

Urban Sanitation in Indonesia: Planning for Progress

Providing Powerful Incentives for Cities

Urban sanitation planning needs to be more than a voluntary activity if it is to be undertaken nationwide. Government needs to develop both incentives and obligations for municipalities to adopt comprehensive strategies, by linking funding to the adoption of city-wide sanitation plans.



Barely 1% of the population has access to sewerage and while most households have a toilet, many of these discharge into open drains and water courses.

Executive Summary

The government has adopted national sanitation goals but without a strategy for meeting them in urban areas, and municipalities have had difficulty accessing funds should they decide to make improvements.

The Indonesia Sanitation Sector Development Program (ISSDP) is an innovative response to the growing sanitation crisis; instead of funding investments directly, it fosters an enabling environment for progress, with special attention to city-level planning, strengthening sector strategy and institutional arrangements, and advocacy and awareness-raising at all levels.

This Field Note examines the city-level planning and capacity building process which is at the heart of ISSDP and is helping to signal the way forward for sector strategy. Central to the process are collaboration between the various government organizations involved in sanitation at municipal level, and the identification of prioritized, affordable actions that will enable the cities to move steadily towards effective services, city wide.



Abbreviations and Acronyms

Bappeda	Local Planning and Development Unit
CBO	Community-based Organization
CSS	City-wide Sanitation Strategy
DKP	Cleaning and Landscaping Agency
DLH	Environmental Services Agency
ISSDP	Indonesia Sanitation Sector Development Program
MDG	Millennium Development Goal
NGO	Non-government Organization
PDPAL	Perusahaan Daerah Penanganan Air Limbah (Regional Wastewater Treatment Enterprise)
PDAM	Perusahaan Daerah Air Minum (Regional Drinking Water Enterprise)
RT/RW	Neighborhood Administrative Units
RPMJ	National Mid-Term Development Plan
PU	Public Works Department
TTPS	Tim Teknis Pembangunan Sanitasi (Sanitation Technical Team)
WSP-EAP	Water and Sanitation Program - East Asia and the Pacific

Glossary

Cubluk	Soak pit
Kelurahan	Sub-district (the lowest administrative unit in a city)
Musrenbang	Development planning meeting
Pokja	Working group
Tim Teknis	Technical Team
Perda	Local Regulation

Introduction

Indonesia is south-east Asia's biggest economy and has made an impressive recovery from the East Asian crisis of the late 1990s. In 2005 it regained middle income status and economic growth since then has averaged 5% per annum. Alongside this growth comes accelerating urbanization, and with it the challenge of developing essential infrastructure and services. Out of a total population of 230 million, the urban population already accounts for half and is predicted to reach 60% by 2025.

While infrastructure generally deteriorated following the turmoil of the late 1990s, poor urban sanitation has been a problem for decades. Government has treated sanitation as essentially a private matter and public investments in sanitation infrastructure and services have been negligible. The results are self-evident: barely 1% of the population has access to sewerage and while most households have a toilet, in most cases the wastewater discharges untreated or partially treated into open drains, canals, rivers and ponds. Fecal contamination of urban ground water resources is widespread, but many people remain reliant on wells for their drinking water. It is little wonder that Indonesia continues to suffer a high incidence of water- and sanitation-related diseases, including typhoid.

Solid waste management and drainage are also grossly inadequate, with huge quantities of uncollected waste finding its way into drains and watercourses, causing blockages and exacerbating problems of local flooding.

The Government of Indonesia has adopted national sanitation goals in line with the MDGs, but has not, so far, developed a strategy for meeting them. And while sanitation services have been decentralized to local government, specific responsibilities and funding

mechanisms have not been defined in sufficient detail. As a result, municipalities are under little pressure to improve sanitation services and rationalize institutional arrangements, and do not know how to access capital funds. Where improvements are undertaken, they tend to be piecemeal and unconnected to any strategic plan for the city as a whole.

Funded by The Netherlands Embassy through Indonesia Water and Sanitation Program (WASAP) and Swedish Agency for International Development (Sida), the Indonesia Sanitation Sector Development Program (ISSDP) is a partnership between the Government of Indonesia and the World Bank Water and Sanitation Program (WSP). Implementation has been assisted by DHV & Associates. It is an innovative and ambitious response to the urban sanitation crisis. Instead of funding new investments directly, it aims to foster an enabling environment for progress in the sector, with special attention to planning, capacity building and institutional arrangements at city and provincial level; policy and strategy at national level; plus advocacy and awareness-raising at all levels; all geared towards local ownership of sanitation challenges and improvements.

At the end of its first, two-year phase, government ownership of the program, both at central and local levels, is strong and a distinct shift is evident in the sector. Each of the six medium-sized municipalities supported by the program has produced a city-wide sanitation strategy and urban sanitation is starting to gain the profile it deserves on the national development agenda. Central and provincial governments are now taking concrete steps to ensure that more cities begin tackling the urban sanitation challenge and can access the funds and technical assistance they need to do it.

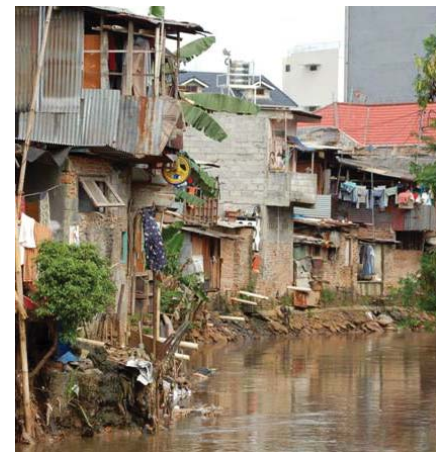
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helping to signal the way forward for national strategy. Central to the process are collaboration between the various government organizations involved in sanitation at municipal level, and the identification of prioritized, affordable actions that will enable the cities to move steadily towards effective services, city wide.

Sanitary Conditions in Indonesian Cities

According to the 2007 World Development Report, just over half of the Indonesian population lives below the poverty line of \$2 per day. The Indonesian government has reported that, in urban areas, only 13% of the population is poor, but this is based on a threshold of just \$0.60 per day.

While at least half of Indonesia's 230 million population lives in urban areas, only 1% of the population is served by sewerage, and less than ten cities have a substantial sewerage network. This level of coverage is among the lowest in Asia.



In the absence of public investments, most of the infrastructure and services in place have been provided by households and small operators. The use of water-borne toilets is well established in towns

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and roughly three quarters of urban households have a toilet. However, local government oversight and regulation is weak and very few households dispose of wastewater safely. Many toilets are connected to soak pits known as *cubluk*, or to septic tanks that are poorly constructed, rarely emptied, and allow untreated or partially treated wastewater to seep into ground water (which is high in many locations) or into open drains and watercourses. Other households have toilets that discharge directly into drains and water courses via a waste pipe, or are simple 'overhung' latrines whereby a simple screen or shelter is erected inside which people defecate directly into the water.

Septic tank emptying businesses are common, but many of them dump sludge directly into rivers without treatment. All six municipalities participating in ISSDP have a sludge treatment plant, but these operate below capacity or not at all, for a variety of reasons including low demand and difficulties with vehicular access. Some are provided at waste disposal sites and where these are some distance from town, the transport costs could be an additional deterrent to potential users.

Informal collection of household waste on payment is well established in Indonesia but at least one third of urban households do not receive this service. Even where waste is collected, large amounts of it are burnt, disposed of randomly or dumped at unofficial sites that are not serviced by the municipality. Formal secondary collection points are too few, as are final disposal sites. And while sanitary landfill is known, it is not normally practiced.

Many households are located in areas that do not have proper urban drainage, and in some towns (including Banjarmasin, one of the ISSDP cities) there is regular flooding. The presence of large quantities of sewage and uncollected garbage exacerbates the problems of already inadequate drainage networks.

Regular hand washing with soap is quite rare in Indonesia, although soap is available in nearly every home. ISSDP surveys found that around 44% of respondents in the six cities never wash their hands with soap.

Inadequate sanitation in both rural and urban areas has had severe consequences for health in Indonesia and impacts most acutely on the poor, who are least able to compensate for the lack of government investments in basic services. One survey found that the poor urban households were buying water from private vendors at 15 to 30 times

the tariffs of the public utility (WSP, 2006). Many of them were unable to obtain connections to the public supply due to a lack of formal land tenure and the high one-time cash costs of connections.

