

# **WATER AND SANITATION IN LATIN AMERICA AND THE CARIBBEAN**



**UN  HABITAT**







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# FOREWORD

Ensuring access to water and adequate sanitation services is one of the most efficient ways to break the poverty cycle. The Millennium Development Goals, adopted by 189 countries in 2000, included the target of halving by 2015 the number of people without access to water suitable for human consumption and adequate sanitation services. In order to comply with the goal of halving the proportion of people without drinking water supply services in the LAC Region, access would have to be provided to over 120 million persons.

Despite the efforts, the Latin American and Caribbean region still shows a high level exclusion from services. The rate of overcoming coverage problems has diminished while the numbers of the socially excluded have been growing in many countries. There are serious deficiencies in access to services, which disproportionately affect low-income groups, improvements in access to sanitation is clearly behind water, where most of the sector efforts and funds have been focused during last years. The insufficient coverage and poor quality of the sanitation and waste water treatment services not only have negative impacts on the health of the population but also affect the environment, the economy and the availability of water for other uses.

UN-HABITAT launched the Water and Sanitation Trust Fund (WSTF) in October 2002 to help governments meet their commitment to the water target of the Millennium Development Goals (MDGs). That target seeks "to reduce by half the proportion of people

without sustainable access to safe drinking water and sanitation by the year 2015". The 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. The Trust Fund's activities are targeted to create smarter water policies and increase investment in water and sanitation for the urban poor.

The Water for Cities Programme in Latin America and the Caribbean (WatSan-LAC) is a regional operative initiative of the WSTF created in response to the regional consultations undertaken during the Americas' Regional Preparatory Process and during the working sessions at the 4th World Water Forum, held in Mexico City, in March 2006. The Programme has been conceived as a collaborative effort among the countries of the region, the Inter-American Development Bank (IDB) and UN-HABITAT. The Programme has been conceived along the lines of other UN-HABITAT supported water and sanitation Programmes, supported by the Water and Sanitation Trust Fund; following examples of the Water for Asian Cities Programme and the Water for African Cities Programme.

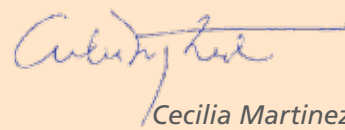
Since 2008, UN-HABITAT has made efforts to develop and manage a collaborative network for the Water and Sanitation for Cities Programme in Latin America and the Caribbean with the participation of



different stakeholders, including intergovernmental organizations, financial institutions, national governments, local authorities, organizations of civil society, universities, research centers and community based organizations. The Programme aims to support developing countries in Latin America and the Caribbean to achieve sustainable access to safe drinking water and basic sanitation for the poor, particularly in the urban and peri-urban areas. The Programme combines policy dialogue and normative work with on-the-ground pilot and demonstration water and sanitation projects focusing on pro-poor water and sanitation service delivery. 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. This strategic partnership with the IADB for the Latin America and the Caribbean (WatSan-LAC) Programme was formalized in 2008 with the signing of the Memorandum of Understanding (MoU) between both institutions. Different forms of cooperation between both institutions are being formalized in Bolivia, Colombia, El Salvador, Mexico and Peru.

The Programme also aims to increase the flow of investments to the water and sanitation sector in Latin America and the Caribbean through strategic partnerships amongst different agents, including the IADB, donor countries, central governments, local authorities, the private sector, non-governmental organizations and local communities.

This brochure has been prepared to describe the results achieved in the implementation of the UN-HABITAT WatSan-LAC work Programme since 2008, focus has been on supporting policy dialogue and normative work combined with community-based demonstration projects, including the construction of decentralized water and wastewater systems (small bore sewerage networks), community-based environmental sanitation, including demonstration toilets and solid waste management, human values-based water, sanitation and hygiene education in schools coupled with awareness creation. This brochure also aims to share the challenges encountered thus far in implementing the Programme. We would like to continue these efforts to improve the living environment in urban areas through improving basic urban services in an environmentally friendly manner and to contribute to the global efforts to adapt to the effect of climate change. The focus of this brochure is on the current and planned activities in the following areas: i) Overall global normative work; ii) Water and Sanitation for Latin America and the Caribbean Cities Programme (WatSan-LAC); iii) Solid Waste Management Programme.



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for Latin America and the Caribbean







# LATIN AMERICA AND CARIBBEAN SCENARIO BACKGROUND

In recent years a big effort has been made in the Latin America and Caribbean Region to achieve the MDG Target 7C: "To halve the population without access to water and basic sanitation". This has led to important advances in water and sanitation service provision.

The region has a population of approximately 593 million and is one of the most urbanized areas in the world. Urban dwellers surmounted 471 millions in 2010. Urban population increased from 71% in 1990 to 79.4% in 2010. Currently, megacities are home to most of the population, but the megacities' rate of growth is now decreasing while small cities (ranging from 100,000 to 500,000 inhabitants) are expanding rapidly. In the developing world, urban expansion is often characterized by informality, illegality and unplanned settlements. Urban growth has been strongly associated with poverty and slum growth. In the Latin America and the Caribbean region, the proportion of urban population living in slums has been reduced from 33.7% in 1990 to 23.5% in 2010. Proportions are declining, but numbers are growing: from 105 million slum dwellers in 1990, the region counts now with 110 million people leaving in slums. (Source: State of the World's Cities 2010/2011, UN-HABITAT)

According to data from 2008, 93% of the population in the region had access to water service while 79% had access to basic sanitation services (JMP Monitoring Report 2010). Targets for the region in 2015 are 92% for water service provision and 84% for sanitation. One can therefore conclude that the water target has been achieved, while sanitation is lagging behind.

