## **UN@HABITAT** FOR A BETTER URBAN FUTURE

## Sanitation Sector in Lao PDR

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### Lao PDR – country profile



Population (2009 estimate)	6.1 million	
Per Capita GDI (2008)	US\$740	
GDP growth rate (2009)	6,5%	
GDP compilation (2008)	Services 38% , Agriculture 35% , Industry 27%	
Urban population (1998/2008)	20%/31%	
Population living in poverty	33%	

Data sources: ADB / World Bank

Technical Cooperation for Sustainable Environmental Development in the Asia-Pacific Region 30 September, Fukuoka, Japan

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## Despite recent improvement, many still lack access to improved sanitation





## Sanitation facilities (by major types)





# Economic impacts of poor sanitation and hygiene are significant





# Health impacts: Nearly 3 M cases of diarrhea annually due to poor sanitation

Every child under 5 years has almost two cases of diarrhea	Disease	Children <5 yrs	Total #cases
	Diarrhea	1,160,720	2,860,000
6000+ deaths every	Typhoid	196	1,637
sanitation	Hepatitis	18	227
Another 79,000 indirect (including malaria) cases of disease due to poor sanitation	Dysentery	110	739
	Scabies	7,496	7,779



### National strategy for Sanitation

•A National Strategy for Rural Water Supply and Environmental Health (the RWSS Strategy) adopted in 1997 and updated in 2004.
•Both urban and rural sanitation are the responsibility of the Ministry of Public Health (MPH), through the National Centre for Environmental Health (Nam Saat)



#### ISSUES AND CHALLENGES

•Implementation of the strategy has been constrained because it is poorly communicated and disseminated, and also because Nam Saat has limited financial resources for implementing policies and limited numbers of staff and capacities at provincial and district level to deliver fully on its mandate.

•Sanitation is not high on the political agenda, either at national or local level

- Low level of government investment in this sub-sector
- Most provision via household investment or donor projects



### Wastewater management in Vientianepotential for technology exchange

- No urban centers, including the capital Vientiane, have comprehensive piped sewerage systems or wastewater collection, treatment and disposal systems.
- Vientiane is developing rapidly and the infrastructure struggles to develop at the same pace.
- The combined wastewater and storm water management system of Vientiane has developed over time in an ad hoc manner and now relies mainly on a limited number of household septic tanks and open canals leading to natural wetlands to achieve acceptable levels of water quality.
- Until now, this natural system has, for the most part, been successful in maintaining an acceptable water quality in the streams, canals, and wetlands of the city. However, as the agglomeration of small urban villages grow and merge into a densely populated capital city, these processes are being overwhelmed by increasing amounts of sewage.
- The expense and delay associated with the construction of a centralized water treatment center with accompanying sewage piping is unreasonable considering the current level of infrastructure spending by the city.
- It is possible that most households in the city will continue to dump mostly untreated sewage into the canals, streams, rivers and wetlands for decades while the city infrastructure struggles to catch up.



## UN-HABITAT's sanitation projects in Laos

UN-HABITAT has implemented the sanitation and hygiene projects in Lao PDR under WAC and MEK-WATSAN to support participating Governments attain the sanitation related MDGs agreed in 2000, to halve the proportion of people without access to improved sanitation services by 2015.

#### The types of projects implemented here include:

- Human Values-based Water, Sanitation and Hygiene Education (HVWSHE): an initiative to create a new water ethic through values-based water education by importing information on water, sanitation and hygiene and also inspire and motivate learners to change their behavior with a view to promote wise and sustainable use of water and sanitation.
- Hygiene promotion: strengthening the technical capacity of stakeholders to promote hygiene and sanitation activities in a number of provinces.
- Raising awareness and capacity on community waste management.
- Construction of latrines, including provision of revolving funds to poor households for construction of latrines.









# Case study: Revolving funds for latrine construction in Xieng Ngeun

- In 2006 the first community-based water and sanitation project was launched in Lao PDR, implemented under MEK-WATSAN. In addition to the 8 villages being connected to a water supply network, the households were trained in latrine construction and given the opportunity to purchase materials cheaply to build their own latrines.
- In order to make the scheme accessible for everyone and especially to the poorest households, two revolving funds were set up in 2007: one for connecting to piped water network and one for latrine construction.
- The funds were coordinated by a local WATSAN team. T&Cs for the loans were agreed, including the repayment periods (12 months for water and 18 months for latrines). The loans were granted on a basis of income, so that the poorest households were given a priority. The loan for latrine construction was a combination of cash and materials.
- Three years on, a total of 156 households have received a loan from the revolving fund for water connection, and 73 households have received a loan from the latrine fund. The fund for water in particular was a great success - all applicants in the eight villages were eventually connected to the water network, and the revolving fund is now granting loans to applicants from other villages in the area.





## Ways forward

WSP study made the following recommendations for the sanitation sector in Laos:

- 1. Give greater priority to investments in sanitation and hygiene promotion
- 2. Target investments to rural areas as well as to the urban poor
- Strengthen promotion and information campaigns to improve personal hygiene practices, focusing on hand washing with soap
- 4. Better monitoring and further evaluation of the impact of improved sanitation options in Lao PDR



The National Urban Sector Strategy and Investment Plan has recommended the following step-by-step approach in dealing with sewerage system:

(a) introducing stronger sanitation regulations in all towns

(b) upgrading pit latrines to septic systems in medium and high density areas

(c) improving and expanding the combined drainage systems in medium and high density areas to receive settled affluent from septic tanks

(d) constructing dry-weather interceptors at the outfall from combined drainage systems to convey waste water to down-stream discharge points or to waste water treatment plants, and

(e) developing separate sewerage systems for the central areas of the large cities and towns.



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