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**SUSTAINABLE WATER AND SANITATION SERVICES  
FOR ALL IN A FAST CHANGING WORLD**

**A pro-poor community based approach for water  
and sanitation in small Mekong region towns**

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*Achievement of the 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, is a major challenge for governments of the Greater Mekong Sub-region (GMS). Rapid urbanisation is increasing the need for services in the small towns to which many rural migrants are moving, yet there are limited financial resources to improve coverage. Under the Mekong Region Water and Sanitation Initiative (MEK-WATSAN), UN-Habitat has partnered with GMS governments with the aim of achieving the water and sanitation related MDG. With a pro-poor emphasis MEK-WATSAN has developed a community-based water supply and sanitation model which has leveraged partnerships with existing institutions to effectively improve water supply and sanitation services to the urban poor in the Mekong Region.*

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## **Background**

The Mekong Region Water and Sanitation Initiative (MEK-WATSAN) is a collaborative effort between UN-Habitat and the governments of the Mekong region, targeting towns in Cambodia, Laos, Vietnam and the Chinese provinces of Yunnan and Guangxi. Its philosophy is to support participating governments to attain their water and sanitation related Millennium Development Goals (MDGs) agreed in 2000, **to halve the proportion of people without access to improved water supply and sanitation services by 2015**. As such, it promotes (1) pro-poor urban water governance; (2) urban water conservation and demand management; (3) integrated urban environmental sanitation; and (4) income generation for the urban poor through community-based water and sanitation services.

Growing demand for services coupled with limited financial resources and local level capacity lead to a need to address issues responsible for service provision gaps. The MEK-WATSAN approach targeted the rehabilitation and upgrading of existing infrastructure, along with capacity building to ensure effective operation of water utilities and to provide a revenue base on which to operate and maintain the systems. This approach was less capital intensive than other approaches and aimed to improve the living conditions and livelihoods of the urban and peri-urban poor living in small towns. The initiative was linked to sector reforms within a process of decentralization to enable achievement of the MDGs.

Implementation commenced with a detailed participatory assessment to select target towns on the basis of need, poverty incidence, consistency with government policies, accessibility, availability of water source and local authority commitment. Following the selection of towns, a fast-track phase implemented pilot projects and these were followed by Roll-out Phase 1, in which lessons learned from the fast-track phase contributed to replication and scaling up.

## **Rationale**

The Mekong Region faces serious challenges to meet MDG targets regarding water and sanitation for its 250 million inhabitants. This is because investment levels are inadequate and the pace of urbanization is outstripping the rate of implementation of water supply and sanitation facilities. With urban growth rates in the dimension of 5%, the rapid pace of urban infrastructure development will attract large numbers of rural migrants, including the poor. While levels of national coverage for water supply and sanitation are

reasonably high (50%-80% in 2005), the figures mask a skewed distribution in which the coverage rates of secondary towns were as low as 10% for sanitation and 16% for water supply in 2005.

Urbanisation is particularly marked in small towns in the economic corridors, which are systematically being developed through project, policy and institutional interventions. The purpose of the economic corridors is to link infrastructure with production and trade in order to enhance connectivity between the countries of the Greater Mekong Sub-region (GMS). The resulting increased rate of urbanisation in the economic corridor towns has the potential to undermine their residents' welfare, with the poor being the most severely affected. It is therefore essential to prioritise the upgrade of urban services in the corridors. Improved water and sanitation services in these secondary urban towns will help in meeting most of the MDGs, and in turn will be instrumental in bringing about the sustainable socio-economic developments that the economic corridors seek to achieve.