But there are many differences in services coverage between countries and regions, between urban and rural areas, and most importantly of all, between income groups.

Urban coverage for water and sanitation is very high in percentages (97% and 86% respectively for water and sanitation, 2008, JMP Report) compared to coverage in rural areas, these high percentages bring forward still 13 million urban dwellers do not have access to an improved water source while 62 million lack access to some kind of improved sanitation facility; compared to the 24 million and 55 million rural population without water and sanitation access respectively in the region.

Most countries have achieved target for water service in urban areas, except Haiti, Nicaragua, Peru and Republica Dominicana. Still, headline statistics do not reflect the quality of the provided services. Many



problems in the region are related to water quality and the continuity of service, as well as water losses in an environment where there is increasing competition for water and the resource is not being managed in a sustainable manner. The sanitation access is extremely low in Bolivia, Nicaragua and Haiti. But wastewater treatment is nearly invisible in the whole region, causing contamination of water bodies. Climate change is imposing new challenges and demanding new solutions for increasing service coverage.

Thus, the Latin American and the Caribbean Region urban scenario faces a set of complex problems that need complex solutions. The population urban growth in an unplanned manner increases the need for water and sanitation service provision in areas of difficult access, increasing at the same time problems caused by over-exploitation of resources and its contamination due in part to the lack of wastewater systems.

**13 million urban dwellers do not have access to an improved water source while 62 million lack access to some kind of improved sanitation facility, compared to the 24 and 55 million rural population without water and sanitation access respectively in the region.**



# UN-HABITAT RESPONSE: THE WATER AND SANITATION FOR LATIN AMERICA AND THE CARIBBEAN CITIES PROGRAMME

## UN-HABITAT WATER AND SANITATION TRUST FUND

UN-HABITAT launched the Water and Sanitation Trust Fund in October 2002 to help governments meet their commitment to the water target of the Millennium Development Goals (MDGs). That target seeks *“to reduce by half the proportion of people without sustainable access to safe drinking water and sanitation by the year 2015”*. The Trust Fund’s activities are directed at creating smarter water policies and increased investment in water and sanitation for the urban poor.

The establishment of a Water and Sanitation Trust Fund in UN-HABITAT is aimed at enhancing the agency’s effectiveness around the world by giving donors the chance to contribute funds to a facility dedicated to a well-defined goal and a clear set of objectives fully compatible with the donor’s own funding priorities.

The Trust Fund’s vision therefore is to achieve *“expanded access to environmentally sound basic urban infrastructure services with a special focus on the unserved and underserved populations”*.

The 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.



# WATER AND SANITATION FOR CITIES IN LATIN AMERICA AND THE CARIBBEAN PROGRAMME

The Trust Fund supports three regional Programmes, namely; Water for African Cities, Water for Asian Cities and Water for Cities in Latin America and the Caribbean. The objective of the regional Programmes is to support partner countries to improve management of urban water supply and sanitation. These Programmes combine policy dialogue and normative work with on-the-ground pilot and demonstration water and sanitation projects focusing on pro-poor water and sanitation service delivery.

The Water for Cities Programme in Latin America and the Caribbean (WatSan-LAC) is a regional operative initiative of WSTF created in response to the regional consultations undertaken during the Americas' Regional Preparatory Process and during the working sessions at the 4th World Water Forum, held in Mexico City, in March 2006. It is mainly funded by the Spanish Government.

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. This strategic partnership with the IADB for the Latin America and the Caribbean Programme was formalized in 2008 with the signing of the memorandum of understanding (MoU) between both institutions. Different forms of cooperation between both institutions are being formalized in Bolivia, Colombia Mexico, Peru and El Salvador.

The Programme supports the following areas:

- Support central and local 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;
- Support the 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.

**The Programme'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 amongst different agents, including the IADB, donor countries, central governments, local authorities, the private sector, non-governmental organizations and local communities.**

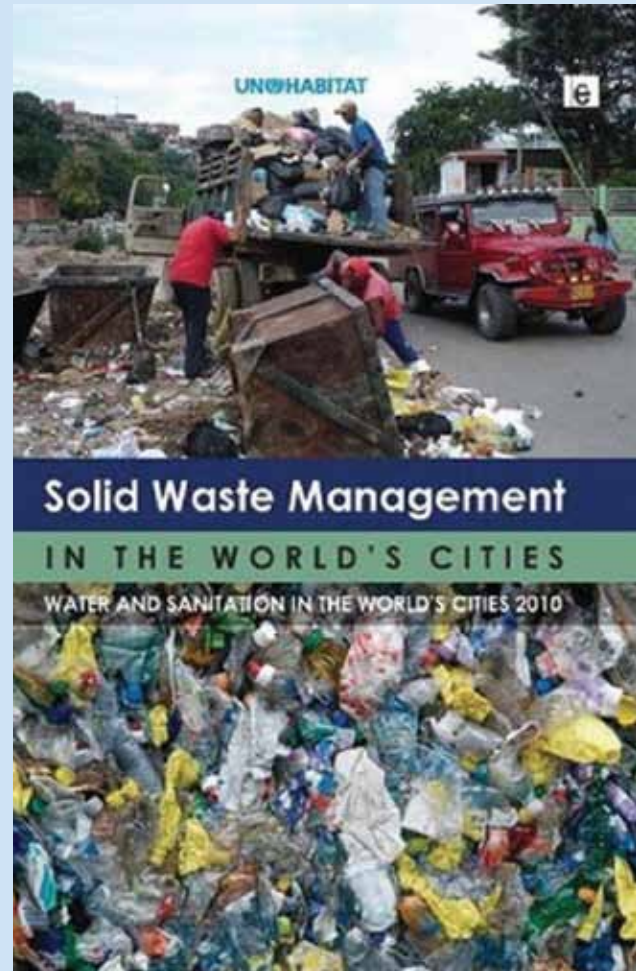




WatSan-LAC started activities in Mexico and Bolivia. During this period, it has improved its activities in Nicaragua, Guatemala, El Salvador, Honduras, Peru, Ecuador and Colombia. Different partnerships with governments, civil organizations and NGOs have been created in several countries. Besides, there are regional projects related to cross cutting issues as gender and water as a human right. The Programme is complemented by the global normative work of the Agency.