Infant mortality in low-income areas reached 121 per 1000 in 2001, compared with an average of 59 for low- and middle-income countries in the Asia Pacific region, and a high proportion of deaths was associated with water- and sanitation-related disease. The incidence of typhoid is the highest in the region, and disproportionate for countries achieving a GDP of over \$700 per annum. It is

BOX 1: SANITATION BY COMMUNITIES – SANITASI OLEH MASYARAKAT (SANIMAS) PROGRAM

The SANIMAS program is based on community-driven development principles. Communities are offered three choices for sanitation improvement:

- (i) Shared (communal) septic tanks for groups of four to five households. In this model, the household has to build its own toilet and connect it to the septic tank;
- (ii) Enhanced communal bathing, washing and toilet block (mandi, cuci, kakus or MCK) facilities including biogas capture and reuse; or
- (iii) A shallow sewer leading to a communal sewage treatment facility (usually a baffled reactor). For this option the individual household provides its own toilet and connection to the sewer.

The option of choice may depend on the specific conditions of the respective locations and other social or cultural preferences. The communities are guided in the selection of their preferred option. Typically house-owners prefer private facilities connected to a shallow sewer, and tenants of rental housing prefer the shared toilet block. All of the options are modular for community sizes of 100 to 200 households.



Each of these options costs about Rp 3 million (\$310) per household. For a typical community of 100 households the Government of Indonesia grants the local government Rp100 million (\$10,300) or one third of the cost. The local government invests the balance of Rp 200 million (\$20,700). The community invests an equivalent 2–5% (in 'in kind' labor) contribution to build the facilities.

Since 2006 the Ministry of Public Works has begun replicating the SANIMAS approach with its own budgets, though long-term operation and maintenance systems are still to be developed and the technology has yet to be taken to scale.



estimated that Indonesia loses some \$9 million annually due to poor sanitation; roughly 2.3% of GDP (WSP, 2007).

Urban Water Supplies

Water resources are plentiful in Indonesia, but only 42% of households have access to a public water supply network and barely one third of urban residents have access to a house connection from the public utility (PDAM). Tariffs are well below cost recovery levels and many utilities have outstanding loans from the Ministry of Finance. As a result, maintenance suffers and in many cases expansion has been postponed. Water quality from public networks is often low.

Where an adequate public supply is not available, households use alternative supplies such as private dug wells, tubewells and small local distribution networks, or buy water from informal suppliers, some of whom distribute utility water illegally. In smaller cities, as much as half of the population accesses water through these alternative routes. Private wells are severely contaminated with fecal bacteria due to the high proximity of malfunctioning septic tanks or pits used for human waste disposal. In Blitar (one of the cities supported by ISSDP)

only 10% of households have access to a piped water supply and roughly two-thirds of shallow wells are sited within ten meters of a septic tank or pit latrine.

Sanitation Policy and Institutional Arrangements

For many years, central ministries in Indonesia exercised almost complete control over infrastructure planning, development and financing. Operation and maintenance, on the other hand, was assigned to local governments. This stark separation of responsibilities for investment and for service delivery did not foster accountability and capacity development at local level and, as a result, the sector experienced declining technical and financial performance despite increased capital expenditure from the late 1990s onwards.

In 2001, the government embarked on a rapid and far-reaching decentralization process. This formalized local government responsibility for the delivery of urban sanitation services (among other things) but did not lead to any significant improvements on the ground. A critical constraint was that responsibility for

urban services (including sanitation) was devolved to local government without establishing an operational framework and service delivery standards or putting in place measures to develop municipal capacity. What exactly municipalities should do, how they would be held accountable, and how services should be funded, were not spelled out. Importantly, no specific obligation was introduced to improve sanitary conditions in unsewered areas, which account for almost the entire population in most towns and cities. An added complication was the failure to define the role of provincial governments in municipal sanitation. Since 2006, the provinces have been allocated an increasing share of national infrastructure development budgets. In 2007 this reached 40% of national spending and partial clarification of provincial roles was at last issued.

The current allocation of responsibilities for urban sanitation services is as follows:

National government is responsible for sanitation policy and strategy; regulation, minimum standards and monitoring; and overall coordination of the sector. The National Development Planning Agency (*Bappenas*), the Ministries of Public Works, Health, and Home Affairs (the latter is responsible for local government) and the Environment Agency all have a role in urban sanitation, though *Bappenas* plays the lead role in decision making. In contrast to this, responsibility for promoting rural sanitation lies squarely with the Ministry of Health.

Provincial governments have not, up to now, been involved in urban sanitation services since their roles and responsibilities in this area have not been adequately defined. The 2001 reorganization established no hierarchical relationship between provinces and municipalities, though it did establish that provincial government has a responsibility to monitor and enforce national minimum

It is estimated that a tenfold increase in total sanitation investments would be needed to meet national sanitation targets and the MDGs.

standards including effluent standards, and is responsible for trans-boundary environmental issues such as the control of river pollution. The need to establish the role of provincial government is becoming urgent since the provinces now receive significant funds from national government that could be used for urban sanitation improvements, but no mechanisms are in place for deploying them.

Local governments have overall responsibility for the provision of urban sanitation services, but the assignment of specific roles to municipal departments and other city-based agencies varies greatly from one city to another (see Table 1). Typically, six to nine offices have a role to play, though as many as 16 are involved in some cities. Quite often, the solid waste management agency (*Dinas Kebersihan*) or the environmental services agency (*Dinas Lingkungan Hidup*) take a lead role, though no agency has a specific responsibility to promote household toilets. In the case of sewerage (where it exists) responsibility may lie with the wastewater management utility (PDPAL), the water utility (PDAM), the water resources department (*Dinas Sumber Daya Air*), or the department of public works (*Dinas Pekerjaan Umum*).

These agencies employ a substantial number of graduate and postgraduate staff in larger cities, but expertise in urban sanitation planning and service delivery is quite limited.

To improve coordination and collaboration between these agencies, in 2007 the Government of Indonesia established a national multi-departmental sanitation working group known as *Tim Teknis Pembangunan Sanitasi*, headed by Bappenas. The same group provides the vehicle for ISSDP support to national sanitation policy and strategy.

Policy development in the sector has so far focused on community-based

services, which effectively means rural and peri-urban sanitation – there is no policy for urban sanitation. In other words, the policy framework emphasizes the role of communities without addressing issues that need institutional attention. The government has, however, adopted national sanitation goals. These include achieving 75% access to improved sanitation by 2015 under the National Action Plan on Sanitation (in line with the Millennium Development Goals) and the achievement of open defecation-free districts and towns by the end of 2009 under the National Mid-Term Development Plan (RPMJ). However, no national strategy or financing plan has been adopted for achieving these targets in urban areas.

view in government that responsibility for sanitation investments lies with householders. In reality, government also needs to make substantial investments in primary infrastructure, and it has been estimated that a tenfold increase in total sanitation investments would be needed to meet national sanitation targets and the MDGs. So far, however, there is no investment strategy or financing plan for the sector.

While government clearly needs to spend more on sanitation infrastructure, past investments have not always been cost-effective or sustainable, due to a failure to establish viable operation and maintenance or cost recovery arrangements. For example, more



Urban Sanitation Finance

Public expenditure in the water and sanitation sector was growing before 2001 and jumped enormously in the first two years after decentralization, at both central and local levels. The emphasis, however, has been on funding water supply rather than sanitation. Total public expenditure on sanitation remains minimal, at just 0.04% of total public spending. This reflects the prevailing

than 200 fecal sludge treatment plants were built in the mid-1990s to cater for the ubiquitous septic tanks, but only a handful are operational today. This further illustrates the low priority and ownership afforded to sanitation by local government.

In the absence of government guidelines and regulations, substantial provincial and local development funds remain unspent. The World Bank has estimated that this amounts to \$10.3 billion nationally.

For now, municipalities are expected to finance sanitation improvements primarily from their regular resources, most of which come from central government, with a small amount raised locally. This means that expenditure has to be projected annually, with little provision for longer term planning, though multi-year budgeting is due to be introduced. Accessing funds held at provincial level is difficult due to the lack of formal guidance; anti-corruption laws are being strengthened and officials are increasingly wary of taking risks where no explicit rules are in place.

