Lessons in Urban Sanitation Development

Indonesia Sanitation Sector Development Program 2006-2010









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EXECUTIVE SUMMARY

Urban sanitation problems are technically, socially and managerially complex. Building up over many years as cities develop rapidly and often informally, the result is often a mix of on-site and off-site infrastructure, some of it obsolete and much of it poorly maintained, with only a small percentage of wastewater being treated and disposed of safely. Rarely do cities present a blank canvas upon which new infrastructure and services can be drawn. Planning for city-wide sanitation improvements is a daunting task and it is not surprising that local authorities, which often lack expert human resources, tend to opt for a blueprint approach based on major (and often unaffordable) new investments rather than assessing what already exists and exploring how it might be improved.

Indonesia has for decades experienced the challenges outlined above. While 73 percent of urban households have access to a private toilet facility, severe under-investment in public sanitation infrastructure has resulted in one of the lowest sewerage coverage levels in Asia, with most excreta and wastewater discharged untreated or semi-treated into local drains or water bodies, causing massive environmental pollution. Dense housing areas and severe seasonal flooding, exacerbated by the choking of drains with uncollected solid waste, has only added to the problem.

Against this backdrop of very limited progress, the Indonesia Sanitation Sector Development Program (ISSDP) operated from 2006 to 2010. By the time the program ended in January 2010, Government commitment to urban sanitation had grown remarkably: 12 cities had developed city sanitation strategies and started to implement them, government budgets for sanitation had increased by 300 percent, and a national roadmap entitled "Accelerated Development of Sanitation in Human Settlements 2010-2014" containing commitments to scale up the ISSDP approach in over 300 cities had been formally adopted by the Government.

sanitation challenges but was clearly instrumental in opening a Government-owned pathway towards addressing the challenges. What were the key drivers for change, and what lessons can be drawn from this experience for other countries? As a follow up to an earlier stocktaking of ISSDP implementation, this field note explores key design and implementation lessons including:

- Designing to suit local circumstances
- Adopting a holistic view of technical assistance
- Using a range of measures for creating an enabling environment
- Promoting strategic planning as a management tool
- Ensuring quality in advocacy and communications

ISSDP was not able to resolve all of Indonesia's urban

ABBREVIATIONS AND ACRONYMS

ADB Asian Development Bank

AKKOPSI Aliansi Kabupaten Kota Peduli Sanitasi (Alliance of Districts and Cities Concerned about Sanitation)

APBD Anggaran Pendapatan dan Belanja Daerah (Local Budget)
APBN Anggaran Pendapatan dan Belanja Negara (State Budget)
AusAID Australian Agency for International Development

Bapedal Badan Pengendalian Dampak Lingkungan (Environmental Impact Management Agency)
Bappeda Badan Perencanaan Pembangunan Daerah (Local Development Planning Agency)
Bappenas Badan Perencanaan Pembangunan Nasional (National Development Planning Agency)

CSR Corporate Social Responsibility

DAK Dana Alokasi Khusus (Special Allocation Budget)

EHRA Environmental Health Risk Assessment
ESI Economics of Sanitation Initiative

GDP Gross Domestic Product

GPMK Gerakan Perang Melawan Kemiskinan (War Movement for Fighting Poverty)

HWWS Hand Washing With Soap

IDR Indonesian Rupiah (USD 1 = IDR 9,500)

IndII [AusAID-funded] Indonesia Infrastructure Initiative ISSDP Indonesia Sanitation Sector Development Program

JICA Japan International Cooperation Agency

MDGs Millennium Development Goals

MoH Ministry of Health

MoU Memorandum of Understanding

Musrenbang Musyawarah Perencanaan Pembangunan (Public Consultation for Development Planning)

NGOs Non-Governmental Organizations

OBA Output-Based Aid

PD PAL Perusahaan Daerah Penanganan Air Limbah (Local Wastewater Management Enterprise)

Perda Peraturan Daerah (Local Regulation)
PIU Project Implementation Unit
PMU Project Management Unit
Pokja Kelompok Kerja (Working Group)