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. As members of the UN-Water Wastewater Management Task Force , UN-HABITAT and UNEP launched a Rapid Assessment Report entitled "Sick Water: The Central Role of Wastewater Management in Sustainable Development" during the global celebrations of the 2010 World Water Day in Nairobi, Kenya. UN-HABITAT also produces a triennial global report on the State of Water and Sanitation in the World's Cities.

The third report - "Solid Waste in the World's Cities: Understanding Global Trends and Practices " was simultaneously launched during the fifth session of the World Urban Forum held in Rio and during the global celebrations of the 2010 World Water Day in Nairobi. UN-HABITAT also contributes to the World Water Development Report.



**UN-HABITAT recognizes the need of translation of normative products to the Spanish language so that they can be disseminated in the Region. For this reason a selection of the most important publications will be translated in the coming years. In 2010 the Handbook "Constructed Wetlands Manual" was translated printed and disseminated.**







# UN-HABITAT REGIONAL PROGRAMME

## THEMATIC LINES

In addition to projects specific to national contexts, the Programmes 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 connections across borders 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 honed.

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

### GENDER MAINSTREAMING FOR ENHANCING AWARENESS OF GENDER ISSUES IN WATER AND SANITATION

In 2009 UN-HABITAT started collaboration with the Gender Water Alliance (GWA), which has the objective of providing tools for the use of UN-HABITAT and its partners in mainstreaming gender in water and sanitation projects and developing a monitoring mechanism for the integration of gender-related issues

in ongoing projects. Under this collaboration, ten workshops have been proposed including a Training of Trainers, eight workshops in Nicaragua, Ecuador, Mexico and Bolivia, and one regional workshop to share experiences within this project. In addition it will support the development of a "Gender Resource Book" in Spanish.

### HUMAN VALUES BASED WATER, SANITATION AND HYGIENE EDUCATION (HVBWSHE)

UN-HABITAT has promoted through the HVBWSHE methodology the integration of a new ethics and behavior change amongst service providers and users to ensure more equitable and sustainable service provision related to water and sanitation. There is a growing recognition that improvements in water management cannot be accomplished only by technical or regulatory measures; these must be complemented with advocacy, awareness-raising and education activities. A values-based approach can bring about positive attitude changes and create a new water use and hygiene ethic in society. The methodology has been integrated in different projects within the WatSan-LAC Programme





through collaboration with Project Wet, to develop country-specific educational materials and resources for WatSan-LAC Programmes; 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. The Programme will act in five countries: Bolivia, Colombia, Mexico, Peru and El Salvador and may later be extended to other countries in the region.

## PROMOTION OF NEW APPROACHES IN SANITATION IN CENTRAL AMERICA AND THE ANDEAN REGION.

UN-HABITAT is supporting knowledge nodes for sustainable sanitation in Central America (Honduras, Guatemala, El Salvador and Nicaragua) and Bolivia. 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, universities 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.

## SUPPORT TO NETWORKS IN THE REGION AND ADVOCACY ACTIVITIES

UN-HABITAT has supported 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 in 2010. In Montevideo a Capacity Development Workshop for Water Journalists in the LAC region has been organized in partnership with UNW-DPC and UNESCO International Hydrological Programme (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.

## WORK PROGRAMME

### 2011/2012

The regional focus will continue with a further development of the previously mentioned initiatives and initiate new main lines of intervention on:

- Promotion of the human rights-based approach in the water and sanitation sector.
- Support to service providers for adaptation to the impact of climate change.
- Technical assistance and capacity building for small water operators.
- Sustainable sanitation: from knowledge sharing on new sustainable technologies to sanitation as a business models.
- Monitoring systems for specific aspects of water and sanitation in the region.











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# **COUNTRY PROGRAMMES**



# MEXICO

*Some of the key challenges of the Mexican water policy sector are: improving sustainable water and sanitation services in small towns and growing peri-urban areas, deepening transparency and accountability of water and sanitation services provision and increasing water treatment services and building capacities for water adaptation to climate change. So far UN-HABITAT's Country Programme has focused on improving governance in water and sanitation management through social auditing and monitoring processes, development of appropriate WatSan technologies in schools, capacity-building for water operators and institutional strengthening for water adaptation to climate change, especially through participatory vulnerability assessments.*

Coverage indicators in Mexico are high when set against the MDG Goals, but there is considerable room for improvement in the quality of services and also in the equality of access for the whole population.

Water availability is also a major challenge in the country, and principles 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.

## STRATEGIC LINES

The Programme started in 2008 when Mexico became one of the first countries where UN-HABITAT intervened in the water policy sector. The main efforts centred in strengthening water governance and protection of water resources in urban settings.

More recently a Memorandum of Understanding has been signed 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 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.