A further complication is that water utilities with foreign currency-dominated loans were adversely affected in the Asian financial crisis and many became bankrupt. As the financial viability of the

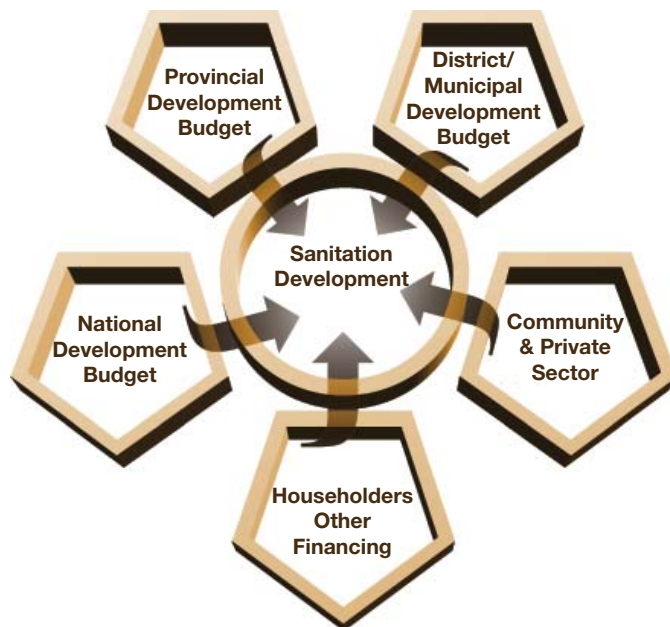
utilities has deteriorated, the Ministry of Finance has become reluctant to lend for water and sanitation improvements. Loans are refused if a utility has outstanding arrears and, as a result, the largest previous source of capital financing for the water sector has dried up for most local governments. This reflects a national trend of reducing all government borrowing, as Indonesia overstretched itself in the past.

Turning to service users, the willingness of householders to pay for household collection of solid waste has been clearly established, but the same cannot be said for wastewater treatment and disposal. A few water utilities include a sewage component in the water tariff, but only a minority of households are connected to the piped supply and tariffs are in

any case very low. The high level of toilet use shows that people are willing to pay for the privacy and convenience of a private facility, but it is not so clear that these same households would be willing to make an additional payment for improvements to ensure safe excreta disposal by upgrading their installation, connecting to a sewer, or ensuring the regular emptying of their tanks by contractors that practice safe sludge treatment and disposal. How to promote and finance sewer connections is one of the practical challenges being addressed by ISSDP.



BOX 2: FUNDING SOURCES FOR SANITATION SERVICES



Sources of Funds

Sanitation services can be developed with various sources of finance. Besides its own municipal budget, the city can access government and non-government funds. To reach the 2015 targets of the Millennium Development Goals, Indonesian cities need to access an additional IDR 4 billion annually from sources other than municipal budgets.

Municipal Sanitation Planning

The focus of development planning at municipal level is the Local Mid-Term Development Plan, which has a five-year vision. This is compiled through a series of development planning meetings known as *musrenbang*, beginning at sub-district level and continuing via district to city level. The process is coordinated by the city planning body (*Bappeda*) and the plan provides the framework for the municipality's annual activities and budget. Individual departments also provide input, and some have their own

The low priority afforded urban sanitation by government in the past, and the absence of a coordinated response to the MDGs, were important factors in the development of ISSDP.

Table 1: Urban sanitation in Indonesia—typical allocation of responsibilities at city level

	Local Policy and Strategy	Infrastructure Development and Service Delivery					
		Sewerage, Wastewater Treatment	Sludge Treatment	Communal Toilets	SANIMAS (Urban Community Sanitation System)	Household Toilets, Septic Tanks	Drainage
Local Government Enterprises							
PDPAL (Sewerage Utility)							
PDAM (Water Utility)							
Municipal Departments							
DKP (Cleaning and Landscaping Agency)							
RT/RW (Neighborhood Administrative Units)							
DLH (Environmental Services Agency)							
PU (Public Works)							
Other Government Bodies							
Bappeda (Local Planning and Development Unit)							
Non-Government Stakeholders							
Private Sector			Pit emptying				
NGOs/communal groups							
CBOs							
Individuals							Tertiary

Abbreviation	Institution	English Translation
Bappeda	Badan Perencanaan dan Pembangunan Daerah	Local Planning and Development Unit
PDPAL	Perusahaan Daerah Penanganan Air Limbah	Regional Wastewater Treatment Enterprise
PDAM	Perusahaan Daerah Air Minum	Regional Drinking Water Enterprise
DKP	Dinas Kebersihan dan Pertamanan	Cleaning and Landscaping Agency
RT/RW	Rukun Tetangga/ Rukun Warga	Neighborhood Administrative Units
DLH	Dinas Lingkungan Hidup	Environmental Services Agency
PU	Pekerjaan Umum	Department of Public Works

strategic plans. These should be related to the local plan but must also fit with sectoral initiatives from line departments at provincial and national level.

Regulation and Standards

Legislation and standards relating to sanitation are also under-developed. Environmental laws exist to control water pollution, but enforcement is weak and polluters see little point in reducing their impact when the receiving bodies are polluted anyway, sometimes from distant sources. Current controls focus more on the obligations of polluters than on the management role of public bodies, though here too there are gaps, not least a lack of enforceable standards for the design, construction and maintenance of household toilets or the treatment of septic tank waste. Steps are, however, being taken to address this (see Box 1).

As provincial governments expand their role in facilitating urban sanitation improvements, it is likely that many will adopt a regional regulation on sanitation within the framework of national service standards.



BOX 3: MINIMUM STANDARDS FOR URBAN SANITATION SERVICES

The Ministry of Public Works is currently drafting minimum service standards for wastewater, drainage, and solid waste disposal that local governments will need to meet. Even if they cannot be met in full in the near future, well-designed standards—which refer to the MDGs—can assist the development of local sanitation strategies by providing objective benchmarks for assessing progress. Each city sets its own standards according to its capacity, and an incremental approach is to be taken.

Type of Service	Minimum Service Standard Indicator	Remarks	Target	Deadline
Access to Wastewater Collection Infrastructure and Facilities				
Provision of wastewater infrastructure and facilities to meet public need, in the form of private toilets, communal toilets or public toilets	Private or communal or public toilets available, equipped with at least: -Squat/ sit toilet bowl -Goose-neck/ water seal	To meet this target, communities must be open defecation free	80% service coverage	2015 (MDG target)
Wastewater management using low-density (300 people/ha) on-site system	In cities: toilets are connected to septic tanks with absorption fields. The distance between the septic tank absorption field and water well is at least 10 meters	National Standard (SNI) 03-2398-1991 concerning Procedures for Planning Septic Tanks with Absorption Fields	80% service coverage	2015

Other standards include:

- Wastewater management in low-density (less than 300 people/ha) may use on-site systems
- Off-site systems needed when density is over 300p/ha
- Wastewater management units established at the municipal level and human resources with competency in sanitation available
- Wastewater service fees cover at least operation and maintenance costs, in keeping with the principle of cost recovery
- Local guidelines available and need to incorporate communications and public participation.

ISSDP Rationale, Goals, Objectives

The low priority afforded urban sanitation by government in the past, and the absence of a coordinated response to the MDGs, were important factors in the development of ISSDP. The program is supporting progress at both implementation and policy level, with

a strong emphasis on collaboration between agencies within and beyond the municipality.

The program purpose is: “to establish a framework for sustainable pro-poor sanitation services in Indonesia through effective and coordinated policy-making, institutional reform, strategic planning and awareness building”.

There was no blueprint for developing an enabling environment or a city-wide sanitation strategy, nor had there been any sustainable programs in Indonesia that provided an obvious point of reference.

BOX 4: SUMMARY OF URBAN SANITATION CHALLENGES IN INDONESIA

ISSDP is a vehicle for addressing critical challenges in the sector at all levels. These include:

At national level

- Low political priorities, due to prevalent views on responsibility for sanitation at all levels of government. Sanitation needs to be higher on the political agenda if it is to get the attention it deserves, and can no longer be regarded as purely a private matter in urban areas.
- The urgent need for a national urban sanitation policy that sets priorities, defines institutional and community roles and responsibilities, establishes a legal and regulatory framework, and facilitates the adoption of comprehensive city-wide sanitation strategies.
- The need for an investment framework and financing strategy, both to increase the total funding available in the sector and to enable those funds to be deployed effectively.
- The need for advocacy to make the sanitation crisis an issue of national concern.