With regard to technical and political aspects, UN-Habitat took the following approaches during project preparation and implementation:

- Innovation
- Community Involvement and Empowerment
- Replication
- Rehabilitation Private Sector Participation
- Sustainability
- Results-based
- Collaboration and Cooperation
- National and Regional Perspective

### **Implementation**

MEK-WATSAN was implemented in a flexible manner to suit region, country or project-specific requirements. Each project included one or more of the following:

- Capacity building relating to: (1) mobilization of political will and advocacy to promote policy, regulatory and tariff reforms, and preparation for investments; (2) pilot demonstration projects, improving governance and capacity at all levels of government for effective integrated water and sanitation development and management; (3) promotion of water quality, sanitation and hygiene education; and (4) performance benchmarking and monitoring of MDGs.
- Project preparation, which aimed to identify, develop and prepare investment proposals.
- Investment, in which the reforms and proposals developed under the other phases were implemented.
- Monitoring and Evaluation: a robust monitoring system has been set up, including SMS based monitoring systems, allowing communities to report on the sustainability of the system.

The project has benefitted approximately 455,000 people with improved water supply and sanitation at a total cost of around US\$ 12 million, of which approximately 20% was mobilised from partners. The roll-out phase 1 of the project had a total budget of around US\$ 10.5 million.

One of the striking features of the MEK-WATSAN initiative is its ability to forge partnership with a wide range of stakeholders. Types of partnerships are shown in Table 1.

### **Achievements**

The roll-out phase 1 has exceeded planned targets for total numbers of beneficiaries provided with access to water and improved sanitation and the planned targets for each country were either exceeded or approximately met, as shown in Table 2.

<b>Stakeholder(s)</b>	<b>Salient Features</b>
Governments	Partnerships at central and local levels
Communities	In-kind contribution
Public utilities	Implementing Partners
Asian Development Bank (ADB)	Complementary investments
UNDP/SIWI	Water governance
Mekong River Commission (MRC)	Gender mainstreaming
World Health Organisation (WHO)	Water safety plans
International Non-Government Organisations (INGOs)	Gender mainstreaming, sanitation, public-private partnerships

<b>Country</b>	<b>Beneficiary Targets: Water</b>		<b>Beneficiary Targets: Sanitation</b>		<b>Contract Completion</b>
	<b>Planned</b>	<b>Achieved</b>	<b>Planned</b>	<b>Achieved</b>	
Lao PDR	38,640	39,856	34,551	34,512	Dec 2012
Cambodia	26,982	27,332	80,985	106,906	June 2013
Vietnam	31,630	32,587	85,000	81,392	Dec 2012
<b>Totals</b>	<b>97,252</b>	<b>99,775</b>	<b>200,536</b>	<b>222,810</b>	

The project has continued to build on regional and national consultations. The Project Performance Monitoring and Evaluation (PPME) tool developed in the project is used to record the scope and breadth of the initiatives and as such forms a basis for evaluating continued interaction, information sharing and networking between project partners and stakeholders. In addition, the Project raised the profile of the need for good sanitation and facilitated processes that enabled water supply focused government organisations to develop sanitation needs assessment and implementation skills.

Several cross-cutting measures are a feature of MEK-WATSAN. These include capacity-building programmes, which were developed in a participatory way and implemented effectively at national and local level. Major capacity building initiatives for water utilities staff improved staff's technical, planning and managerial capability and increased the understanding and capacity of local authorities in the delivery and management of pro-poor water and sanitation services. Key community preparation strategies included training community groups, providing UN-Habitat or partner mentoring support, partnering with the Women's Union in Vietnam and a very experienced non-government organization (NGO) in Cambodia and with experienced Water Utilities in each Mekong Country. Special mention of the Lao PDR Water Supply Authorities (NPSEs) is appropriate because the Project was able to build on and also benefit from the technical skills of divisions in some NPSEs who had benefited from two decades of ADB support.

Further cross-cutting measures include clearly defined Cooperation Agreements between stakeholders, effective study exchange mechanisms among member countries and stakeholders, transparent, legal, country-specific procurement frameworks and consideration and implementation of environmental, gender and ethnic aspects relevant to each project.

The implementation of transparent and sustainable micro-financing and institutional mechanisms was effective in enabling poor and vulnerable households to access safe water and sanitation facilities. A revolving fund/subsidy provided for water connections and sanitation was validated during the final external evaluation.