PPP Public Private Partnership

PPSP Percepatan Pembangunan Sanitasi Permukiman (Accelerated Sanitation Development in Human Settlements)

PU Pekerjaan Umum ([Department of] Public Works)

RPIJM Rencana Program Investasi Jangka Menengah (Mid-term [Infrastructure] Investment Planning Program)

RPJM-D Rencana Pembangunan Jangka Menengah Daerah (Local Medium-Term Development Plan)
RPJM-N Rencana Pembangunan Jangka Menengah Nasional (National Medium-Term Development Plan)

SANIMAS Sanitasi oleh Masyarakat (Sanitation by Communities)

SK Surat Keputusan (Decree)

SSK Strategi Sanitasi Kota (City Sanitation Strategy)

TTPS/SanTT Tim Teknis Pembangunan Sanitasi (Technical Team for Sanitation Development)

UNICEF United Nations Children's Fund

USAID United States Agency for International Development
USDP [Dutch-funded] Urban Sanitation Development Program

WASAP [Dutch-funded] Water and Sanitation Program (managed by WSP)

WASPOLA Water and Sanitation Sector Policy Formulation and Action Planning Project

WHO World Health Organization

WSI [AusAID-funded] Water and Sanitation Initiative

WSP Water and Sanitation Program

1. Introduction



Children playing in an inundated market in North Jakarta, in which flooding is part of daily life

Earlier in this decade, the Government of Indonesia had begun to acknowledge that the country faced an urban sanitation crisis, but the lack of attention to sanitation in the past meant that it was inexperienced in this field and that the policy and institutional framework for the sub-sector was underdeveloped. The Indonesia Sanitation Sector Development Program (ISSDP) was designed to resolve these constraints. In essence, it provided technical assistance to strengthen the policy and institutional environment in order to increase investment in urban sanitation at national and local levels; expand service coverage; and improve service quality and sustainability. It was envisaged that all of these would accelerate progress towards the sanitation

MDG and national sanitation goals.

At national level, program efforts focused on advocacy for, and support to, sanitation policy and strategy development, improved sector coordination and the establishment of an investment framework. At city level, the program provided capacity building support to municipalities (6 initially later 12) with a strong emphasis on the strategic planning of sanitation improvements. The Water and Sanitation Program designed the program, managed the technical assistance contract and provided additional technical support on a regular basis. Technical assistance was co-funded by the Government of the Netherlands via a World Bank-administered Trust Fund known as WASAP and the Swedish International Development Agency.

ISSDP was an unusual initiative in that, while it was concerned with urban sanitation improvements, it did not make investments directly, focusing instead on advocacy and technical assistance. The only funding on offer was the prospect of modest grants for piloting and small works after cities had developed city sanitation strategies. DHV BV was contracted by WSP to support government with implementations.

The program was designed to suit the Indonesian context: while the government wanted to make progress in sanitation, an earlier debt crisis had made it reluctant to take on infrastructure loans from multilateral agencies, apart from which the introduction of decentralization and regional autonomy in 2001 meant that primary responsibility for sanitation was shifting from the center to local level. Furthermore, unofficial policy was to treat sanitation as essentially a private matter, with households responsible for capital investment and operations. This partly explains why Indonesia has the lowest sewerage coverage in Asia: barely 1 percent of the population has access and only 11 cities have a sewer system, in most cases serving just a tiny part of the city area. Even in the capital, Jakarta, which has a population of more than 10 million people, only 2.8 percent of the city population is served by sewerage. The lack of an investment component did not make ISSDP unattractive to the Government of Indonesia; on the contrary, the program's emphasis on making best use of existing resources was in line with government thinking at the time.

1.1 Sanitary conditions in Indonesian cities

With a population of approximately 230 million, Indonesia is the world's fourth most populous country. Almost half of the population live in urban areas and, in the absence of public investments, most of the sanitation infrastructure in place has been provided by households. The use of waterborne toilets is well established and roughly three quarters of urban households have a toilet (typically pour-flush), but local government oversight and regulation are weak and very few households dispose of wastewater safely. Many toilets discharge into a *cubluk*: an unsealed tank or soakpit also referred to locally as a *tangki septik*. Regular hand washing with soap is also quite rare, although soap is available in nearly every home.