Several advocacy and institutional activities are ongoing in the country with the support of UN-

MEXICO	
% Urban population (World Urbanization Prospects, Revision 2009)	77.5
% slum dwellers (UN-HABITAT, 2007)	11.4
% urban access to improved water source (2008, JMP Report 2010)	96.0
% urban access to improved sanitation facility (2008, JMP Report 2010)	90.0
Urban dwellers without access to improved water source (2008, JMP Report 2010) (thousands)	3353
Urban dwellers without access to improved sanitation facilities (2008, JMP Report 2010) (thousands)	8383







HABITAT. The Programme in Mexico forms part of different sector groups along with the main sector's actors in the country. As part of these activities two main workshops were organized in 2009: the Water Journalist Capacity-Building Initiative Workshop in collaboration with the Water Advisory Council, the IWA, and the Mexican Environmental Education and Communication Fund; and the Water Demand Management Workshop in partnership with UN-DPC and the National Association of Water Utilities (ANEAS).

Main pilot projects on going are:

## 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 one Observatory established in the municipality of Ecatepec de Morelos (state of Mexico) and two more are being created in the municipalities of Xalapa and Tuxtla Gutierrez. Key partners that collaborate on these projects include the Water Advisory Council and other UN-Agencies. More recently a project for supporting the launching of 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). Two other projects are about to start in the municipalities of Xalapa (state of Veracruz) and Tuxtla Gutierrez (state of Chiapas), supported 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 November 2010 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. Currently there are two Water Adaptation to Climate Change projects 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 Joint Programme on Establishing Effective and Democratic Water and Sanitation Management in Mexico. UN-HABITAT is also part of the Regional Dialogue on Water Adaptation to Climate Change to support awareness-raising on the topic towards the COP-16 to be held in Mexico and also to support initiatives to be launched thereafter.

## WORK PROGRAMME 2011/2012

Lines of intervention of the Programme in the midterm future are likely to be:

- 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.







# BOLIVIA

*Bolivia is one of the countries in the region still not on course to achieve the MDG Targets in 2015. A high level of inequality affects the country, since approximately 10% of the population receives 40% of the national income. Water services are deficient because of the operators' weakness, the high atomization of the sector (there are more than 28.000 providers in the country), a weak regulatory system, and the low value that users attach to the services.*

*Among the possible interventions, UN-HABITAT is centering its activities in the country in piloting integral projects in small towns and promoting new innovative low cost solutions for sustainable sanitation and waste water decentralized systems.*

BOLIVIA	
% Urban population (World Urbanization Prospects, Revision 2009)	48.8
% slum dwellers (UN-HABITAT, 2007)	66.1
% urban access to improved water source (2008, JMP Report 2010)	96.0
% urban access to improved sanitation facility (2008, JMP Report 2010)	34.0
Urban dwellers without acces to improved water source (2008, JMP Report 2010) (thousands)	254
Urban dwellers without acces to improved sanitation facilities (2008, JMP Report 2010) (thousands)	4198

## STRATEGIC LINES

The Programme started in 2008, and combines soft and hard activities working with central and local authorities, as well as with NGOs and CSOs.

Discussions are underway with the Ministry of Environment and Water on a Memorandum of Understanding (MOU) that will set out strategic actions to support the Ministry's mandate and activities. UN-HABITAT forms part of the International Cooperation Group for Water and Sanitation (GRAS), which intends to implement the Paris Declaration improving the coordination between donors and the Government of the country. In addition, collaboration with the IADB has started for supporting the development of the master plans for the four main cities in the country, which will be the base for the IADB's Water Peri Urban Project, due to be implemented with the support of the Government of Spain.

In 2009, UN-HABITAT held different advocacy workshops for promoting its main project focus in the country related to the Waste Water Treatment and Water Safety Plans. These were an opportunity to share experiences in waste water decentralized systems in the country and water demand management.

Along with these soft activities, the Programme is complemented with demonstrative and fast track initiatives to promote the HVBWSHE methodology in





the country, develop integral projects in small towns (integrating water and sanitation service provision, solid waste management, waste water decentralized systems and capacity building and education), and pilot technologies in the field of sustainable sanitation. These initiatives are implemented in collaboration with local authorities and NGOs in the country. Current pilot projects and collaborations ongoing are the following:

### **INTEGRATED WATER AND SANITATION PROJECT IN PATACAMAYA**

An integral intervention in water, sanitation and solid waste management in the small city of Patacamaya has been initiated in collaboration with the Municipality (15,000 inhabitants; La Paz) and Plan International. A positive outcome was the creation of a municipal solid waste company (ECORES) to improve solid waste management and encourage best practices in solid waste disposal by the project clients.

### **INTEGRATED PROJECT TO IMPROVE ACCESS TO WATER AND SANITATION IN THE MUNICIPALITY OF SAN IGNACIO DE VELASCO**

This project is an integral intervention with the goals of expanding Water and sanitation service provision, improving waste water treatment, capacity building for the water operators and stakeholders, HVWSHE in local schools, and support for a solid waste management system.

### **COMMUNITY BASED SANITATION AND WATER SUPPLY IMPROVEMENT IN PERI-URBAN AREAS OF COCHABAMBA**

In partnership with Water for People, the project's main goal is to improve access to sanitation and water supply for 20.000 poor people living in the peri-urban areas of Cochabamba. Other main objectives are to demonstrate innovative and cost-effective community



based approaches for improving access to services in a sustainable manner and to support HWWSHE implementation in at least two public schools.