At provincial level

- The need to clarify the role of the provincial government in the funding of urban infrastructure investments and the planning and delivery of sanitation services.
- A lack of capacity for sanitation promotion and progress monitoring.

At city level

- A lack of mechanisms for inter-agency collaboration on planning and service delivery, bearing in mind the range of organizations that have a stake in sanitation.
- A lack of incentives and accountability for the achievement of national sanitation goals. At present, not all municipalities would accept that there is a big problem with excreta disposal.
- Limited municipal capacity for planning, infrastructure development, service delivery and sanitation promotion.
- Complicated and poorly understood mechanisms for accessing and allocating capital funds.
- An under-developed (and unregulated) role for the private sector in service delivery and maintenance (for example in the safe removal, treatment and disposal of septic tank sludge).
- Poor operation and maintenance of existing infrastructure.

At community and household level

- Limited appreciation of the need for safe disposal of wastewater, though toilet use is widely practiced.
- Many people occupy land illegally and are excluded from municipal projects and planning processes.

In Phase I there were four components:

Component 1: Sanitation Enabling Framework. An enabling framework developed through strengthened policy, regulation, institutions, strategies and action plans. This component was founded on a series of sector assessments and thematic studies, the findings of which would enable the program to build commitment for, and support, policy and institutional change.

Component 2: Coordinating framework for activity and investment in the sanitation sector developed by government and agreed with all donors.

Component 3: Public awareness campaigns for sanitation developed, promoted and tested, with a focus on the urban poor. These were to include

targeted promotional campaigns (national and in selected cities) informed by market research on demand and supply and issues in behavior change.

Component 4: Local level capacity building and development of city-wide, poor-inclusive sanitation strategies and pro-poor action plans. To be completed in six cities and used to inform national strategy for the sector.

The four components were designed to operate as somewhat separate, but mutually supportive and well co-ordinated, streams of work. They would run concurrently, with significant interaction between them. National coordination was overseen by a steering committee at the most senior level of government, under which was the Technical Team for Sanitation Development (*Tim Teknis*).

The absence of an infrastructure construction component made this program different from conventional donor-assisted projects, and it took some time for government partners to appreciate why it focused on the 'enabling framework' – a concept that cannot be explained in a few words.

Moreover, there was no blueprint for developing an enabling environment or a city-wide sanitation strategy, nor had there been any sustainable programs in Indonesia that provided an obvious point of reference. In practice, the program has evolved as a collaborative process of investigation, review and planning with government partners at both national and local levels, and national strategy is evolving in a series of steps, not as a one-off activity.

BOX 5: IT'S NOT A PRIVATE MATTER ANYMORE: ADVOCACY AND AWARENESS CAMPAIGNS

ISSDP efforts to develop an enabling environment for progress in urban sanitation are supported by a dedicated component dealing with awareness raising and advocacy at national and local levels. This has included, among other things, the piloting of pro-poor awareness campaigns and the promotion of hand washing via radio messages. The pro-poor campaigns were participatory activities carried out at community level in areas identified as high risk, using visual materials to facilitate reflection on current sanitary conditions and the need for action, and to investigate community preferences for improvements. Some aspects of the Community-Led Total Sanitation approach – particularly the use of communal shame as a motivating factor – proved to be quite effective.



During Phase I it was not always easy to get the timing right for promotional inputs, and ensure that appropriate, 'doable' messages were being disseminated. An early city-wide trial in Blitar to promote the upgrading of septic tanks, for example, proved to be premature because the program had not yet developed practical guidelines on making the improvements.

National promotional campaigns were also designed during Phase I, but implementation was held back because government strategy had not yet reached the point where cities could respond adequately to demand for better sanitation, should it be generated. Steps were taken, however, to stimulate public concern over

the urban sanitation crisis, including the production of high quality advocacy material. One of these was a brochure entitled 'It's Not a Private Matter Anymore!' which used photos and graphics, and compelling headlines, to spell out the need for action both by government and communities. The document was targeted at government officials and politicians but also proved popular with the media. Encouraged by the success of the brochure, ISSDP produced some others including one entitled '100 Million Customers Await You,' which aimed to increase awareness of the private sector regarding sanitation business opportunities.

which includes representatives from the full range of government agencies and non-government partners that have an interest in urban sanitation. It is this working group that develops the strategy and is responsible for securing its formal adoption by city authorities.

ISSDP has tried, through the planning process, to directly address the shortcomings of existing sanitation services in the cities, particularly poor inter-agency coordination, a history of ad hoc, supply-driven investments, and a lack of essential information for decision making.

Key features of the planning process include the following:

1. It avoids 'blueprint' approaches to infrastructure development that treat the city as a blank sheet on which completely new services can be imposed. Instead, it starts from an analysis of what already exists, then considers how this could be improved in incremental steps as funds become available and municipal capacity grows. Implicit in this is the recognition that planning cannot be a one-off event; that plans must be regularly reviewed and updated, and approaches modified in the light of experience. A 'learning by doing' approach is especially

City Sanitation Planning under ISSDP

This component is at the heart of ISSDP and in Phase 1 has focused on the formulation of city-wide sanitation strategies in six cities: Surakarta, Jambi, Payakumbuh, Banjarmasin, Denpasar and Blitar. Lessons from this experience are now informing sector policy and strategy development at national level.

Program support in each city centers on a city sanitation working group (*Pokja*),

Table 2: Sanitation baseline in the six ISSDP cities

	Population	Toilet plus sewer/ septic tank (%)	Toilet without safe disposal (%)	No toilet	Access to waste collection (%)	Drainage Coverage (%)
Denpasar	560,000	46	54	-	23	62
Banjarmasin	600,000	17	83	-	41	17
Surakarta	660,000	57	43	-	89	60
Jambi	450,000	44	56	-	23	49
Payakumbuh	105,000	33	64	3	34	33
Blitar	127,000	24	70	6	34	30

(Source: ISSDP)

Members of the city sanitation working group add their own perception of public health risk areas based on their knowledge of the town and their professional expertise.

2. It pays attention to the institutional and financial aspects of service delivery, and to the need for effective communication with service users if established behaviors, especially unsafe excreta disposal, are to be challenged and modified.
3. Addressing long-standing deficiencies in sanitation services is a daunting, potentially overwhelming task. ISSDP breaks down a complex planning process into discrete, manageable tasks, emphasizing the importance of sound information for decision making. At the same time, it recognizes that some available data may be incomplete or unreliable, and finds a practical way forward where this is the case, for example by conducting sample environmental health risk assessment surveys in representative parts of town.
4. The process recognizes the need both for strategic, city-wide decision making by local government, and for active support and engagement at community level. It thereby optimizes both aspects in a 'top-down meets bottom-up' approach to planning. This is consistent with, and linked to, the government's annual development planning process, whereby development proposals from neighborhood groups are collated and prioritized at sub-municipal tiers and provide the basis for developing the annual municipal budget and five-year plans.

The development of a city-wide strategy begins with an assessment of existing infrastructure and services in each sub-district (*kelurahan*) of the city. This involves three discrete steps:

Step One: Secondary data analysis

This entails an examination of available data for each *kelurahan*, while recognizing that it may not be complete or reliable.

Three broad types of information are examined:

The number of households formally designated as poor, since poverty affects access to sanitation facilities, bearing in mind that most services are self-provided.

Population density. This can have a strong influence on the severity of sanitary problems and consequently the health risks.

Technical data on the coverage of water and sanitation services, and the level of service provided (shared or household taps, on-site sanitation or sewerage, etc.)

A weighting factor is assigned to each of these parameters.