It is important to note that most Indonesian cities do not have distinct slum areas; higher- and lower-income households are interspersed within the same neighborhoods and poor sanitation is therefore a problem for everyone, highlighting the need to address it as a city-wide issue, not on a neighborhood or piecemeal basis.

Informal collection of household solid 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 burned, 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. While sanitary landfill is known, it is not normally practiced.

Many households are located in areas that do not have adequate drainage, and in some towns there is regular flooding. The presence of large quantities of sewage and uncollected garbage exacerbates the problems of already inadequate drainage networks.

Inadequate sanitation in both rural and urban areas has had severe consequences for health and impacts most acutely on the poor, who are least able to compensate for the lack of government investments. It has been estimated that poor sanitation and hygiene causes at least 120 million disease episodes and 50,000 premature deaths annually. The resulting direct economic impact is more than IDR 29 trillion (USD 3.1 billion) per year, while the overall adverse economic impact is estimated at USD 6.5 billion per year (WSP, 2008).

1.2 Sanitation policy and institutional arrangements

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 was devolved without clarifying what exactly municipalities should do, how they



Environmental sanitation challenges from inadequate wastewater, refuse, and drainage disposal

would be held accountable, and how services should be funded. The current allocation of responsibilities at each tier of government is as follows:

National government is responsible for sanitation policy and strategy; regulation, minimum service standards and monitoring; and overall coordination of the sector. The National Development Planning Agency (Bappenas), the Ministries of Public Works, Health, and Home Affairs (which is responsible for local government) and the Environmental Impact Management Agency (Bapedal) all have a role in urban sanitation, though Bappenas plays the lead role in decision making. The responsibility for promoting rural sanitation lies with the Ministry of Health.

Provincial governments have not, up to now, been much involved in urban sanitation as their roles and responsibilities in this area have not been clearly spelled out. Broadly speaking, however, provincial government involvement in sanitation falls under its mandate to manage trans-boundary environmental issues and provide a service monitoring function.

Local governments have overall responsibility for the provision of urban sanitation services, but the allocation of roles between the various departments and agencies varies greatly from one city to another. Typically, 6 to 9 offices have a role to play, though as many as 16 are involved in some cities.

Policy development in the sector has so far focused on community-based water and sanitation services, which effectively means rural and peri-urban sanitation; there are few specific policy provisions concerning the roles of local and central government in urban sanitation. In other words, current policy emphasizes the role of communities without also addressing issues that need institutional attention. The government has, however, adopted national sanitation goals. These include achieving 75 percent access to improved sanitation by 2015 under the National Action Plan on Sanitation (with no distinction between urban and rural areas), which is almost in line with MDGs, and the achievement of open defecation-free regencies (kabupaten) and towns (kota) by the end of 2014 under the National Medium-Term Development Plan (RPJM-N). Unfortu-

nately, no comprehensive national strategy was adopted for achieving these targets in urban areas.

1.3 Urban sanitation finance

Public expenditure on sanitation and sewerage development has been minimal over that last decade, reflecting a longheld de facto view that responsibility for sanitation investments lies with households. One study (UNICEF, 2007) forecast that, based on the current rate of progress, Indonesia would fall short of the official JMP MDG sanitation target of 73 percent by 10 percentage points, equivalent to 25 million. As a follow-up to ISSDP the "Accelerated Sanitation Development Program for Human Settlements (PPSP)" was officially launched at the end of 2009. Where public investments have been made, they have not always been cost-effective or sustainable, due to a failure to establish viable operation and maintenance or cost recovery arrangements.

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 has been proposed by central government and may be introduced in the near future. Some funds are potentially available from provincial government but accessing them is difficult due to the lack of formal guidance and strengthened anti-corruption laws, which are making officials more wary of taking risks where no explicit rules are in place.