## WATER, SANITATION, AND HYGIENE INTERVENTIONS IN DISTRICT 9 OF PERI-URBAN COCHABAMBA

The goal of this project is to improve access to improved sanitation and water supply for the poor living in District 9 in peri-urban areas of Cochabamba. It entails supporting the Municipal Office of District 9 to strengthen their water and sanitation planning, monitoring, and supervision capacities, conducting a hydrological study of the area of intervention, promoting technological innovations, micro-credit, sanitation as a business concept, water quality monitoring and designing messaging about water, sanitation, and hygiene for different groups (migrants, women, young people).

### WORK PROGRAMME 2011/2012

Lines of intervention of the Programme in the midterm future are likely to be:

- Promotion of sustainable sanitation through the Eco- sanitation Node of knowledge,
- Replication of Integral Programmes in peri urban areas,
- Continuation of activities in peri urban areas of Cochabamba, integrating Water Resource Management and Community Sustainable Sanitation,
- Creation of Water and Health Observatories



# PERU

*Peru is set to be at the leading edge of efforts to adapt to the impact of climate change on water resources. Climate change is already threatening to reduce the availability of water, as is the contamination of surface sources. The country has made big efforts to meet MDG targets, according to the last official data, and it is expected urban areas will achieve the needed percentages.*

*Still service coverage in urban and peri-urban areas remains poor: still only 90% of the urban population has access through a piped system in their homes and 19% of the urban population does not have access to an improved sanitation system. Wastewater treatment facilities are also scarce in the country.*

PERU	
% Urban population (World Urbanization Prospects, Revision 2009)	76.6
% slum dwellers (UN-HABITAT, 2007)	36.1
% urban access to improved water source (2008, JMP Report 2010)	90.0
% urban access to improved sanitation facility (2008, JMP Report 2010)	81.0
Urban dwellers without acces to improved water source (2008, JMP Report 2010) (thousands)	2059
Urban dwellers without acces to improved sanitation facilities (2008, JMP Report 2010) (thousands)	3911

## STRATEGIC LINES

UN-HABITAT 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, UN-HABITAT 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.

## ADAPTATION TO CLIMATE CHANGE

With this focus, UN-HABITAT entered into an agreement with the international NGO CARE to carry out a project aimed at improving climate change adaptation in the region of Junín, which integrates scientific information management and promotion for its use for water resources, management and awareness raising (both among decision makers and the population) to implement IWRM policies and strategies in a context of climate change.

The Regional Government of Junin is one of the most active in combating climate change, as one of the most affected regions in the country due to its dependence on the glaciers of the Andean Mountains. The collaboration with CARE will be the starting point for a complete intervention in Junin of technical







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support for adapting water service provision to the already complicated water resource management situation in the region. Negotiations with the water and sanitation service provider of Huancayo, the capital of the Region, are ongoing for supporting the operator for its adaptation to climate change impact.

UN-HABITAT 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, integrated in an effort lead by the Inter American Development Bank through a programmatic loan to develop the sector.

## WORK PROGRAMME 2011/2012

Three main strategic lines are foreseen in the Programme in the country:

- Complementary activities related to climate change adaptation in Huancayo, with the possibility of scaling-up the results to other regions in the country.
- Support for Waste Water Treatment sector with the piloting of decentralized systems and other innovative technologies.
- Promotion of eco-sanitation technologies and different sanitation models in peri urban areas.



# ECUADOR

The water and sanitation sector in Ecuador is highly deficient despite the favorable conditions in terms of economic and natural resources. Statistics indicate that 60% of served water is not potable, 55% of systems provide an intermittent service and only 8% of used water is treated before it is disposed back to nature, among other deficiencies. In order to improve this situation, Ecuador's 2008 Constitution establishes access to water as a fundamental human right as well as a set of priorities relating to water use that make drinking water the most important one. In addition to that, Ecuador's National Development Plan has set sustainability in the water and sanitation services as a priority.

In this context, UN-HABITAT is working closely with the different public institutions seeking to reinforce capacities at the national and local levels and to make use of existing opportunities for improvement of the sector, aiming at meeting the Millennium Development Goal 7, Target 10: "to cut by half the proportion of people that do not have access to sustainable water and sanitation services", mainly with the support of the Spanish MDG-F.

## STRATEGIC LINES

### GOVERNANCE IN THE WATER AND SANITATION SECTOR IN ECUADOR WITHIN THE FRAMEWORK OF THE MILLENNIUM DEVELOPMENT GOALS

The Programme will contribute to developing democratic governance in W&S services with a perspective on integrated management of water resources, social, territorial and gender equity, and support to the overall government-driven reform process within the framework of the National Development Plan.

Expected results include: increased access to safe water and sanitation for the poorest populations of 4 provinces; contributing to the achievement of target 10 of MDG 7 and having an impact on MDGs 1, 2, 3, 4, 5, 6 and 8; the implementation of a new regulatory and institutional framework for the W&S sector; the

ECUADOR	
% Urban population (World Urbanization Prospects, Revision 2009)	66.3
% slum dwellers (UN-HABITAT, 2007)	-
% urban access to improved water source (2008, JMP Report 2010)	97.0
% urban access to improved sanitation facility (2008, JMP Report 2010)	96.0
Urban dwellers without acces to improved water source (2008, JMP Report 2010) (thousands)	265
Urban dwellers without acces to improved sanitation facilities (2008, JMP Report 2010) (thousands)	354



design and implementation of consensual public policies for effective services management; improving the technical, administrative and financial capacities of service providers in the areas of intervention; and the empowerment of women, social organizations and communities that participate in the sustainable and transparent management of the sector.

