and urban renewal.

UN-Habitat and IDB may explore the possibility of collaborating on the creation and implementation of a "Water and Sanitation Program for LAC Cities". UN-Habitat has a number of programs ( e.g., Training and Capacity building, Best Practices in Local Leadership) which provide general technical assistance, and the Bank provide a focus for such activities enabling them to leverage and support the financial investments.

UN-Habitat and the Bank may explore the possibility of collaborating also on the development and implementation of a Water Operator Partnerships-LAC Chapter, which could have the objective of helping regional water operators to maximize their capacities

to deliver services, particularly to the poor, in the attainment of the MDG for Water and Sanitation.

The IDB intends to explore actions in the Water and Sanitation sector as part of the Water and Sanitation Initiative that may aim to raise approvals of Bank loans in this sector to around US\$ 1 billion a year. UN-Habitat intends to explore co-financing operations to Bank projects for which a contribution of US\$ 10 million dollars in grants could be made.

## **2. ACF-SPAIN (Fundación Acción contra el Hambre – España)**

ACF-SPAIN, as part of the Action Contre la Faim International Network, is an international non-governmental, private, apolitical, non-confessional and non-profit organization, present in more than forty-six countries working in projects concerning focus areas: nutrition, health, food security, and water and sanitation.

ACF-SPAIN's vocation is to combat hunger, misery and dangerous situations that threaten men, women and children. In Colombia, ACF-SPAIN began its work in 1998, obtaining its formal registration in 1999.

UN-Habitat and ACF-Spain collaborate to implementing the "Reduction of environmental health risks of urban and semi-urban poor in Tumaco Municipality, Colombia", within the Programme Water and Sanitation for Cities in Latin America and the Caribbean.

**The Project** aims at addressing the problems of access to water and sanitation in Colombia. The Project's main goal is to improve the living conditions of vulnerable population in a sustainable manner in the South of Colombia, through reduction of environmental health risks of urban and semi-urban poor population in Tumaco Municipality, Colombia..

The expected outcomes are:

- 1) Sustainable physical access to safe water and sanitation facilities, 1,000 people will gain access to environmentally sustainable safe water while 1,150 people will gain access to basic sanitation infrastructure.
- 2) Sustainable Solid Waste Management. Improved solid waste management practices at different levels will benefit 1,000 people.
- 3) Public Awareness and Education. 1,450 people will have increased awareness about protection of scarce water resources, basic sanitation practices and solid waste management and reduction practices.

### **UN-Habitat's Responsibilities**

- a) Providing guidance and advice on the overall project planning and implementation
- b) Providing funds to ACF-SPAIN up to a maximum of USD252,406,4 (USDollars Two hundred and Fifty Two Thousand, Four Hundred and Six and Forty Cents) for undertaking various Project activities
- c) Recommending potential technical partners for implementation of the Project, as per UNDP regulations.

- d) Coordinating with relevant stakeholders to facilitate the activities of the Project, as per UNDP regulations.
- e) Coordinating with ACF-SPAIN and provide final approval for the selection of consultants for the implementation of the project activities.
- f) Advising ACF-SPAIN on UN-Habitat's rules and regulations for sub-contracting and outsourcing.
- g) Undertaking regular supervision and an end of project evaluation
- h) Assisting ACF-SPAIN to disseminate project activities at national and international levels.

### **ACF-SPAIN Responsibilities**

- a) Providing leadership and organisational support with full responsibility over the implementation and monitoring of the Project, and to ensure efficiency and effectiveness.
- b) Undertaking all activities in consultation with UN-Habitat.
- c) Providing and ensuring the counterpart contribution up to a maximum of USD252,931.5 (USDollars Two Hundred and Fifty Two Thousand, Nine Hundred and Thirty One and Fifty Cents) in cash and in kind, to undertake project activities.
- d) Coordinating with other relevant stakeholders at local and national levels.
- e) Delivering all outputs and progress reports to UN-Habitat.
- f) Documenting and promoting information sharing relative to the Project
- g) Conducting regular monitoring of the activities and an end of project impact evaluation
- h) Undertaking the auditing exercises required as per the agreement signed for the implementation of the project.

### **3. CCA (Consejo Consultivo del Agua A.C.)**

**The CCA** is a civil organisation, plural and independent, constituted as a Civil Association in March of 2000. The main objective of CCA is to promote strategic political-institutional and societal changes needed for the rational use and sustainable management of water in Mexico by supporting the policy-reform, capacity-building and public communications efforts of other public, social and private sector organizations, and particularly those of the National Water Commission and the Mexican Presidency.