The willingness of households to pay for household collection of solid waste has been clearly established, but the same cannot be said for wastewater treatment and disposal. The existing high coverage level for household toilets shows that people are willing to pay for the privacy and convenience that a facility provides, but it is not clear that the same households would pay more 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.

2. Program overview

2.1 Purpose and outputs

The purpose and outputs of ISSDP Phase I are set out in Table 1; in Phase II outputs 3 and 4 were merged but the purpose remained the same. The four outputs were pursued via separate, but mutually supportive, streams of work that were designed to run concurrently. National coordination was overseen by a Steering Committee at senior government level (deputy ministers and director generals) under which was the Technical Team for Sanitation Development (Tim Teknis TTPS or 'SanTT') - effectively a national sanitation working group. While components 1, 3 and 4 were facilitated by contracted consultants DHV BV, component 2 was managed directly by WSP.

The consultant team comprised a mix of short and long term specialists, plus administrative support. The team operated under, and in support of, the SanTT and most personnel were based in a central program office in the capital, with a smaller number deployed in participating cities and (in Phase II) provincial governments. WSP man-

aged the technical assistance contract on behalf of the government and the World Bank-administered Trust Fund, through which donor funding was administered.

An additional initiative emerging from ISSDP, which came to operate independently and continues to do so, was the development of a public private partnership for hand washing with soap (HWWS). As responsibility for hygiene promotion lies directly with the Ministry of Health, it was decided to establish dedicated institutional arrangements for HWWS including a full-time coordinator employed by WSP with WSP's direct support and inputs (See Box 3).

Table 1: Program overview

Table 1: Program overview			
Purpose	Indicators		
To establish a framework for sustainable pro-poor sanitation services in Indonesia through the development of effective and coordinated policy-making, institutional reform, strategic planning and awareness building	 Increased central and local government sanitation investment Reform agenda features in government plans High-level policy statements and announcements Roles and mandates of stakeholders defined and implemented City-wide Sanitation Strategies and plans formally adopted by local governments 		
Outputs	Comments		
Sanitation 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		
Coordination and investment framework developed by government and supported by donors	This component sought to establish a common framework for government and donor support to the sector		
Campaigns for sanitation awareness raising and hygiene promotion designed, tested, and implemented with focus on 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		
 Local capacity built and city-wide strategies and action plans completed in pilot cities and lessons fed back to national policy and guidelines 	Completed in 6 cities initially. In Phase II 6 more were added, as was support to the coordinating role of 3 provincial governments		

2.2 Strategy and approach

The program was ambitious and challenging; it sought to create an enabling policy and institutional framework yet there had been few sustainable urban sanitation programs in Indonesia that provided an obvious point of reference, neither was there a pre-existing local model for the formulation of city sanitation strategies or any other systematic sanitation planning by the local government. In practice, the program evolved as a collaborative process of investigation, review and planning with government partners at both national and local levels, with national strategy evolving gradually, not as a one-off activity.

City sanitation planning (Output 4)

In Phase I of the program, which ran from 2006-2008, Component 4 focused on the formulation of city sanitation strategies in 6 cities: Surakarta, Jambi, Payakumbuh, Banjarmasin, Denpasar and Blitar. These were small- to medium-sized municipalities with populations ranging from roughly 100,000 to 700,000. In Phase II (2008-2010) the program was expanded in 3 of the 6 provinces where ISSDP had been active. In each of these 3 provinces, 2 new cities were added, with populations in the same range as the first 6, and the program continued to facilitate intercity communication for mutual learning and support. This proved quite effective.

To support the cities' planning process, ISSDP deployed a

small full-time team of consultants, led by a city facilitator, in each of the participating cities for about 15 months. In addition, roaming experts provided guidance and support in specialist areas such as engineering, institutional development, health risk assessment survey and analysis, local private sector participation, awareness building and advocacy, community empowerment with gender- and poor-inclusive approaches, capacity development and finance. This support was supplemented with a number of orientation and training events.