The Programme is being implemented by three ministries with the support of five UN agencies. In 2009 UN-HABITAT was responsible for providing support and technical assistance for the legal reform process that the sector is going through in Ecuador, by building capacities of water and sanitation service providers in small towns and villages and to develop physical interventions in the sanitary infrastructure of schools, as well as to initiate the interventions within rural communities.

## **CITIES AND CLIMATE CHANGE INITIATIVE – ESMERALDAS**

The Cities in Climate Change Initiative (CCCI) will be working on the issues of strengthening the performance of both national and city level actors through participatory approaches and targeted instruments. On the premise that global warming over the next decades is inevitable, CCCI will support the city of Esmeraldas, in a coordinated manner with Ecuador's national government, to adapt effectively to climate change through reducing the severity of many of the impacts if adverse conditions prevail.

Since 2009, the CCCI in Esmeraldas will be supporting the local government in getting to know its vulnerabilities in a better and more systematic manner, with strong emphasis on those related to water and sanitation. The CCCI will also be promoting sanitation technologies that can work in the event of water

scarcity due to drought or flood-led infrastructure damage, particularly eco-sanitation (dry toilets). One of the main outputs will be the design of a local strategy to adapt to global warning at local level.

## **WORK PROGRAMME 2011/2012**

Current projects will be continued during the following years.

### **Governance in the water and sanitation sector in Ecuador within the framework of the Millennium Development Goals**

In 2010 and 2011 UN-HABITAT will continue the activities of 2009, seeking to make them self-sustainable and leading the investments that the Programme has planned in water and sanitation infrastructure. These investments will include participatory design and construction of water and sanitation infrastructure using environmentally friendly, gender-sensitive technology, and building local capacities for operating and maintaining such infrastructure.

### **Cities and climate change initiative – Esmeraldas**

In the second phase of the CCCI, the Programme will strengthen the government of Esmeraldas and the most vulnerable populations in increasing their resilience to severe climate events, including their access to secure water and prevention of water-related diseases







# COLOMBIA

*In Colombia stark differences are evident in the provision of water and sanitation services. At a national level the country has high service coverage by global standards, but variation within the country is considerable and some municipalities are not able to supply the service to more than 50% of the population.*

*The poverty rate in Colombia is 42,6%, implying that nearly 17 million people still live in poverty in the country. The regions with the highest levels of poverty include the Pacific coastal districts of Narino and Choco and they also suffer from some of the lowest levels of water service coverage.*

COLOMBIA	
% Urban population (World Urbanization Prospects, Revision 2009)	74.8
% slum dwellers (UN-HABITAT, 2007)	16.1
% urban access to improved water source (2008, JMP Report 2010)	99.0
% urban access to improved sanitation facility (2008, JMP Report 2010)	81.0
Urban dwellers without acces to improved water source (2008, JMP Report 2010) (thousands)	335
Urban dwellers without acces to improved sanitation facilities (2008, JMP Report 2010) (thousands)	6369

*Another challenge specific to Colombia is the need to provide services to the large numbers of people displaced by conflict who are living in temporary accommodation in peri urban and urban areas.*

## STRATEGIC LINES

As a pilot experience, UN-HABITAT has begun its activities recently in collaboration with Acción Contra El Hambre, a Spanish NGO with a strong presence in the country, in the Municipality of Tumaco in the Narino region in the South of Colombia. The Project's main goal is to improve the living conditions of vulnerable people in urban and semi-urban areas in a sustainable manner by reducing environmental health risks. The components of the Programme are water and sanitation service provision, which is complemented with support for a Sustainable Solid Waste Management System. Education in hygiene is included for the population of the areas.

## WORK PROGRAMME 2011/2012

The last phase of negotiation is underway for a joint initiative with the IADB, the Ministry of Environment, Housing and Urban Development, the National Department of Planning, the Municipality of Quibdó and Empresas Publicas de Medellin (the local water utility).







# EL SALVADOR

*El Salvador is one of the poorest countries in the region. Although urban coverage is reported to be high in the country, many different bodies for water management exist due to the lack of proper water and sanitation policies: most of the bodies are small and lack management skills. This affects mainly small towns and rural areas. The improvement of the current systems and the capacity building needed by these providers are key to increasing access to services in a sustainable manner. Small towns and peri urban areas need the rehabilitation or expansion of systems to cover the most deprived areas, while their provider's managers need skills to coordinate related activities, and the provider needs mechanisms to access the funds to cover the costs for these improvements.*

EL SALVADOR	
% Urban population (World Urbanization Prospects, Revision 2009)	63.8
% slum dwellers (UN-HABITAT, 2007)	-
% urban access to improved water source (2008, JMP Report 2010)	94.0
% urban access to improved sanitation facility (2008, JMP Report 2010)	89.0
Urban dwellers without acces to improved water source (2008, JMP Report 2010) (thousands)	223
Urban dwellers without acces to improved sanitation facilities (2008, JMP Report 2010) (thousands)	409







## STRATEGIC LINES

### PROMOTION OF INNOVATIVE FINANCIAL MECHANISMS FOR WATER AND SANITATION SERVICE PROVIDERS

UN-HABITAT has joined the work of different water and sanitation stakeholders in the country to promote innovative financial mechanisms for water and sanitation service providers with a twofold approach: supporting the creation of a new financial mechanism for the service providers and providing technical assistance to these providers for improving their managerial and technical skills.

While the initiative is being studied by the IADB to be implemented at national level, UN-HABITAT has coordinated collaboration with CARE for developing preliminary studies and implementing a pilot experience so that different mechanisms can be tested and honed. Analysis of lessons learned, and dissemination of results nationwide are included in the last period of the project.