**Un Habitat and CCA** collaborate to implementing the project "Implementation of 3 WATSAN Citizen Observatories and Establishment of s WATSAN Citizens Observatory Network", within the Water and Sanitation for Cities Programme in Latin America and the Caribbean – WATSAN-LAC.

**The Project**, aims at fostering the development of a more transparent, equitable and efficient water and sanitation service provision through the implementation of effective citizen participation, social monitoring and accountability mechanisms.

### **UN-Habitat's Responsibilities**

- a) Providing guidance and advice on the overall project planning and implementation
- b) Providing funds to CCA up to a maximum of USD134,000 (USDollars One Hundred Thirty Four Thousand) for undertaking various Project activities.
- c) Coordinating with relevant stakeholders to facilitate the activities of the Project.
- d) Undertaking regular supervision and an end of project evaluation
- e) Assisting CCA to disseminate project activities at national level in Mexico.

### **CCA Responsibilities**

- a) Providing leadership and institutional support with full responsibility over the implementation and monitoring of the Project, and to ensure efficiency and effectiveness in its implementation.
- b) Providing funds up to a maximum of USD134,000 (USDollars One Hundred Thirty Four Thousand) for undertaking various Project activities.
- c) Establishing coordination with UN-Habitat, social actors involved and other relevant stakeholders.
- d) In Coordination with UN-Habitat, planning and undertaking all activities.
- e) Delivering all the outputs and progress reports to UN-Habitat.
- f) Documenting and promoting information sharing relative to the Project.

## **4. CCC (Civic Centre for Collaboration)**

**Un Habitat and CCC** shall collaborate in implementing of the Strengthening of Citizen Participation in the Cities of Xalapa, Veracruz and Tuxtla Gutierrez, Chiapas as one of the activities needed to achieve the objectives of component 2 intiled "Risk management and adaptation to Climate Change" subscribed in the UN-Habitat project under the framework of the MDG-F joint Programme for "Strengthening the Effective and Democratic Management of Water and Sanitation to support the Achievement of the Millennium Development Goals."

### **UN-Habitat's Responsibilities**

- a) Provide guidance and advice on the overall project planning and implementation.
- b) Provide funds to CCC up to a maximum of USD23,800 (USDollars Twenty three thousand eight hundred) for undertaking various Project activities.
- c) Cordinate with relevant stakeholders to facilitate the activities of the Project.
- d) Undertake regular supervision and end of project evaluation.
- e) Assist CCC to disseminate project activities at national level.

### **CCC's Responsibilities**

- a) Provide leadership and institutional support with full responsibility over the implementation and monitoring of the Project, and to ensure efficiency and effectiveness.
- b) Establish coordination with UN-Habitat, social actors involved and other stakeholders.
- c) In Coordination with UN-Habitat, plan and undertake all activities.
- d) Deliver all the outputs and progress reports to UN-Habitat.
- e) Document and promote information sharing relative to the Project.

### **5. SNV (The Netherlands Development Organization)**

SNV is a Dutch international development organization with more than 40 years of experience. It currently works in 32 countries in Africa, Asia, Latin America and the Balkans, supporting national and local actors within government, civil society and the private sector to find and implement local solutions to social and economic development challenges. It employs more than 1,500 professional advisors in the field, dispatched through 100 offices worldwide. It also provides a unique blend of integrated services and solutions that are tailor-made to the specific needs of each region, including the provision of clean drinking water, education, sanitation and hygiene.

**Un Habitat and SNV** shall collaborate to implement “Strengthening the Bolivian Node to Disseminate Experiences and Projects on Decentralized Sustainable Sanitation (the “Project”) within the Programme WATSAN LAC (the “Programme”)

**The Project**, aims at contributing in the development of a knowledge network and a node of experts in sustainable sanitation, in order to generate favorable conditions to implement Decentralized Sustainable Sanitation (DSS) alternative systems in Bolivia, spreading activities at local and international levels.