Prior to ISSDP, cities had mostly been on the receiving end of sanitation grants provided by central government, and few had experience of planning for delivery of their decentralized mandate. City facilitators played a direct role in guiding the planning process during Phase I and were pivotal in ensuring that strategies were eventually produced, which took roughly 18 months for the first 6 cities. In Phase II (in which a second batch of cities was supported) the facilitators sought to play a more hands-off role. This helped to enhance local ownership, though it added uncertainty to the timing of outputs and gave the program less control over the quality and content of the strategies.

While it drew on lessons from global experience in urban sanitation planning (see Box 1), ISSDP avoided 'off-the-shelf methodologies and sought to develop a process that was locally relevant and government-owned.

Box 1: Building on the strategic sanitation approach

In developing the city planning component, ISSDP drew on lessons from earlier urban sanitation programs, particularly in Asia, as captured in the publication, Urban Sanitation: A Guide to Strategic Planning by Kevin Tayler et al (2003). This book in turn built upon, and modified, the principles of the Strategic Sanitation Approach developed by WSP in Africa in 1997. The planning process developed under ISSDP, drawing on these references, was built on the principles that:

- local planning should begin with a detailed investigation of the infrastructure and services that already exist, avoiding gross assumptions or a 'blueprint' approach that treats the city as a blank sheet;
- the way forward probably lies in incremental steps rather than massive, one-off investments (the 'small steps' approach); and
- plans should respond to user demand, but this demand should be investigated, not assumed, and service users should be empowered to make informed decisions.

While the program took inspiration from Tayler, the process that evolved was new and responsive to local conditions, and the merits or otherwise of the Strategic Sanitation Approach were not a part of the ISSDP team's ongoing dialogue with government.

The first step in the formulation of a city sanitation strategy (abbreviated to SSK in Indonesian) was the formation of a city sanitation *pokja* (working group) comprising members from a range of local agencies and departments that had an interest in sanitation. The planning process that followed was founded on a detailed assessment of existing infrastructure and services, including user perceptions of the services; see box 2 below.

The process recognized the need both for strategic, city-wide decision making by local government and for active support and engagement at community level, although this latter issue has not yet received the attention needed. It thereby optimized both aspects in a 'top-down meets bottom-up' approach to planning. This was consistent with government's annual *musrenbang* process whereby development proposals from neighborhood groups were collated and

Box 2: The city sanitation planning process

The strategic planning process developed under ISSDP began with an assessment of existing infrastructure and services in each ward (*kelurahan*) of the city. This involved three discrete steps:

Step one: Secondary data analysis

This entailed an examination of available data for each kelurahan, while recognizing that it may not be complete or reliable. Three broad types of information were examined:

- 1. The number of households formally designated as poor, since poverty affects access to sanitation facilities, bearing in mind that most services are self-provided.
- 2. Population density. This can have a strong influence on the severity of sanitary problems and consequently the health risk.
- 3. 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 was assigned to each of these parameters.

Step two: Primary data collection

A participatory survey termed Environmental Health Risk Assessment (EHRA) was conducted in sample kelurahan that had a relatively high proportion of low-income households. The survey and observations involved groups of women from these locations, who made a health risk assessment of their neighborhood, with assistance from municipal and program staff. The assessment considered the condition of, and access to, water and sanitation facilities, and established the baseline status of hygiene behavior in key areas such as handwashing with soap, the handling of children's faces and solid waste management in the home. The findings enabled the identification of priority areas within the city and provided insights into both the impact of poor sanitation at household level and potential improvement strategies.

Step three: Professional assessment

Members of the pokja added their own perception of public health risk areas based on their knowledge of the town and professional expertise.

In the last stage of the analysis, the information gathered was used to produce a set of maps which divided the city into zones based on 4 levels of public health risks. Priority locations were not always obvious, partly because poorer residents were not always found in large clusters; most neighborhoods contained a range of income groups. It was for this reason that ISSDP did not target the poor as a separate group but adopted a 'poor-inclusive' approach to planning.

