

MEK

The Mekong Water and Sanitation Initiative

WATSAN

A Regional Programme
of the UN-HABITAT
Water and Sanitation
Trust Fund

Supporting Secondary Urban Centres
in the **MEKONG REGION** to achieve the
MILLENNIUM DEVELOPMENT GOAL on
Water and Sanitation



Background

MEK-WATSAN initiative is a collaborative effort between United Nations Human Settlements Programme (UN-HABITAT) and the Governments of the Mekong region, which seek to work with other development partners in the region, one of the most significant being the Asian Development Bank (ADB). The whole philosophy of MEK-WATSAN is to support participating Governments attain their water and sanitation related Millennium Development Goal (MDG) agreed in 2000, to halve the proportion of people without access to improved water supply and sanitation services by 2015. Improving the water and sanitation situation is also a critical factor for meeting most of the other MDGs, which include eradicating extreme poverty and hunger; achieving universal primary education; promoting gender equality and women's empowerment; reducing child mortality; improving maternal health; combating major diseases; and improving environmental sustainability.

MEK-WATSAN promotes:

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

Objectives

To support the participating Governments in the Greater Mekong Subregion (GMS) attain their water and sanitation related MDG, UN-HABITAT initiated the development of the Mekong Region Water and Sanitation Initiative (MEK-WATSAN) for secondary towns. Specifically it will:

- Expedite pro-poor water and sanitation investments in secondary towns,
- Enhance institutional and human resource capacities at local and regional levels to sustain water and sanitation services,
- Operationalise upstream sector reforms at the local level,
- Enhance capacities of local private sector entities in service delivery,
- Reduce the adverse environmental impacts of urbanisation on local river catchments,
- Support economic development in secondary towns through improved water and sanitation, and related income generating activities, and
- Support cooperation between the countries of the Mekong region, and thus economic development.

Collaboration and Cooperation

In addition to partnering with ADB, a dialogue for cooperation is to be opened with the European Union, World Bank, a number of bilateral agencies and non-profit organizations. Specifically UN-HABITAT is to also explore areas of cooperation with entities such as the Mekong River Commission, the Water Supply Partnership, the Southeast Asian Water Utilities Network, the Greater Mekong Subregion Academic and Research Network and the Phnom Penh Plan for Development Management. Under MEK-WATSAN, UN-HABITAT will also seek to build partnerships with Community Based Organisations (CBOs) and Non-Governmental Organisations (NGOs) to implement projects in support of the economic corridor(s).

National and Regional Perspectives

Although there will be a national focus for the programme in each country, MEK-WATSAN is a regional programme. The benefits this approach brings include facilitation of benchmarking, increased opportunities for informal networking, peer-to-peer capacity building, regional training and the enhanced potential for implementation reforms.



Overview of the Region

The term **Mekong Region**, which is now home to some 250 million people, generally refers to the geographical area centered around the world's 12th largest river, the Mekong. The economy of Thailand is an important part of the region's growth, but the emerging transitional economies of Cambodia, Lao PDR and Vietnam are now leading to higher regional economic growth, which is predominantly urban-based.

The Mekong Region Countries and the River



Source: UNEP – Greater Mekong Subregion Atlas of the Environment

Rationale for MEK-WATSAN Initiative

There are still countries or regions within the countries in the Mekong region, which are facing poor water supply and sanitation services and are therefore struggling to achieve the targets set.

In Lao PDR, some 100 of a total of 145 districts or secondary towns have no formalised water supply, and in Cambodia, only 11% of the population has access to sanitation facilities. Although water supply and sanitation programmes are underway in each country of the Mekong region, current levels of investment are grossly inadequate. Urbanisation is occurring at a faster pace than the rate of implementation of water supply and sanitation facilities. In percentage terms, coverage rates are set to fall substantially before 2015. Table 1 provides a summary of the MDG status in each country of the Mekong region. The number of people to be served in order to meet the MDGs are staggering, and this is especially so in the secondary towns. It is very clear that the countries of Cambodia, Lao PDR and

Vietnam will not meet their MDGs by 2015, unless there is a paradigm shift in the levels of investment and in the commitment of the Governments to implement reforms.