### WORK PROGRAMME 2011/2012

UN-HABITAT will continue to be involved in promoting the scaling-up of the results, with other stakeholders, mainly the IADB. In the national Programme, it is expected to be a big component of technical assistance to water operators, which is one of the main focal areas of the WatSan-LAC Programme.



# NICARAGUA

*Nicaragua has one of the lowest MDG set of indicators in the region. Despite significant efforts to increase water and sanitation coverage at national level, a huge challenge remains to meet the Millennium Development Goals.*

*Roughly one fifth of the population of Nicaragua lives in its capital, Managua and an estimated 45% of the population live in slums.*

*One of the biggest dump sites in Central America is in Managua, and is known as La Chureca. It receives an estimated 90% of the waste from the city and is home to many poor people whose survival depends on recovering waste for recycling or other uses.*

*The Government of Spain through the Integrated Development of the Acahualinca Neighbourhood Project committed funds to support the rehabilitation of the La Chureca dumpsite, to promote more efficient waste recovery and provide families living on and near the site with housing and employment alternatives.*

*Different mechanisms have been used to fund the proposed project actions including a contribution to the UN-HABITAT Water and Sanitation fund in which the current project intervention is framed.*

## STRATEGIC LINES

### BUILDING CAPACITY FOR SOLID WASTE MANAGEMENT (SWM) IN MANAGUA, NICARAGUA

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 the wider SWM system.

The project seeks to develop models and tools for the improvement of solid waste management in the capital of Managua and, in a second phase, to extend the Programme, providing information on and replicating the use of these models and tools in other municipalities in Nicaragua and the rest of Central America.

NICARAGUA	
% Urban population (World Urbanization Prospects, Revision 2009)	63.8
% slum dwellers (UN-HABITAT, 2007)	-
% urban access to improved water source (2008, JMP Report 2010)	94.0
% urban access to improved sanitation facility (2008, JMP Report 2010)	89.0
Urban dwellers without acces to improved water source (2008, JMP Report 2010) (thousands)	223
Urban dwellers without acces to improved sanitation facilities (2008, JMP Report 2010) (thousands)	409



The project has four main components: (1) Support to Integrated Acahualinca Neighbourhood Development Project (2) Support to Municipal Government, (3) Support to Waste Recovery and Recycling Sector and (4) Support to Regional Solid Waste Management.

The main focus of the project in 2009 was on the Components 2 and 3.

UN-HABITAT undertook a detailed analysis of solid waste collection, transfer and disposal in the city and used this information as the basis for the development of an Integrated Solid Waste Management Plan for Managua (2010-2020.) This planning process is being undertaken using a participatory “learning by doing” methodology which builds municipal capacity for strategic SWM planning as well as generating a plan developed and agreed in coordination with a wide range of involved stakeholders.

UN-HABITAT also designed SWM pilot projects including a small transfer station (STS) to be built in District VI of Managua. The STS is based on a model developed by UN-HABITAT consultant Manus Coffey. A study tour for representatives of the municipal government of Managua was undertaken in October 2009 to review the operation and maintenance of STS in Egypt. UN-HABITAT also signed an agreement with UNOPS to support procurement and implementation of these pilot projects in 2010.

Under Component 3, UN-HABITAT undertook a mapping of sector activities in Managua as well as studying public perception of these activities and determining the willingness of key stakeholders to support the development of this sector.

UN-HABITAT also supported 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.

In addition, to these activities, UN-HABITAT has undertaken several workshops designed to increase knowledge and build capacity for local stakeholders in key water and sanitation issues including: Cleaner Development Mechanism in SWM Projects (CDM); Hazardous Waste Management; Integrated Sanitation; and Correct Solid Waste Management and Recycling in Schools in Managua;

Finally, UN-HABITAT signed new agreements with project partners to support the implementation of the work plan for 2010 including an agreement with ACEPESA to undertake regional SWM study and design of SWM Technical and Institutional Assistance Initiative and Pre-investment Studies.

## WORK PROGRAMME 2011/2012

The continuation of the SWM initiative in the Central American Region is the main focus of the Programme for the period 2011/2012.

Other identified lines for the WatSan-LAC intervention in the country will be to support water and sanitation service provision through capacity building for small municipal operators.







# PARTNERSHIPS

Strategic partnerships have been developed with local, national and regional level stakeholders, development banks and other multi-lateral agencies to scale up innovative and successful approaches supported by the programme. Implementation partnerships have also been established with national and local governments, development partners, as well as international and local NGOs, universities, water utilities and training institutions.

## MEXICO

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

Instituto Mexicano de Tecnología del Agua (IMTA)

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

Engineering Faculty of the National Autonomous University of Mexico (UNAM)

Tecnológico de Monterrey

UNW-DPC

Water Advisory Council (CCA)

UNDP/Spain Millennium Development Goals Achievement Fund

ECLAC

UNESCO

FAO

WHO / PAHO

UNIDO

UNODC

UNDP



## BOLIVIA

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, Bolivia  
Municipality of San Ignacio de Velasco, Bolivia  
Municipality of Cochabamba, Bolivia  
Municipality of Patacamaya, Bolivia  
GRAS ( Group of Donors and International  
Cooperation Agencies in Water and Sanitation)  
UNICEF  
PAHO  
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)  
DINESVBI( Sectoral Spaces for Water and Sanitation)  
Water Research Center(CASA) –University of San  
Simon, Cochabamba  
CODESAB ( Water and Sanitation Regional Council),  
Cochabamba  
COED (Disaster and Emergency Operation Center),  
Santa Cruz