### **UN-Habitat's Responsibilities**

- a) Providing guidance and advice on the overall project planning and implementation
- b) Providing funds to SNV up to a maximum of USD79,000 (USDollars Seventy nine thousand) for undertaking various Project activities
- c) Facilitating the network with diverse water resources management, water and sanitation management, environmental education and other relevant consultants, with the objective of supporting the activities of the Project.
- d) Recommending potential technical partners for implementation of the Project, as per UNDP regulations.
- e) Coordinating with relevant stakeholders to facilitate the activities of the Project.
- f) Advising SNV on UN-Habitat's rules and regulations for sub-contracting and outsourcing.
- g) Undertaking regular supervision
- h) Assisting SNV to disseminate project activities at national and international levels.



### **SNV Responsibilities**

- a) Providing leadership and organisational support with full responsibility over the implementation and monitoring of the Project, and to ensure efficiency and effectiveness in its implementation
- b) Undertaking all activities in consultation with UN-Habitat.
- c) Providing and ensuring the counterpart contribution up to a maximum of USD41,500 (USDollars Forty-one thousand and five hundred) in cash and in kind; and ensuring the contribution of its associates and partners (i.e. SEI,NDSS) of USD38,500 (USDollars Thirty-eight thousand five hundred) to undertake project activities.
- d) Coordinating with other involved stakeholders at local and national levels.
- e) Delivering all outputs and progress reports to UN-Habitat.
- f) Documenting and promoting information sharing relative to the Project.
- g) Conducting regular monitoring of the activities and an end of project impact evaluation

### **6. EMAPAS (Empresa municipal de agua potable y alcantarillado Sacaba) Cochabamba-BOLIVIA**

EMAPAS is a decentralized municipal non-profit water service provider in charge of delivering potable water services in the municipality of Sacaba, Cochabamba. Its main goal is providing a better service with quality and continuity, expanding its coverage with a particular focus on lower income groups. For achieving this goal it provides adequate and locally sustainable water supply and sanitation facilities jointly with skilled staff and hygiene behavior programmes at household and community levels.

**UN-Habitat and EMAPAS** shall collaborate to implementing the Integrated Water Resource Management and Community Sustainable Sanitation Project in Sacaba, Cochabamba, Republic of Bolivia within the Programme WATSAN LAC.

**The Project**, aims at improving the quality of life of the peri-urban population of Sacaba and contributing to the pursuit of sustainable development through:

- 1) The implementation of neighborhood sanitation networks in three peri-urban areas of Sacaba (Curubamba, Alto, Mayu Molino and Molino Blanco)
- 2) The development of a community solid waste management system.
- 3) The development of sustainable environmental management practices in the Maylancu River and other tributaries of the Rocha River
- 4) The institutional strengthening of EMAPAS.
- 5) The improvement of sanitation infrastructure facilities in three local public schools and promoting Human Values Based Water, Sanitation and Hygiene Education (HVWSHE) among the students and local communities.

### **UN-Habitat's Responsibilities**

- a) Coordinating and monitoring the project implementation
- b) Providing funds to EMAPAS up to a maximum of USD135,000 (USDollars One Hundred Thirty Five Thousand ) for undertaking various Project activities
- c) Facilitating the network with actors in the sector of water resources management, water and sanitation, environmental education and other relevant consultants, with the objective of supporting the implementation of the Project.

- d) Reviewing and monitoring the project implementation arrangements.
- e) Advising and backstopping during the cycle of project implementation.
- f) Undertaking regular supervision and a joint end of project evaluation.

#### **EMAPAS Responsibilities**

- a) Establishing coordination with UN-Habitat, schools and other stakeholders
- b) Providing and ensuring the counterpart contribution up to a maximum of USD151,235 (USDollars One hundred Fifty-one thousand and Two hundred and Thirty five) in cash and in kind to undertake project activities.
- c) Leading to stir the project in a effective and efficient manner.
- d) Planning and undertaking all activities in close consultation with UN-Habitat.
- e) Coordinating with other relevant stakeholders at local and national levels.
- f) Conducting regular monitoring of the activities and an impact evaluation

#### **7. ANEAS (Asociación Nacional de Empresas de Agua y Saneamiento de México A.C.)**

**The ANEAS** is a non for-profit civil association that groups and represents the interests of nacional water and sanitation operators in Mexico, its main objective is to support improvements in the performance and efficiency of water and sanitarion treatment services in benefit of local populations. For achieving this goal, the ANEAS undertakes several activities including capacity-building, knowledge generation and dharing political lobbying, institutional strengthening and legal reform initiatives.