Growing demand for adequate water supply and sanitation services as well as the lack of financial resources and capacity among local authorities will lead to an increasing need to address water and sanitation issues to bridge service provisions gaps in this sector and thus to achieve MDGs. The gaps in service provision are probably grossly underestimated. At the same time, it may be wrongly assumed that the water and sanitation infrastructure rehabilitation in secondary towns would require huge investments/capital expenditure. This is not necessarily the case, as rehabilitation of existing infrastructure and provision of capacity building to ensure efficient operation of the utilities, as well as to provide the revenue base to operate and maintain the systems, may not require large investments.

Table 1: MDG Status in the Mekong Region

		Water Supply		Sanitation	
		Coverage (%)	People Served	Coverage (%)	People Served
Cambodia	2004	<30	0.70	<10	<0.20
	2015	68	2.90	59	2.50
Lao PDR	2004	40	0.57	55	0.77
	2015	80	1.70	70	1.60
Vietnam	2004	60	11.50	30	9.50
	2015	80	25.00	60	18.50
Yunnan (PRC)	2004	70	7.50	70	7.50
	2015	90	19.40	90	19.40

Note: Estimates based on data from Government sources, ADB and UNDP reports.

Challenges facing the Mekong Region

Urbanisation

Urbanisation is placing an enormous burden on many secondary towns in the Mekong Region, which will become ever more onerous as we move towards the MDG target year of 2015. Urban areas are growing at rates of 4.3 per cent in Cambodia, 4.9 per cent in Lao PDR, and 3.6 per cent in Vietnam. These rates, which are around 2.5 times the national population growth averages, are projected to increase the urban population of the Mekong region by 50 per cent by the year 2015. The vast majority of the new urban citizens are the poor, newly-arrived rural migrants. They invariably have to pay higher prices for their water, or use unsafe water, as well as endure unsanitary conditions.

Although urbanisation drives economic growth, it brings with it serious challenges. Without policy and institutional reform, there is a real risk of urban services becoming unsustainable, leading to environmental degradation and serious health problems. These outcomes ultimately undermine the competitiveness of towns and cities, and make them less liveable.

Poverty

Although relatively high economic growth rates are making inroads into reducing poverty, the statistics indicate that there are still major causes for concern. The percentage of people living below the poverty line (less than one dollar/day) is still as high as 29 per cent in Vietnam and 36 per cent in Cambodia. In addition, poverty has a further dimension, that of access to basic services, such as water supply and sanitation. Secondary town coverage rates are invariably much lower than the national averages. The poor not only have low incomes, but they have little or no access to safe water and basic sanitation, which adversely impacts on their health and productivity, and perpetuates the poverty. The opportunity to rise out of this poverty trap is constrained by the limited capacity of local Governments and authorities to sustain or expand access to safe water and basic sanitation.

Environment

As the urban cities and towns in the Mekong region have grown over the past decades, so has the level of pollution that these settlements discharge into the local waterways. Governments, both local and central, as well as service providers have not been able to adequately manage wastewater discharge from urban centres, especially secondary towns. Low levels of revenue generation that barely support operation and maintenance undermine the institutional and human resource capacities necessary to sustain the delivery of services, whilst protecting local environments. Gross Domestic Product (GDP) growth in the Mekong Region is now heavily biased towards industry and services, reflecting the urbanisation trend. Without adequate consideration of the potential adverse impacts of inadequate sanitation, local waterways may become unusable as raw water sources.

Urbanisation is one of the most important features in the Mekong Region as urban growth rates are in the dimension of 5% and thus double as high as national population growth rates. This rapid process of urbanisation is posing severe challenges for many cities and towns in the region and particularly applicable for the urban centres in the corridor, considering the rapid pace of infrastructure development will bring in a great inflow of population to these centres, including migration of rural poor.