## 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





## COLOMBIA

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 – Espanya

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)

## EL SALVADOR

Care International

ANDA (National Water Company)

## NICARAGUA

Municipality of Managua (ALMA)

Spanish Agency of International Development Cooperation (AECID)

Ministry of Environment and Natural Resources (MARENA)

Asociation of Municipalities of Nicaragua (AMUNIC)

Nicaragua National Recycling Forum (FONARE)

National University of Engineering – Centro de Investigación y Estudios en Medio Ambiente (UNICIEMA)

Politechnic University of Nicaragua (UPOLI)

UNOPS

UNDP

Central American Association for the Economy,

Health and Environment (ACEPESA)

Studies and Promotion Center for the Habitat (HABITAR)

## REGIONAL

Inter-American Development Bank

Gender Water Alliance (GWA)

Project Wet

Spanish Agency of International Development Cooperation (AECID)

Stockholm Environment Institute (SEI)

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 Gautemala (RAS-GUA)

Foro CentroAmericano y de Republica Dominicana – Agua Potable y Saneamiento (FOCARD-APS)

UNW-DPC

UNESCO International Hydrological Programme (IHP)

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)

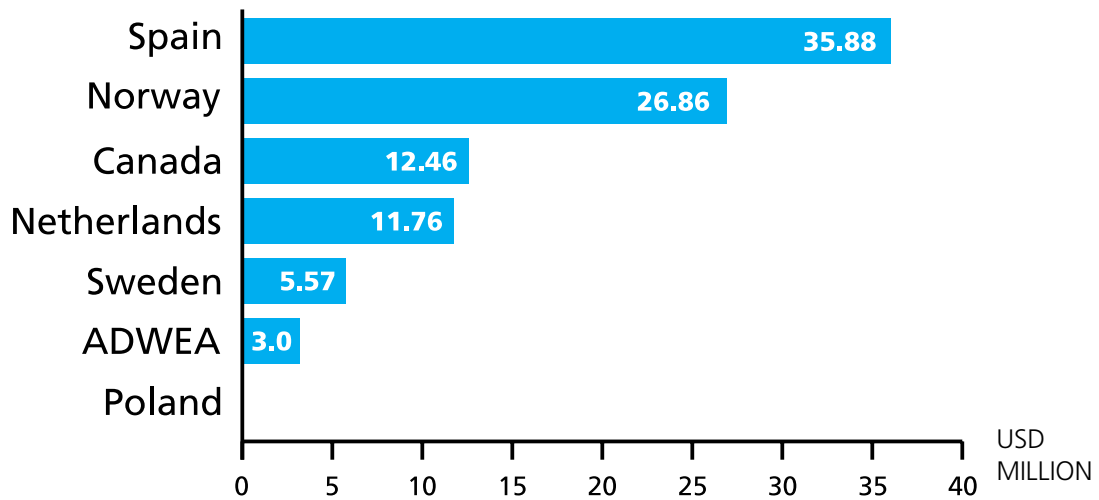




# SOURCES OF FUNDING

A combination of traditional and innovative financing mechanisms has been used to capitalize the Water and Sanitation Trust Fund. Since 2003, the water and sanitation trust fund has received funds to the tune of USD 125.8 million. From this amount, USD 95.5

million is a contribution from main donors towards the General Water and Sanitation Trust Fund. The Status of these contributions are based on signed agreements (2003-2010) as shown in the graph:



WatSan-LAC started activities in 2008 financed by the General Water and Sanitation Trust Fund. WatSan-LAC staff has contributed to the design and implementation of ROLAC's water sector related projects. Support has been received by the UNDP's

Millennium Development Goals Achievement Fund (Spain) in Mexico and Ecuador. The following table represents annual budget distribution (2008-2020) by country and origin of funds:

UN-HABITAT and partner CONTRIBUTIONS (per country per year)	UN HABITAT Cost (USD)								
	2008		2009		2010		TOTALS		Grand Total UN H + partner
COUNTRY	UN H	Partner	UN H	Partner	UN H	Partner	UN H	Partner	
BOLIVIA (WSTF)	647.710	783.229	450.000	637.582	239.000	304.422	1.336.710	1.725.233	3.061.943
MEXICO (WSTF)	115.000	191.500	–	–	363.000	509.000	478.000	700.500	1.178.500
MEXICO (MDG Fund)	–	–	212.086	–	332.109	–	544.195	–	544.195
EL SALVADOR (WSTF)	–	–	300.000	235.000	–	–	300.000	235.000	535.000
REGIONAL (WSTF)	–	–	560.000	540.000	330.000	404.726	890.000	944.726	1.834.726
COLOMBIA (WSTF)	–	–	–	–	252.406	252.406	252.406	252.406	504.812
PERU (WSTF)	–	–	–	–	300.000	255.000	300.000	255.000	555.000
Solid Waste Management (Nicaragua and Regional Central America) (WSTF)	–	–	1.962.721	–	500.000	–	2.462.721	–	2.462.721
ECUADOR (MDG fund)	–	–	69.900	–	1.238.608	–	1.308.508	–	1.308.508
<b>Total</b>	<b>762.710</b>	<b>974.729</b>	<b>3.554.707</b>	<b>1.412.582</b>	<b>3.555.123</b>	<b>1.725.554</b>	<b>7.872.540</b>	<b>4.112.865</b>	
<b>Grand Total</b>	<b>1.737.439</b>		<b>4.967.289</b>		<b>5.280.677</b>		<b>11.985.405</b>		







CAPS

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