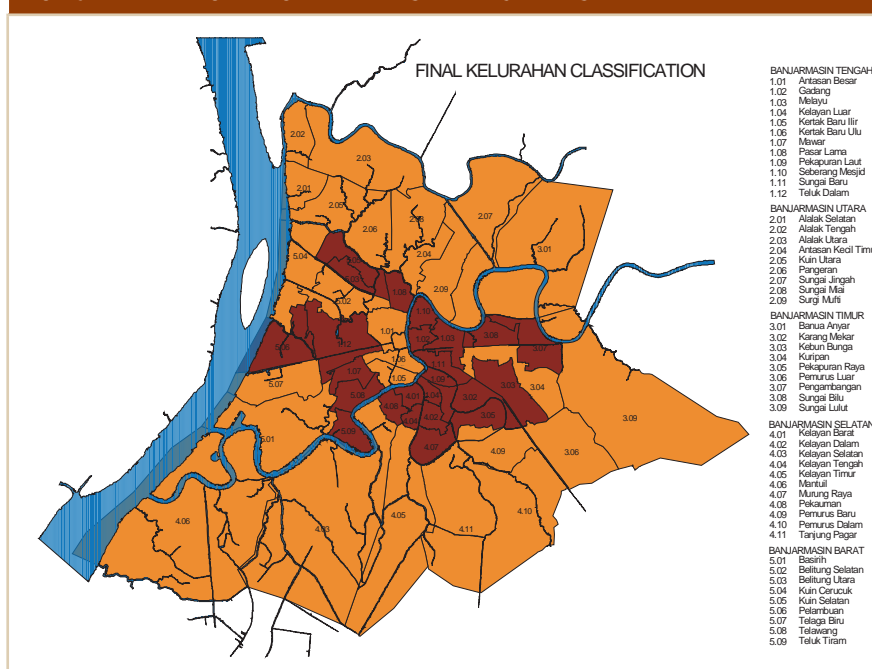
Step Two: Primary data collection

A participatory survey known as an environmental health risk assessment (EHRA) is conducted in sample *kelurahan* that have a relatively high proportion of low-income households. The survey and observations involve groups of women from these locations, who make a health risk assessment of their neighborhood, with assistance from municipal and program staff. The assessment considers the condition of, and access to, water and sanitation facilities, and establishes a baseline on hygiene behavior in key areas such as handwashing with soap, handling of child waste, and solid waste management in the home. The findings enable more accurate targeting of priority areas and provide insights into both the impact of poor sanitation at the household level and potential improvement strategies.

Step Three: Professional assessment

Members of the city sanitation working group add their own perception of public health risk areas based on their knowledge of the town and their professional expertise.

BOX 6: EXAMPLE OF PRIORITY AREAS IN BANJARMASIN



BOX 7: WHITE BOOK

The results of sanitation mapping in ISSDP are reported in a document called the **White Book**. The white books prepared by six cities involved in ISSDP generally consist of seven chapters. In addition to an introductory chapter, the chapters generally discuss:

- **City Overview**, which is a brief description of the geographic and topographic characteristics of the city, administrative districts, current land-use, municipal government structure, the vision and mission of the city, and demographic and socio-economic conditions.
- **City Sanitation Status**, which describes the condition and level of existing sanitation services (wastewater, solid waste, drainage system), public health conditions, current and planned sanitation programs and activities, sanitation-related institutions and regulations, and funding for sanitation.
- **City Sanitation Problems**, which describes problems that have impeded or may impede the development of sanitation services. These problems may be related to technical or supporting aspects (community participation, policy and regulation, institution, non-government involvement, financing).
- **Indicative Sanitation Development Plan**, which illustrates a) sanitation development trends, needs, and opportunities, and b) recommendations for intervention.
- **Identification of Priority Areas**, which identifies city wards (kelurahan) prioritized for sanitation development (see box on the left).
- **Summary and Conclusion**, which briefly describes issues requiring attention when preparing the citywide sanitation strategy, including recommended activities for sanitation development.

The White Book is usually accompanied by an executive summary, aimed at city decision makers. Generally, an official cover letter signed by a high-ranking city official is also a part of the White Book. Payakumbuh Municipality White Book, for example, is signed by the mayor.



While working with the city sanitation working groups, the program has sought to integrate sanitation planning with established government planning and budgeting cycles so that it is not seen as a parallel and purely project-related activity, but part of the routine business of local government.

BOX 8: CITY-WIDE SANITATION STRATEGY

Documenting the citywide sanitation strategy

Like the sanitation working groups in other cities involved in ISSDP activities, the Jambi sanitation working group developed a citywide sanitation strategy document comprising ten volumes. The volumes can be grouped as follows: 1) documents related to the sanitation development framework, 2) documents related to the strategy for sanitation services development, and 3) documents related to the strategy for development of supporting components. Another document describes the annual action plan for sanitation development. Below is a description of the ten volumes of Jambi citywide sanitation strategy document.

1: Sanitation Development Framework
Defines the city's sanitation vision, missions, goals and strategies. Also discusses the planning procedures, community participation principles, involvement of the private sector and NGOs, and policy on financing.

2: Wastewater Subsector Development Strategy
3: Solid Waste Subsector Development Strategy
4: Drainage Subsector Development Strategy
Explains strategies for development of facilities and infrastructure for each subsector. These volumes also present priorities, technical solutions, levels of service and coverage, roles and responsibilities in service improvement, and lists of projects (project digest).

5: Strategies for Sanitation Marketing and Community Participation
Describes strategies to raise community awareness, hygiene promotion, and community participation. The strategies address the goals and targets for improved communication, community awareness, community participation, and gender mainstreaming in the planning and management of sanitation services.

6: Strategies for Institutional Strengthening and Capacity Building
Describes strategies to build the capacities of institutions to support to sanitation development. This should include strengthening of the sanitation working group.

7: Strategies for Enhancing Private Sector and NGO Involvement
Describes strategies to engage private sector and NGOs, particularly whose active role and resources are needed for the development of sanitation services.

8: Financing Strategies
Explains the strategies for financing, plans for investment financing, and for recurrent costs of sanitation services development.

10: Monitoring and Evaluation Strategies
Describes strategies for monitoring and evaluation of planning and implementation of sanitation development activities.

9: Sanitation Action Plan and Financing Scenario
Describes proposals which are prioritized for implementation in the coming budget year. Proposals in the current annual action plan will be submitted as inputs for preparation of annual work plans of each related municipal work unit.



In ten volumes it sets out prioritized plans for infrastructure development and rehabilitation, but also details how sanitation services will be operated and sustained, both physically and financially. The strategies include medium-term goals and budgeted annual action plans, pay particular attention to the needs of the poor, and emphasize the importance of user demand and preferences in service design.

To illustrate the content and scope of the strategies, Box 4 outlines the outcome of the planning process in Banjarmasin, one of the municipalities participating in the program.

Facilitating the Planning Process

The program's approach to technical assistance was to support and facilitate the planning process, but not to undertake it directly. As a result, the time needed to develop a city sanitation strategy was not known at the outset. In the event, it took approximately eighteen months to produce the first six strategies, but with a defined process now in place, this timeframe could probably be reduced for other cities.

While working with the city sanitation working groups, the program has sought to integrate sanitation planning with established government planning and budgeting cycles so that it is not seen as a parallel and purely project-related activity, but part of the routine business of local government. There is also an emphasis on making best use of the limited local resources currently available, rather than making 'wish lists' that cannot be implemented without a massive injection of additional funds.

To support the planning process, ISSDP deployed a full-time city facilitator in each of the six towns, with administrative support, for a period of roughly fifteen

In the last stage of the analysis, the information gathered is used to produce a set of maps that divide the city into zones based on four levels of public health risks. Priority locations are not always obvious, partly because poorer residents are not always found in large clusters; most neighborhoods contain a range of income groups. For this reason, ISSDP does not target the poor as a separate group, but adopts a 'poor-inclusive' approach to planning.

Finally, the information and analysis for each city is collated in a document which has become known as the 'White Book'

(see Box 7) due to the format in which it was first presented. The books include a wealth of baseline information on existing infrastructure and services, budgetary information and some issues analysis. The information provides the basis for formulation of a city-wide strategy to tackle the problems identified.

A Thorough Approach

Each city-wide sanitation strategy aims to be a comprehensive document that addresses sanitation in the broadest sense, including excreta disposal, drainage, solid waste management and hygiene behavior (see Table 3).