(Source: ADB)



Water and Sanitation in the Mekong Region



Cambodia

The situation in Cambodia with regard to water and sanitation services is a serious concern, especially in rural areas and secondary towns, where a large part of the population, and particularly the poor, remain unserved. The high-levels of arsenic that has been detected recently in some of the existing wells across the country is also an increasing concern.

To address this issue the Government has taken several steps, one of the most critical being the formulation of a national policy on Water Supply and Sanitation, which was approved in February 2003, and which covers issues such as private sector participation, financial sustainability, protection of the poor, decentralisation and regulation. The challenge now is to operationalise these policies. In view of the task at hand, the Government allows and encourages private service providers to participate in the sector, even though the legal and regulatory frameworks are not yet adequately developed. Some are very small, and informal, but some are on a larger scale, and operate under a license from the Ministry of Industry, Mines and Energy (MIME).



Lao PDR

With the exception of the capital, Vientiane, and the other provincial capitals, water supply and sanitation coverage in secondary and district towns remains a major concern for the Government. Relatively high unit capital costs and large numbers of poor pose a special challenge for the Government. The National Growth and Poverty Eradication Strategy (NGPES) under which all development programmes are implemented, has identified water supply and sanitation as one of four high priority sectors to be developed in order to meet the Government's economic growth and poverty eradication objectives.

To meet this goal, the Government has prepared an urban water sector investment plan to guide development for the period 2005-2020. The plan, which is estimated at \$266 million, will serve an additional 1.95 million urban inhabitants, and is mainly focused on small - to medium - sized towns. Realisation of the plan will need a sustained investment effort over the next 15 years.

Lao PDR recognises that it will need the support of the private sector to meet its MDGs, and has embarked on an ambitious goal to establish a regulator before inviting private entities to participate on a formal basis.



Vietnam

Vietnam has experienced relatively high economic growth in recent years, with rapidly developing urban centres. Much of this urbanisation is based on newly arrived rural migrants, who place considerable demands on the town's urban services. The Government is trying to address this problem through its Comprehensive Poverty Reduction and Growth Strategy (CPRGS), 2001-2005, which has targets of 80 per cent coverage for urban water supply by 2005, and 100 per cent coverage for sanitation by 2010. It is widely recognised however, that these targets are overly optimistic and will need to be revised. It is estimated that of the \$8billion required to meet the 2010 development targets, only \$230million/annum is being invested at this stage.

The institutional and enabling frameworks have not attracted much private sector interest at this stage. Consequently, the Government is considering a concept that involves unbundling existing water utilities and corporatising them, with a view to improving their performance.



Yunnan Province of PR China

Although water supply and sanitation programmes are currently underway in the Mekong Region, current levels of investment are grossly inadequate. Secondary towns, which have been starved of investment for decades, are particularly in need. With limited budgetary resources, Governments are severely constrained in their ability to meet the needs of these secondary towns. Private sector participation may hold the key, but serious financing challenges lie ahead, as the secondary towns are home to many poor immigrants. Urbanisation presents yet a further challenge. It is currently out-pacing the development of water supply and sanitation and, at current rates of investment, percentage coverage rates are set to fall substantially before 2015. It is clear that some countries will not meet their MDGs by 2015, unless there is a paradigm shift in the levels of investment and in the commitment of the Governments to implement reforms.

In more recent times, the Government has realised that the participation of the private sector not only mobilises more resources, but can also introduce higher levels of technology and management expertise. The water and sanitation sectors therefore, are now welcoming private sector participation, such as build-operate-transfer (BOT) initiatives.

MEK-WATSAN Goal

MEK-WATSAN's fundamental goal is to improve the living conditions of the urban poor in the Mekong Region and protect local environments.