The evaluation noted further achievements. Regarding health and safety, the provision of family latrines to poor and vulnerable households improved the urban environment, which has led to an improvement in household hygiene practices and should contribute to a reduction in water/sanitation related illnesses. As for the water supply, the physical risks to people are reduced because householders and especially women and children have the security of not having to venture to isolated areas to collect water or for toileting purposes.

Health improvement solely attributable to improved sanitation and access to water is logical and often stated, but is difficult to measure. For this programme the over-riding perception of recipient communities and beneficiaries was positive with respect to livelihood, improved health and improvements to the environment as a result of Water and Sanitation Hygiene (WASH) awareness programmes developed and embedded by UN-Habitat and partners in the project communities and the infrastructure provided. The premise of improved health as a result of the programme is too early to assess but the indications point to positive outcomes.

Finally, all the respective Authorities linked to the Project acknowledged the positive support for increasing the number of people with access to safe water and improved sanitation facilities and progress towards water and sanitation MDG target 10.

The external evaluation noted that the achievements “contribute to community impacts such as improved health and livelihood for a population, which in turn contributes to enhanced productivity and economic development in the Mekong River Basin regions and improved protection of Mekong River ecosystems from pollution loads emitted from urban centers along the Mekong River” (Mills, Thi, Thammanosouth, & Sorn, 2013).

### **Evaluation and lessons learnt**

The success of the MEK-WATSAN implementation was measured using criteria of relevance, effectiveness, efficiency, impact and replicability, and sustainability.

Relevance was built into the selection of towns through the inclusion of criteria such as need, poverty incidence, geographical location (along economic corridors a priority), consistency with government policies and local authority commitment. Support for governments and national strategies was achieved through capacity building and institutional reforms and this contributed to the goal of MDG achievement. The MEK-WATSAN programme has also been directly relevant and responsive to government strategy in all countries on further rehabilitation and construction of the physical infrastructure and for Vietnam in particular it is relevant to the main priority of the government to promote pro-poor urban governance, urban water conservation and demand management, integrated urban environment sanitation and income generation for the urban poor through community-based water and sanitation services.

Beside the development sectors the programme also responds to the needs of local people for their daily lives. It provides good quality water with affordable tariffs which contributes to the poverty reduction of urban people especially poor households and it contributes to the challenge of providing improved sanitation facilities for public health protection and improved environmental conditions.

Effectiveness was shown in the way the project delivered in line with its original philosophy of triggering pro-poor water and sanitation investments in small towns. The Project met this objective by providing a subsidy for water connection fees and latrine construction for poor and near poor households. The subsidy was adjusted to suit the needs of each country and comprised combinations of revolving fund, grant, and household (HH) contributions based on defined ‘poverty limits’ for household water supply connections and latrine construction. The whole process has an associated reporting component that takes time, causes implementation delays and creates bureaucratic bottlenecks yet on balance it engendered a sense of ownership of the facilities.

In terms of effectiveness of the financial transfer mechanism, although MEK-WATSAN has Memoranda of Understanding (MoUs) with the central governments, funds were directly transferred to the implementing partners that were operational at town level and they managed the funds. This avoided the often criticized head-office process that typically leads to project delays because of delayed transfer of funds. The Cooperation Agreements for each subproject required a post project completion audit and the requirements were met for each subproject.

MEK-WATSAN has created successful partnerships with the private sector such as Coca Cola for water supply, with NGOs such as Centre for Development (CfD) for sanitation and with the Mekong River Commission (MRC) for gender mainstreaming in the water and sanitation sector. MEK-WATSAN also cooperated with an INGO, GRET, on a public-private partnership (PPP) model in Lao PDR. UN-Habitat’s

cooperation with GRET ensured that the poor are not left out of PPP implementation and that the community was involved as a stakeholder in the process.

When evaluating efficiency, the external evaluation noted that the project demonstrated good cost efficiency compared to similar projects in urban areas. Stakeholders and partners have emphasized that MEK-WATSAN's successful approach was due to leveraging off the existing institutional structures and using local capacity to implement sub-projects, enabling low cost implementation without compromising quality. This approach was locked in through the Cooperation Agreement (CA), and high level consultation clarified partner commitments and responsibilities. The ability of UN-Habitat to stay close to stakeholders was a key factor in the continuing support of governments including local authorities.