**Subject** to their respective regulations, rules, policies, practice, procedures and availability of funds, the Parties shall collaborate to implementing the “Distance Learning Diploma for Water and Sanitation Operators and Local Authorities Project” (the “Project”) within the Programme WATSAN LAC (the “Programme”)

**The Project**, aims at designing and implementing a distance-learning course for Mexican water and sanitation operators and local authorities in order to support them in raising their general service performance, which in turn will benefit the local communities they serve.

#### **UN-Habitat’s Responsibilities**

- a) Providing guidance and technical advice on the overall project planning and implementation.
- b) Providing funds to ANEAS up to a maximum of USD99,000 (USDollars Ninety nine thousand) for undertaking various Project activities.
- c) Coordinating with relevant stakeholders to facilitate the activities of the Project, including the Ministry of Social Development and the Distance Learning and Continuous Education Division of the Engineering Faculty of the National Autonomous University of Mexico (UNAM)
- d) Undertaking regular supervision and end of project evaluation.
- e) Assisting ANEAS to disseminate project activities at national level.

### **ANEAS Responsibilities**

- a) Providing leadership, institutional support and project management support with full responsibility over the implementation and monitoring of the Project, and the ensure efficiency and effectiveness.
- b) Providing financial and in-kind funding up to a maximum of USD100,000 (USDollars One Hundred) for undertaking various project activities.
- c) Ensure the financial and in-kind funding from part of the Distance Learning and Continuous Education Division of the Engineering Faculty of the National Autonomous University of Mexico (UNAM) of up to USD125,000 (USDollars One Hundred and Twenty Five Thousand) for undertaking various project activities.
- d) In coordination with UN-Habitat, planning and undertaking all activities.
- e) Establishing coordination with UN-Habitat, and other and other relevant stakeholders in the project, including of the Distance Learning and Continuous Education Division of the Engineering Faculty of the National Autonomous University of Mexico (UNAM), Ministry of Social Development (SEDESOL), the local water and sanitation operators and the local authorities.
- f) Lobbying amongst ANEAS associates to support the project
- g) Delivering all outputs and progress reports to UN-Habitat
- h) .Documenting and promoting information sharing relative to the Project

### **8. IMTA (Instituto Mexicano de Tecnología del agua)**

The IMTA is a decentralized government entity from the Ministry of Environment and Natural Resources with the mandate of carrying out research & development activities, capacity-building, technological transference, technical assistance and institutional strengthening in the field of water resources management and water & sanitation provision with the goal of supporting the Mexican government and also other stakeholders in the pursuit of sustainable water resources management in the country.

**UN-Habitat and IMTA** shall collaborate to implementing the “Technical Assistance for the Inception of Appropriate Water, Sanitation and Wastewater Treatment Technologies in the Operations of the Habitat-SEDESOL Programme of the Ministry of Social Development (SEDESOL)” within the Programme WATSAN LAC.

**The Project**, aims at supporting the Mexican government in the efforts for increasing the coverage of safe drinking water, sanitation and wastewater treatment for poor and marginalized urban and peri-urban communities by supporting the inception and use of appropriate water and sanitation and wastewater technologies in the operations of a federal urban poverty alleviation programme implemented by the Ministry of Social Development SEDESOL, entitled Habitat-SEDESOL.

### **UN-Habitat's Responsibilities**

Under the Agreement, UN-Habitat, through its Water and Infrastructure Branch (WSIB) and the Regional Office for Latin America and the Caribbean ROLAC, shall be responsible for the overall supervision and backstopping of the Project execution, including:

- a) Providing funds of up to a maximum of USD130,000 (USDollars One hundred and Thirty thousand) for undertaking various Project activities.
- b) Providing guidance and technical advice on the overall project planning and implementation and in coordination with the IMTA
- c) Assisting in the coordination of project activities with partners and relevant stakeholders.
- d) Maintaining a close relationship with the representatives of the UPAUP's (SEDESOL) to ensure successful project delivery.
- e) Supporting all monitoring and evaluation activities.

### **IMTA's Responsibilities**

- a) Providing in-kind funds up to USD150,000 (USDollars One Hundred and Fifty Thousand).
- b) Providing high-level technical assistance for the development of the Rapid Socio-economic, Institutional Feasibility Study, the Contextual Base-Line Report and the Participatory Strategy.
- c) Providing high-level technical assistance for the design and construction supervision of the specific appropriate WATSAN technology.
- d) Providing high-level technical assistance to ensure appropriate technological transference and social appropriation.
- e) Carrying-out project monitoring and evaluation
- f) Providing high-level policy advice to SEDESOL identifying the barriers and opportunities for the inception of appropriate technologies in the context of the Habitat/SEDESOL Programme.