MEK-WATSAN Ensuring Sustainability

- Promoting ownership at local level
- Training and Capacity Building
- Developing Sustainable Structures at Local Level: Clustering of Towns
- Flexibility in Project Planning, Design and Implementation at Town Level
- Integrating Physical Planning with Water and Sanitation, Solid Waste Management and Drainage
- Gender Mainstreaming

Sustainable Environmental Impact Assessment

Within the framework of the Mekong Region initiative, the sustainable environmental impact assessment will serve to:

- Ensure that environmental assessments are integrated in the project especially in the engineering design of water supply and sanitation but also with regard to solid waste management. To establish (drinking) water treatment plants, sewage treatment plants and landfills, more land is to be set aside and a variety of environmental impacts can emanate from those. Therefore, UN-HABITAT is trying to anticipate negative environmental impacts from physical investments initiated under its projects and to amend the investment plans accordingly.
- Ascertain that negative environmental impacts from physical investments are minimised as much as possible.

Preliminary Project Description

Water supply and sanitation projects for selected towns:

- along one or more than one of the economic corridors, and
- outside the economic corridors.

The towns selected according to the following:

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

Rationale for Intervention along Economic Corridors

In the development of economic corridors serious efforts need to be pursued to provide access to water supply and sanitation facilities to secondary urban towns as mass inflow of population will place an enormous burden. The vast majority of these new urban citizens will be the poor, newly arrived rural migrants. They invariably have to pay higher prices for their water, or use unsafe water, as well as endure unsanitary conditions. The opportunity to rise out of this poverty trap is constrained by the limited capacity of local governments and authorities to sustain or expand water supply access, or support sanitation and wastewater coverage in secondary towns. Table 2 delineates that levels of national coverage for water supply and sanitation are reasonably high, while Table 3 highlights that these figures however, mask a much skewed distribution, in which the coverage rates of secondary towns can be as low as 10% for sanitation and 16% for water supply.

Table 2: National Coverage

	CAM	LAO	YUN	VIET
Water	55%	75%	69%	70%
San	60%	80%	70%	50%

Source: ADB

Table 3: Secondary Towns Coverage

	CAM	LAO	YUN	VIET
Water	16	18	60	33
San	11	10	65	10

Source: Government assessments

Without a doubt, secondary urban towns in the economic corridors will face far more serious threats compared to other secondary towns in this region; rapid population growth will result in additional demand of water, energy and settlement areas. The economic corridors will be catalyst to rapid urbanisation, which essentially will see that many secondary urban centres in the region facing the problem of environmental degradation, poor management of public

transport, crime, violence and natural disasters.

All these elements have the potential to undermine the centres' competitiveness, their attractiveness as living space, and their opportunities to attract investments and receive bank loans. All of these problems reduce the welfare of all urban residents and the fruition of the intended objectives of these corridors, and also the fact remains that poor people are the most affected in this whole process. In this light, it is essential that focused thrust is to upgrade the urban services in these corridors.

On the other hand improved water and sanitation services in these secondary urban towns will help meeting most of the MDGs, and in turn will be instrumental in bringing about sustainable socio-economic developments that these economic corridors seek to achieve.

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. These corridors are developed through planned and systematic project, policy and institutional interventions. Much progress has been made in the three major GMS economic corridors:

- East-West corridor,
- North-South corridor, and
- Southern Economic corridor.

The economic corridors are developed to realize the GMS vision to achieve enhanced connectivity, increased competitiveness, and a greater sense of community in the GMS.

(Source: ADB)



Main Project Components

For each of the selected town, there will likely be three main components, as shown in the table below:

Component	Sub-components
1 Water Supply & Sanitation	<ul style="list-style-type: none"> Rehabilitate existing structure and promoting conservation and demand management Increase water supply and sanitation infrastructure
2 Policy Support and capacity building	<ul style="list-style-type: none"> Capacity building of utility and community Policy on water conservation and demand management Raise awareness through human values based water, sanitation and hygiene
3 Monitoring and Evaluation	<ul style="list-style-type: none"> Project Management, Monitoring and Evaluation Environment and Social Management

Implementation Strategy

MEK-WATSAN is to be implemented in a flexible manner to suit region-specific or country-specific or project-specific requirements, and can include one or more of the following phases:

- Capacity building;** which includes
 - Mobilization of political will and advocacy to promote policy, regulatory and tariff reforms, and preparation for investments;
 - Pilot demonstration projects, improving governance and capacity at all levels of Government for effective integrated water and sanitation development and management;
 - Promotion of water quality, sanitation and hygiene education; and
 - Performance benchmarking and monitoring of MDGs.
- Project preparation;** which aims to identify, develop and prepare investment proposals.
- Investment;** in which the reforms and proposals developed under the other phases would be implemented.