BOX 9: THE BANJARMASIN CITY-WIDE SANITATION STRATEGY

Banjarmasin is the capital of the province of South Kalimantan and has a population of just over 600,000. It is known as the 'city of a thousand rivers' because of the many waterways passing through it. This water is tidal and the average level of the town is slightly below sea level, consequently parts of the town flood regularly. Almost 40% of the town has a high population density (over 175 persons per hectare) and one third of the residents are formally designated as poor. Most poor residents live in simple, lightweight houses along the riverbanks, and use the rivers for bathing, laundry, cleaning teeth and defecation.

Roughly 60% of households have a toilet, while 30% use the rivers and 10% use other options such as public toilets. Household toilets generally have soak pits or septic tanks, many of which malfunction and are affected by flooding. Just 1% of the population has access to sewerage. In contrast to this, the public water supply network covers 90% of the city, with 84% of the population served via house connections or public taps. Average monthly consumption is about 17 m³ per household – a generous amount.

Some two-thirds of the daily production of solid waste is collected and there is an established system of door-to-door collection by community-based organizations using handcarts. Some of this waste is later dumped indiscriminately, but the bulk of it is transported to a final disposal site, though vehicular access is difficult.

The situation analysis conducted by the city sanitation working group found that these conditions arise from a combination of long-established personal behaviors, limited demand for better sanitation, and inadequate service provision by the municipality.

In its CSS, the Banjarmasin city sanitation working group has identified modest, but realistic, targets for the 2008-2010 period, in the areas of domestic wastewater disposal (on and off-site), solid waste management, and local drainage. Principal strategies include:

- encouraging roles for non-government service providers;
- increasing demand for sanitation infrastructure and services through marketing;
- strengthening service delivery capacity;
- expanding infrastructure coverage; and
- expanding the range of technology options available in response to local circumstances and user preferences.

These strategies are the foundation of a medium-term action plan for the period 2008-2010. Highlights of the action plan are set out in Annex One.

Of the various components of sanitation, wastewater disposal has the highest profile in the plan. This is due partly to the very active role played by the Banjarmasin wastewater management utility (PDPAL) in the planning process, but also reflects the difficulties faced by the municipality in recent years in identifying improved solid waste management technologies and systems. Further research and possibly piloting may be needed to develop viable options that the municipality feels confident in adopting at scale.

By October 2008, several of the planned activities were underway including, for example, preparation of a wastewater master plan, promotion of sewer connections, and rehabilitation of drainage channels near the city waste disposal site. Other activities were being tendered, but the working group was also reviewing and revising the action plan to make a better fit with the resources available.

months. In addition, roaming experts provided guidance and support in specialist areas such as engineering, project management, data collection and assessment, community-based approaches, capacity development and finance. These were supplemented by a number of dedicated training events.

Gender in City Sanitation Planning

From the outset of ISSDP, it was clear that women in Indonesia are greatly under-represented in formal planning and decision-making processes. Few are invited (or expected) to attend planning meetings and very few serve as political representatives or managers in local government. ISSDP aims to mainstream gender in its operations, but there was initially no defined strategy for doing this. Following a comprehensive review of gender-related aspects of the program, however, specific measures were adopted for ensuring that ISSDP responds appropriately to the varying needs, existing roles and perspectives of men, women and children in the cities where it works. For the sanitation planning process, these include, among other things:

- Wherever possible, disaggregating data on sanitary conditions and services, and any proposed improvements, to reveal the gender-related aspects. This means asking 'who is involved in this?' whenever a particular situation or proposal is under consideration.
- Consulting both men and women on their concerns and preferences for sanitation improvements, bearing in mind that women generally manage household sanitation while men decide on household investments. Progress in this area is being pursued

The value of the planning process, however, is local ownership of sanitation problems and solutions, demonstrated by ongoing implementation of selected parts of the action plans.

both within the program and via the development planning meetings that shape the annual municipal budget.

- Developing effective strategies for communicating with men, women and children in sanitation awareness campaigns and hygiene promotion interventions. Some interventions need to target men specifically, for example to emphasize their need to practice basic hygiene in the home, while others will emphasize the role of women in decision making over sanitation investments.
- Building gender-sensitive approaches into the training and orientation of city facilitators and other extension workers.

While implementing these measures at city level, the program is also investigating whether any formal rules or processes need to be amended at

higher levels of government to promote the equitable treatment of men and women in the development of sanitation services. There may, for example, be cases where service providers do not accept formal applications from female-headed households. In addition, national advocacy campaigns spearheaded by the program are challenging gender stereotypes via publications and other mass media initiatives.

A Wake-up Call for Municipalities

City sanitation strategies are a milestone

With Phase I of the program completed in April 2008, all six cities now have a city-wide sanitation strategy accepted and signed by the head of the City Planning Department (*Bappeda*). Progress beyond that varies from city to city but in every

case the city sanitation working group is promoting the CSS to both the political leadership and operational departments as a key reference point for city planning and budgeting. In at least three cases, the municipality has already made a decision to use the CSS in development of the RPJMD, and in one case implementation of the annual action plan had begun by September 2008 while concrete preparations were underway, while in two others, action plans were being updated and revised. As of November 2008, progress in the six cities was as follows: Inter-agency collaboration is now well established and there is a strong sense of ownership of the CSS within the city sanitation working groups, plus a clear understanding that planning is an ongoing process, not a one-off event that ends with the production of a document. The CSS provides a framework for action but a lot of practical details still need to be worked out (for example, long-term operation and maintenance arrangements for decentralized wastewater treatment plants). This is understandable, however, given that the working groups are dealing with long-term neglect and getting to grips with urban sanitation for the first time. They have come a long way in two years from a very low baseline position in which municipal engagement in urban sanitation issues was minimal. The cities now have a rational framework for action and resource deployment, a better understanding of current sanitation problems and are better placed to deal with them. The value of the planning process, however, is local ownership of sanitation problems and solutions, demonstrated by ongoing implementation of selected parts of the action plans. Added value will be realized when the cities use their updated strategies in formulation of budgets and funding proposals for further implementation.

Coordination and collaboration

City-based agencies concerned with sanitation are now working together more effectively than before and the level

BOX 10: OVERVIEW OF STATUS AND FUNCTION OF CSS IN LOCAL SETTING

Payakumbuh	<ul style="list-style-type: none"> • CSS included in the RPJMD (local medium term development plan) of the new mayor and formally adopted by city council in July 2008
Jambi	<ul style="list-style-type: none"> • CSS signed by mayor in April 2008, but is being re-presented to the new mayor (in November 2008) as an input to the RPJMD • City sanitation working group currently reviewing and improving action plans prepared during Phase 1
Banjarmasin	<ul style="list-style-type: none"> • CSS has been adopted by mayor and city council through a mayoral decree
Denpasar	<ul style="list-style-type: none"> • CSS adopted as a source book by local stakeholder organizations
Blitar	<ul style="list-style-type: none"> • Public consultation undertaken to disseminate and refine CSS content; more consultation and dissemination planned • Following the public consultation the CSS was signed by the mayor • CSS to be used in RPJMD preparation (2009-2013) • 2008 action plan being implemented, financed from the municipal budget. Municipality seeking provincial and central funding to support 2009 action plan
Surakarta	<ul style="list-style-type: none"> • CSS disseminated to mayor, provincial and municipal organizations, NGOs and general public • 2008 action plan is under revision. 2009 plan will be included in the municipal list of priority programs and budgets of related departments/agencies • Provincial government to support activities in four high-risk kelurahan identified in CSS • CSS implementation to begin on Global Handwashing Day, October 15, 2008.

of motivation within the city sanitation working groups is impressive. Moreover, this has been achieved without an injection of capital funds; staff are realizing the need to take action now, even if the resources available do not enable 'ideal' solutions. The program has successfully challenged the notion that all the problems in urban sanitation lie with the community.

Similarly, it has become clear to both local and national managers that the problem in urban sanitation is not only a lack of investment; it is also the lack of a plan. Donors are ready to provide funds for urban sanitation, but up to now there has been no framework for investment. City-wide sanitation strategies are important as they prioritize investment needs, enabling municipalities to direct incoming funds (whether from central government, the province or donors) to where they are most needed. At national level *Bappenas*, and increasingly the Ministry of Public Works, are convinced of the value of city-wide sanitation strategies and *Bappenas* is already planning to extend the process to a substantial number of cities beyond those directly supported by ISSDP. The second phase of the program will focus on capacity building at provincial level with special attention to extending the municipal planning process to all towns and cities in the province.