### **9. WFP (Water For People)**

**The WFP** is a nonprofit international development organization that supports safe drinking water and sanitation projects in developing countries. WFP partners with communities, local governments, and other nongovernmental organizations to assist communities improve their quality of life by supporting the development of locally sustainable drinking water resources, improved sanitation facilities, and hygiene education programs by providing professional development advice, financial support and volunteer technical services. WFP is currently working in 11 countries in Latin America, Africa and Asia.

**UN-Habitat and WFP** shall collaborate to implementing the "Promoting Sustainable Sanitation Services in Bolivia, Ecuador, and Peru within the Programme WATSAN LAC.

**The Project** is a regional operative initiative of UN-Habitat, whose overall objective is to increase the flow of investments to the water and sanitation sector in Latin America and the Caribbean through enabling strategic partnerships amongst different agents, including the

Inter-American Development Bank, donor countries, central governments, local authorities, the private sector, non-governmental organizations and local communities.

### **UN-Habitat's Responsibilities**

- a) Providing guidance and advice on the overall project planning and implementation
- b) Providing funds to WFP up to a maximum of USD250,000 (USDollars Two hundred and Fifty thousand) for undertaking various Project activities
- c) Facilitating the network with deverse water resources management, water and sanitation management, environmental education and other relevant consultants, with the objective of supporting the activities of the Project.
- d) Recommending potential technical partners for implementaiton of the Project, as per UNDP regulations.
- e) Coordinating with relevant stakeholders to facilitate the activities of the Project.
- f) Advising WFP on UN-Habitat's rules and regulations for sub-contracting and outsourcing.
- g) Undertaking regular supervision
- h) Assisting WFP to disseminate project activities at national and international levels.
- i) Review the progress of the project on bi-annual basis jointly with the implementing partner.
- j) Liaise with relevant authorities internationally to strengthen networks for the sustainability of the project.
- k) Monitoring the utilization of the funds to ensure effectiveness and efficienty delivery of the programme objectives.

### **WFP Responsibilities**

- a) Providing leadership, institutional support and project management support with full responsibility over the implementation and monitoring of the Project, and the ensure efficiency and effectiveness.
- b) In consultatio with UN-Habitat, undertaking all activities
- c) Providing and ensuring the counterpart and its associates and partners contribution up to a maximum of USD322,976 (USDollars Three hundred and twenty two thousand and nine hundred seventy six) in cash and in kind to undertaking various project activities.
- d) Coordinating with other concerned stakeholders at regional, national and local levels.
- e) Delivering all outputs and progress reports to UN-Habitat
- f) Documenting and promoting information sharing relative to the Project
- g) Conducting regular monitoring of the activities
- h) To coordinate all the professionals involved in the project implementaiton and provide technical report to UN-Habitat
- i) Account for all the funds received from UN-Habitat and submit all reports as agreed in the work plan
- j) Conducting landscaping visits to determine project implementation sites
- k) Developing Terms of Referencer for sanittion market analyses in selected sites
- l) Identifying sanitation buseness monitoring system that can be used in other regions and by other implementers
- m) Determinig appropriate financing mechanisms and promotion strategies
- n) Developing a sanitrion business monitoring system that can be used in other regions and by other implementers

- o) Hosting annual regional learning summits, document lessons learned and share with the wider sanitation community
- p) Providing field research opportunities to Peruvian and American students and provide mentoring to those students
- q) Participating in the annual World Water Corps sustainability monitoring program.

#### **10. RRASCA (The Red Regional de Agua y Saneamiento de Centro América)**

**The RRASCA** is an International development organization of Central America with over 20 years of experience, that brings together four national Networks: Network for Water and Sanitation in Guatemala (RASGUA), Network for Water and Sanitation of El Salvador (RASES), Network for Water and Sanitation of Honduras (RAS-HON) and Network for Water and Sanitation of Nicaragua (RASNIC). With a variety of members from governmental institutions, municipalities and their associations, civil, society, NGOs, universities and cooperation agencies integrated into the national networks. RRASCA is an active mechanism for coordination, collaboration and assistance among different actors in the water and sanitation sector in Honduras, Guatemala, Nicaragua and El Salvador, with the purpose of contributing to expand the coverage of the water and sanitation services and facilitate compliance with the objectives of the Millennium Development Goals (MDGs).