By targeting the rehabilitation and the upgrading of water and sanitation infrastructure, this initiative aims to improve the living conditions of the urban and peri-urban poor in secondary towns. In particular, the initiative focuses on improving livelihoods of low-income urban population that lack adequate water and sanitation facilities.

This initiative provides an ideal opportunity for targeting water and sanitation investments to secondary towns linked to sector reforms and capacity building within a process of decentralization to enable them to achieve the MDG.

Work-in-progress as on December 2006

Lao People's Democratic Republic

Xieng Ngeun, Luangprabang Province

Indicator

Total population of Xieng Ngeun Town/project area	6,537
Town population distribution by gender	Male: 3,297 Female: 3,240
Water supply coverage before intervention	0
Adequate water supply coverage after intervention	80%
Sanitation coverage before intervention	0
Adequate sanitation coverage after intervention	100%

Sayabouly, Sayabouly Province

Indicator

Total population of Sayabouly	26,000
Town population of the left bank/project area	4,700
Water supply coverage before intervention	0
Adequate water supply coverage after intervention	100%
Sanitation coverage before intervention	47%
Adequate sanitation coverage after intervention	100%

People's Republic of China

Simao, Yunnan Province

Indicator

Total population of Simao	140,000
Population below poverty line	21,500
Water supply coverage before intervention	64%
Adequate water supply coverage after intervention	67%
Sanitation coverage before intervention	80%
Adequate sanitation coverage after intervention	83%

Jinghong, Yunnan Province

Indicator

Total population of Jinghong	135,000
Population below poverty line	15,000
Water supply coverage before intervention	67%
Adequate water supply coverage after intervention	100%
Sanitation coverage before intervention	60%
Adequate sanitation coverage after intervention	100%

MEK-WATSAN Approaches and Guiding Principles

With regard to technical and political aspects, UN-HABITAT is taking following approaches during project preparation and implementation:

Innovation - faster delivery mechanisms will be pilot tested and introduced to more quickly achieve targets. Means of minimizing costs and engendering ownership will be an integral part of the programme, such as community participation. Alternative financing mechanisms will be explored to enable the poor to benefit from the interventions.

Community Involvement and Empowerment - implementation and operation arrangements will be based on full consultation with communities. Partnerships will be promoted between all levels of civil society, as well as both the private and public sectors. Involving the community as a partner, and not just a casual observer will ensure that the interventions are community responsive,

and socially inclusive. Communities will also be a vital partner in identifying and establishing income-generating activities.

Replication - pilot initiatives will be monitored carefully and documented to support scaling up and replication. The regional dimension of the programme will enable examples of best practices to be tested and applied trans-nationally.

Rehabilitation - where systems exist, rehabilitation will form the basis to any expansion programmes. Maximizing the potential of existing assets is more cost effective, and provides the necessary platform for expanding systems out into the poor peri-urban areas.

Private Sector Participation - the potential for the private sector to become involved in the delivery of water supply and sanitation services will be explored and tested, such as small-scale independent service providers.

Sustainability - this issue is fundamental to the whole programme. Engendering ownership and building awareness are two of the basic building blocks for sustainability, both within the community and within the local public sector. Capacity will be built within the local authorities and operators to a level that is commensurate with the applied technology. In addition, the programme will be aligned closely with national development policies and plans, so that interventions are compatible with Government programmes. Pro-poor pricing policies and structures, as well as targeted subsidies, will be employed to ensure the poor can benefit from the interventions on an affordable basis.

Results-based - adopting a results-based implementation approach will introduce a measure of real effectiveness. Monitoring and evaluation will be common theme to all activities and components, which will yield results that can be independently audited.



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