A significant impact of MEK-WATSAN has been the positive behavior changes in communities. Communities are paying more attention to improving the general environment surrounding their houses and in Cambodia some local authorities are also interested in supporting these initiatives through the concept of a clean city by participating in the "Clean City Award Competition" established by the Ministry of Environment.

With regard to health, beneficiaries shared that quality of life had improved indirectly through the increased household incomes of beneficiaries who have been enabled to start or work in businesses which are reliant on water and sanitation facilities.

Exposure of utility staff to community based project implementation has enabled them to actively cooperate with the community and implement cost effective projects feeding into increased coverage of water supply and sanitation infrastructure in poor urban areas, thus ensuring that the poor benefit from the sector strategy and the improved management system. The MEK-WATSAN model has already been replicated by a local partner in Lao PDR based on the experience of the first pilot, so contributing to this objective.

Throughout the programme, sustainability has been considered in five different areas. Environmental sustainability was ensured by the development of an environmental sanitation Master Plan for each town, as well as a water quality control and monitoring plan. A key factor in technical sustainability was the design of systems which were appropriate to the site. Needs assessments and capacity building in water utility staff contributed to the professionalism which is a significant factor in the continued operation of quality water supply and sanitation systems five years after they were handed over to local authorities. Community participation and mobilisation of local mass organisations whenever possible are keys to social sustainability and the extent to which this happens is a measure of the commitment of the whole community. One clearly identifiable indicator of social sustainability is the strong representation of women and ethnic groups on WATSAN/Project Committees. This achievement and the strong partnerships developed between the different stakeholders and relevant institutions provided social cohesion, which in turn allowed for the completion of cost effective infrastructure. To achieve institutional sustainability MEK-WATSAN developed partnerships with existing established institutions and successfully leveraged their expertise in order to expand the activities of water supply and sanitation. For water supply the partners are the public water utilities mandated to provide water supply. These public utilities have been strengthened through MEK-WATSAN project implementation, thus ensuring enhanced institutional capacity in maintaining and operating the established systems. Moreover, the partnerships with the NGO, (CfD), and the Vietnamese Women's Union and with Commune Councils have been anchored with a Memorandum of Understanding, thus ensuring both support of local Government and community ownership. The last component of sustainability is financial sustainability. The projects which have a requirement for stakeholder contributions as documented in MoUs and Cooperation Agreements all met the minimum requirement of 20% contribution in cash or kind. Correctly set water tariffs support water supply sustainability and this was achieved. Revolving funds for sanitation, a proven UN-Habitat mechanism for delivering improved sanitation facilities, was successful and measurable and the uptake in each country was significant.

Reflection at the conclusion of the Roll-out Phase 1 produced the following key lessons:

- The community based model exemplified by MEK-WATSAN is a good alternative model for water supply in small towns.
- The presence of the UN as a major implementer has shown that it has a great convening power resulting in governments and key stakeholders collaborating and ensuring that consumer rights are protected.
- Interventions and key partners need to be appropriate to the context of the target town.
- The initial timeline was extremely ambitious when considering that similar projects have taken 5-6 years to reach completion. It is important that allowances are made for circumstances such as the effects of climate change and protracted negotiations with governments.

## Conclusions

The MEK-WATSAN programme has developed a pro-poor water supply and sanitation model which has demonstrated successful outcomes in four different countries. The participatory nature of the model has engendered a sense of ownership in local communities, and effective working relationships between stakeholders at all levels. The focus on maintaining partnerships is seen as crucial to positive outcomes. Efficient operation by water utilities and country institutions has enabled improved water supply and sanitation to the urban poor, a group whose needs are not always met. Given the success of the MEK-WATSAN Programme in achieving positive outcomes in the target towns, every effort should now be made to scale up the model to other towns in the region and to replicate it in other regions.

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