Using the CSS for resource allocation

One of the strengths of CSS development is its explicit linkage with municipal resource allocation processes, though it proved difficult to meet government deadlines so that sanitation action plans were included in the 2008 budget (the strategies were developed in the second half of 2007 while the 2008 budget request had to be submitted the previous August). The profile of sanitation in local planning meetings has, however, gone up substantially since 2006, with much

better participation by communities in general and women in particular.

Learning by doing: Capacity and ownership building on the job

ISDDP Phase 1 ended in April 2008 with the production of city sanitation strategies, and has shown the importance of *process* in municipal capacity building; had the sanitation working groups simply been given guidelines on writing a plan, they would not have gained so much first-hand experience of the issues to be addressed, or discovered why innovations such as dialog with service users and collaborative planning can be so useful. The mayors of the six cities have started to see sanitation planning as an opportunity, as they can say with confidence that the strategies reflect citizens' demand.

One city facilitator described ISSDP as a wake-up call for municipalities, and this is borne out by the steadily increasing commitment to action. One senior official noted that ISSDP is addressing the failure of previous infrastructure programs, which have tended to be either huge and hardware-focused, with poorly targeted investments, or community-based and holistic but on too small a scale to make

a significant impact city wide.

All of this is encouraging, but creating local ownership of the planning process was slow, and initially difficult. At both national and local levels, it took time for government officials to understand the purpose of ISSDP, and why the program was only talking about sanitation rather than funding investments. There was also an expectation – based on experience of previous donor-funded projects – that the consultants would do everything, when in fact government partners had to undertake a considerable amount of work themselves. At first, city staff saw little reason to go through the planning process, bearing in mind that sanitation was seen as a household responsibility. The concept of planning as a flexible, ongoing process that is responsive to local circumstances, was also a departure from established practice and unfamiliar to most municipal staff.

The frequent turnover of municipal officers was an additional challenge to the process since it affected continuity. The absence of overall city development plans was a further complication, since the bigger picture into which city-wide sanitation strategies would fit was itself poorly defined.

BOX 11: GOVERNMENT UNDERTAKINGS ON SANITATION

Government commitment to urban sanitation has grown steadily during the first two years of program operation. This commitment was expressed publicly via two declarations, the first at regional level, the second national.

The *Blitar Declaration on Sanitation* was signed by the mayors of the six ISSDP-supported cities during a city summit on sanitation in March 2007. The mayors made a commitment to accelerate the development of urban sanitation and to adopt and implement action plans in each city with specific goals and targets.

Following on from this, a *National Sanitation Commitment* was signed by the Ministers of National Development Planning, Public Works, Health, Home Affairs, Industry and Environment at the Indonesia Sanitation Summit in November of the same year, with countersignatures from governors, mayors and district heads. This document recognized the impact of poor sanitation on health and economic development, and committed the government to increase the coverage and effectiveness of sanitation services through multi-stakeholder partnerships between government and non-government organizations, the private sector and communities.

The summits attracted a lot of media attention and it became clear that pride, peer pressure and inter-city competition were powerful motivating factors.



Political support

Securing the active support of city mayors was an important breakthrough, and was triggered by their participation in two city summits at which sanitary conditions in the six cities were compared, and progress reviewed. The summits attracted a lot of media attention and it became clear that pride, peer pressure and inter-city competition were powerful motivating factors. One city was reported in the press as the dirtiest in Indonesia and this prompted the mayor to ensure that his town did not languish at the bottom of the league table. During the second city summit, the mayors of the six cities signed the “The Blitar Declaration” committing themselves to action on sanitation. This was followed some time later by a similar declaration at national level. In November 2008, a further eight cities signed the Blitar Declaration.

As the process unfolded, it became clear that provincial government should also play a significant role in urban sanitation, though that role needed to be clarified and developed. Addressing this will be one of the principal tasks for ISSDP Phase II.

Implications for National Sanitation Strategy

The national and city level components of ISSDP are mutually supportive, with intensive engagement at city level providing lessons on how the ‘enabling environment’ for urban sanitation should be improved at the national level. Some of the emerging issues to be addressed are outlined below.

Capacity building and scaling up

- ISSDP is helping to clarify what municipalities can reasonably do with the human and financial resources currently available. As cities begin implementing action plans in Phase II, it will become evident what support they need in order to make appropriate and cost-effective technology choices, run effective promotional campaigns and develop financially sustainable services within the Indonesian planning and budgeting framework. This information can be used to inform the development of

appropriate resources for training and technical support country wide. This said, ISSDP has already demonstrated that a very effective way for municipalities to develop capacity is to start taking action on sanitation and learn from their own experience, though they need guidance and support in taking the first steps.

Institutional arrangements

- Indonesia needs a national strategy for the achievement of urban sanitation goals, with defined objectives and institutional roles from national to local level, to provide a framework for action at municipal level and to bolster local political will. The government has adopted a policy to strengthen existing institutional mandates with Bappenas as coordinating and lead agency (based on a Ministerial Decree in October 2006). Although the ensuing WATSAN Steering Committee has taken time to establish a regular meeting schedule, its various working groups have been operational. Recently the Steering Committee has been more active, and in that context the Ministry of Public Works has now initiated work on an urban sanitation strategy in consultation with other ministries.
- Urban sanitation planning needs to be more than a voluntary activity if it is to be undertaken nationwide. Government needs to develop both incentives and obligations for municipalities to adopt comprehensive strategies, by linking funding to the adoption of city-wide plans. There are now indications that central government will introduce this link.
- There is consensus on the potential for provincial governments to facilitate increased action on sanitation, but this role needs to be clarified and nurtured.

- As with funding mechanisms, legislation, standards and other technical information on urban sanitation exist at central government level but are largely unknown at city level. This again highlights the need for improved communication within government.

Sector finance

- Government needs to rationalize and publicize existing funding mechanisms for urban sanitation. An important lesson from Phase I is that funding for urban sanitation improvements is potentially available from existing government sources at all levels, but municipalities do not know how to access it. Allocations from central government to provincial governments have recently been made for various purposes, but it is not yet clear how these should be disbursed. This is a long-standing dilemma for all sectors and though the situation is gradually improving, good communication between the tiers of government will be essential if the problem is to be fully resolved.
- Local governments need access to the multi-year funding essential for large investment programs. While this is being discussed by central government, no firm date has been set for its introduction. Again, this is a constraint that reaches far beyond the water and sanitation sector.
- The sector needs a common government/donor approach based on a mutually agreed sector financing strategy and investment framework, which is broader than a single ministry's plan.
- A sanitation donor group has met regularly since mid-2007 to improve coordination and collaboration. This is working well and the group is developing terms of reference for development of a sanitation financing and investment framework, with the government. Until the government has developed an urban sanitation

strategy, however, an investment framework will have little effect, and may not be fully 'owned' by all of the concerned ministries.

Challenges Ahead

For its final year, the focus of ISSDP support will be on four areas:

1. Consolidating activity in the first six cities and helping them move from planning to implementation.
2. Developing the role of provincial government in three provinces and expanding the program to an additional two to three cities in each one.
3. Developing a national urban sanitation strategy.
4. Adopting a sector financing strategy and investment framework.

For the city level work, the critical test will be whether the program leads to more, and better targeted, investments in urban sanitation, and improved service delivery. It is encouraging, therefore, that the new mayors in ISSDP cities have responded positively to the CSS and indicated a willingness to adopt the strategies even when these were developed under a previous administration. There may nevertheless be a risk of ad hoc activity by municipal officials or elected representatives anxious to see some

visible progress after all the planning and ground work.

The lack of capital funding from ISSDP remains a concern for some officials, but it is again encouraging that some of the cities have already secured some short-term funds, enabling them to begin implementation and show that the planning process has been worthwhile. Enabling cities to access existing government resources is a critical task for Phase II, though limited pilot funds, for relatively small-scale works, will also be available from the Netherlands-funded World Bank Trust Fund which financed ISSDP. Unless it is clear that a range of funds is available from domestic or external sources, it may be difficult to motivate other municipalities to develop city-wide plans.