**UN-Habitat and RRASCA** shall collaborate to “Strengthening the Knowledge Node on Sustainable Sanitation in Centro America in order to improve sanitation services within the Programme WATSAN LAC.

**The Project** is a regional operative initiative of UN-Habitat, whose overall objective is to increase the flow of investments to the water and sanitation sector in Latin America and the Caribbean through enabling strategic partnerships amongst different agents, including the Inter-American Development Bank, donor countries, central governments, local authorities, the private sector, non-governmental organizations and local communities.

#### **UN-Habitat’s Responsibilities**

- a) Providing guidance and advice on the overall project planning and implementation
- b) Providing funds to RRASCA up to a maximum of USD80,000 (USDollars Eighty thousand) for undertaking various Project activities
- c) Facilitating the network with diverse water resources management, water and sanitation management, environmental education and other relevant consultants, with the objective of supporting the activities of the Project.
- d) Recommending potential technical partners for implementation of the Project, as per UNDP regulations.
- e) Coordinating with relevant stakeholders to facilitate the activities of the Project.
- f) Advising RRASCA on UN-Habitat’s rules and regulations for sub-contracting and outsourcing.
- g) Undertaking regular supervision
- h) Assisting RRASCA to disseminate project activities at national and international levels.

**RRASCA Responsibilities**

- a) Providing leadership and organizational support with full responsibility over the implementation and monitoring of the Project, and the ensuring efficiency and effectiveness.
- b) In consultation with UN-Habitat, undertaking all activities
- c) Providing and ensuring the counterpart and its associates and partners contribution up to a maximum of USD81,750 (USDollars Eighty one thousand and Seven hundred and Fifty) in cash and in kind to undertaking various project activities.
- d) Coordinating with other concerned stakeholders at regional, national and local levels.
- e) Delivering all the outputs and progress reports to UN-Habitat
- f) Documenting and promoting information sharing relative to the Project
- g) Conducting regular monitoring of the activities

## ANNEX 6

**WATSAN-LAC**  
**BUDGET 2008-2010 BY COUNTRY –AND- BY ORIGIN OF FUNDS**

<b>UN Habitat</b>	<b>Fund</b>	<b>Managed from</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>TOTAL 2008-2010</b>	
BOLIVIA	WSTF	ROLAC	647.710	450.000	239.000	1.336.710	17,0%
MEXICO	WSTF	ROLAC	115.000		363.000	478.000	6,1%
MEXICO	MDG	ROLAC		212.086	332.109	544.195	6,9%
EL SALVADOR	WSTF	ROLAC		300.000		300.000	3,8%
REGIONAL	WSTF	ROLAC		560.000	330.000	890.000	11,3%
COLOMBIA	WSTF	ROLAC			252.406	252.406	3,2%
PERU	WSTF	ROLAC			300.000	300.000	3,8%
ECUADOR	MDG	ROLAC		69.900	1.238.608	1.308.508	16,6%
Solid Waste Mgmt	WSTF	W&S Sec II		1.962.721	500.000	2.462.721	31,3%
<b>TOTAL</b>			<b>762.710</b>	<b>3.554.707</b>	<b>3.555.123</b>	<b>7.872.540</b>	<b>100,0%</b>
<b>PARTNERS</b>	<b>Fund</b>	<b>Managed from</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>TOTAL 2008-2010</b>	
BOLIVIA	Partner	ROLAC	783.229	637.582	304.422	1.725.233	
MEXICO	Partner	ROLAC	191.500		509.000	700.500	
EL SALVADOR	Partner	ROLAC		235.000		235.000	
REGIONAL	Partner	ROLAC		540.000	404.726	944.726	
COLOMBIA	Partner	ROLAC			252.406	252.406	
PERU	Partner	ROLAC			255.000	255.000	
<b>TOTAL</b>			<b>974.729</b>	<b>1.412.582</b>	<b>1.725.554</b>	<b>4.112.865</b>	
<b>% PARTNER/ROLAC</b>			<b>1,28</b>	<b>0,40</b>	<b>0,49</b>	<b>0,52</b>	