A further challenge is to institutionalize sanitation planning and coordination. While city sanitation working groups have played a central role in Phase I, they are committees, not institutions, and there is a risk that the parent organizations (which control staff and budgets) will adopt a 'business as usual' stance irrespective of the CSS. How this is resolved may vary from city to city, but one option is to ensure that the role of the working group in coordinating city sanitation services is formalized, and that members are sufficiently senior to take strategic



The value of the program lies not so much in the quality of the strategy documents as in the fact that the municipalities are making a serious attempt to address a long-neglected issue of critical importance to public health, and are approaching the problem systematically, as a collaborative effort by the many stakeholders involved.

decisions. (There has been tendency for busy managers to delegate relatively junior staff to participate in the working group, which creates a risk that any decisions taken will not carry weight in the municipality). An additional measure under consideration is for working groups to appoint their own, full-time, consultants to take on some of the roles that were played by ISSDP teams during Phase I.

For government to take on this 'city-based planning' approach it will be necessary for the roles currently played by consultants to be funded from local or provincial sources.

One important area that has yet to be addressed is securing sustainable operation and maintenance arrangements for sanitation services. Some cities envisage a major expansion of decentralized wastewater treatment plants, for which asset ownership is currently unclear; in the existing schemes, the plants were nominally put under community management yet the supporting NGO retained responsibility for operation and maintenance for an initial period. The ability and willingness of communities to sustain these facilities varies from place to place, but generally they do not deal with major maintenance and repairs. More work is needed to explore the scope for local private sector and neighborhood organizations taking on maintenance responsibility, though asset ownership must first be clarified.

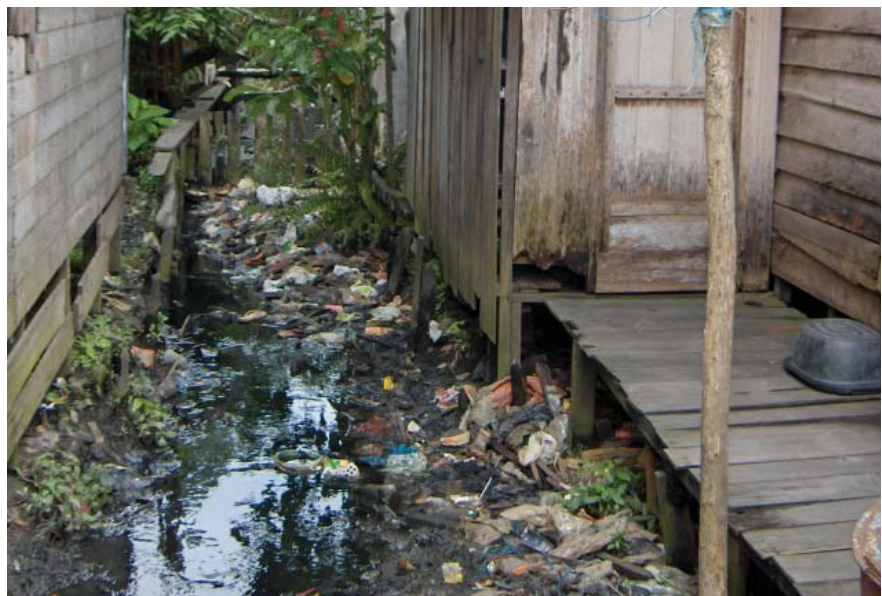
Looking beyond the six cities, a pivotal question is whether, and how, city-wide sanitation planning can be adopted more widely, bearing in mind that there is no obligation to do so at present. There are encouraging signs here, as the Ministry of Public Works has informally indicated its intention to use the CSS as the basis for funding allocations to the six Phase I cities. This could provide a powerful incentive for other cities to develop their own strategies. The extent to which

the CSS process is replicable will also need to be determined, however. City facilitators have played a pivotal role in guiding the planning process, which is detailed and at times complex, and in building local interest and commitment. Finding staff with the appropriate skills has not been easy, and in the short term could limit the scope for scaling up the CSS process province wide. The fact that skilled facilitators with a suitable technical background cannot simply be recruited 'off the shelf' is a reflection of the under-development of the sanitation sector and the need to allocate sufficient time for facilitator training and capacity building in Phase II is a key lesson learned.

Now that the planning process has been refined and a planning manual can be produced, CSS formulation might be completed faster in the next batch of towns. Nevertheless there will probably be a need for hands-on support, and possibly some simplification of the planning process. ISSDP is already making a start by developing training of trainers programs for city facilitators, and trying to identify one or more institutions that could serve as a long-term training resource for the sector.

Conclusion

There are many ways to develop a city-wide sanitation strategy and the process used in ISSDP is only one. The strategies developed are not perfect and local stakeholders understand that there are still some difficult questions to address and practical details to work out. The real value of the program, however, lies not so much in the quality of the strategy documents – which will in any case be revised and updated periodically – as in the fact that the municipalities are making a serious attempt to address a long-neglected issue of critical importance to public health, and are approaching the problem systematically, as a collaborative effort by the many stakeholders involved. The level of ownership of the strategies within the city sanitation working groups is high, and central government has realized the importance of comprehensive planning. Not only that, it has acknowledged the need for strategic action at national level, especially on sector financing. Sanitation is not a private matter anymore, and this is an important step forward for the sector.



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Annex One: Banjarmasin Sanitation Action Plan 2008-2010

ACTIVITY	2008	2009	2010
Cross-cutting Issues			
Sanitation marketing	Sanitation awareness building		
	Media gathering		
	Campaign to promote cleanliness and a healthy life style	Campaign to promote cleanliness and a healthy life style	Campaign to promote cleanliness and a healthy life style
	Advocacy targeting local government institutions	Advocacy targeting the local legislative body	Advocacy targeting the private sector
Enhancement of the role of the private sector and communities		Sanitation competition for neighborhoods, schools and institutions	Sanitation competition for neighborhoods, schools and institutions
Institutional strengthening		Review of building permit regulation. Establishment of operational guidelines for environmental and urban planning, commercial districts, and street vendors.	
	Establishment and capacity building of community self-help groups	Establishment and capacity building of community self-help groups	Establishment and capacity building of community self-help groups
	Strengthening the city sanitation group's operational mechanisms and development of its coordination capacity	Establishment of a municipal center for sanitation information	
Monitoring and evaluation		Monev for planning and implementation of sanitation development	Monev for planning, implementation, and impact assessment of sanitation development
Domestic Wastewater			
Sanitation marketing	Dissemination of domestic wastewater regulations and tariffs. Promotion of service connections	Dissemination of communal wastewater regulations re. small-scale (home) industries	
Enhancement of the role of the private sector and communities	Increase the capacity of construction workers. Enabling market access for compost produced by NGOs and community self-help groups		Dissemination and capacity building on domestic wastewater treatment

ACTIVITY	2008	2009	2010
Cross-cutting Issues			
Installation of infrastructure	Preparation of a master plan for wastewater and a detailed engineering design for a sludge treatment plant	Preparation of detailed engineering design	Preparation of detailed engineering design
	Procurement and installation of collection sewer pipes. Installation of service connections. Construction of communal wastewater treatment plant	Procurement and installation of primary sewer pipes. Installation of service connections. Construction of communal wastewater treatment plant	Installation of service connections. Construction of communal wastewater treatment plant
		Development of a domestic wastewater data base	
Strengthening of regulation	Effectuating a policy of free house connections	Effectuating a policy of free house connections	75% subsidy on house connections
Strengthening of policies	Preparation of a policy to stimulate cooperation in solid waste management		
	Socialization of a solid waste management policy		
Implementation of technical solutions	Development of appropriate solid waste management technologies		
Local Drainage			
Implementation of technical solutions	River normalization	River normalization	River normalization
	Rehabilitation of drainage channels	Rehabilitation of drainage channels	Rehabilitation of drainage channels
Institutional strengthening		Review of the work load and capacity of the municipal settlements and infrastructure unit	
		Assignment of the task to clean tertiary drainage channels to the municipal settlements and infrastructure unit	
Monitoring and evaluation		Reorganization and integration of drainage monitoring and evaluation data collected by the municipal settlements and infrastructure unit	

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WSP Field Notes describe and analyze projects and activities in water and sanitation that provide lessons for sector leaders, administrators, and individuals tackling the water and sanitation challenges in urban and rural areas. The criteria for selection of stories included in this series are large-scale impact, demonstrable sustainability, good cost recovery, replicable conditions, and leadership.

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