Finally, the information and analysis for each city was collated in a document which became known as the 'White Book' due to the format in which it was first presented. Each white book included a wealth of baseline information on existing infrastructure and services, budgetary information and analysis of some issues. This information provided the basis for formulation of a city-wide strategy to tackle the problems identified.

prioritized at sub-municipal tiers to provide the basis for developing the annual municipal budget.

Each strategy was conceived as a holistic document that not only set out priorities for infrastructure development and rehabilitation, but also addressed the institutional, financial, social and promotional dimensions to urban sanitation improvements. The strategies addressed sanitation in its widest sense, encompassing not only excreta disposal but drainage, solid waste management and hygiene behavior, recognizing that these issues were inextricably linked. The strategies also emphasized the importance of user demand and preferences - including the needs of the poor - in the design of improved infrastructure and services. The city sanitation planning process is described in more detail in the WSP field note titled Urban Sanitation in Indonesia: Planning for Progress. See http://www.wsp.org/userfiles/file/Urban_San_Indonesia.pdf

To illustrate the content and scope of the strategies, Table 2 outlines the outcome of the planning process in Banjarmasin, one of the municipalities participating in the program.

During the first phase it became apparent that the provincial governments had a potentially important role to play in supporting and coordinating the CSS process, though the exact scope of this role was not clear. In Phase II, the program provided full-time support to the 3 provincial governments involved in the second batch of cities. Provincial pokjas were formed and supported by provincial facilitators, backed up with specialist consultant support.

Developing the enabling framework at national level (Output 1) For this component, attention was initially focused on understanding the existing framework for urban sanitation services, and its limitations, and on that basis identifying options for progress. This led to the production of working notes, and consultation workshops, on a range of topics, for example:

- 1. Outline of a national institutional framework for the sanitation sector
- 2. Financing framework and strategy for a national sanitation program
- 3. Minimum standards for service delivery, technical design, and wastewater treatment
- 4. Options for public-private partnerships in the sanitation sector
- 5. Legal and practical aspects of sanitation tariffs
- 6. Reference manual on sanitation technical systems and options

In Phase II, a number of guidance notes were developed, and various workshops held to facilitate peer learning and support, including a series of 'City Summits'.

Emerging lessons from city level activities were added to the findings of these studies and together they provided valuable guidance and insights to support national level dialogue on sector strategy. This took place partly through the formal mechanism of the SanTT and partly via regular informal discussions with decision makers in key ministries, particularly Bappenas, Public Works, Health and Home Affairs.

Table 2: Structure of the City Sanitation Strategy in Banjarmasin

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Framework	Volume 1	City Sanitation Development Strategy		
Sub-sector Strategy	Volume 2 Volume 3 Volume 4	Excreta Disposal and Wastewater Management Solid Waste Management Neighborhood Drainage		
Enabling and Sustaining Strategies	Volume 5 Volume 6 Volume 7 Volume 8	Awareness Raising, Hygiene Promotion and Community Participation Institutional Strengthening and Capacity Building for Sanitation Management Private Sector and NGO Participation in Sanitation Development Financial Management of the Sanitation Sector and Resources Mobilization		
Sanitation Action Plan	Volume 9	Annual and Medium-term Sanitation Action Plan		
Monitoring and Evaluation	Volume 10	Strategy for Monitoring and Evaluation		

Coordination and investment framework (Output 2)

This component, developed directly by WSP, aimed at improving donor support of the Government's urban and rural sanitation strategy and programs, and also the development of a sanitation investment and financing framework. In mid 2007, a sanitation donor group was formed which continues to meet on a regular basis. Government has become an active player at the forum and sees it as useful way to communicate and discuss issues with all donors. The bimonthly meetings are well attended and focus on particular themes and topics of mutual interest, and have successfully improved relationships, communication, and coordination, including sharing of research findings and evaluations, as well as joint commissioning of research studies.

While the development of a sanitation financing and investment framework was considered an important sector tool by the donors, the same prioritization was not shared by Government and thus not pursued further following intensive discussions among stakeholders.

Promotional campaigns (Output 3)

During Phase I, preliminary work began on the design of

national awareness campaigns targeting specific groups, and cities were assisted with short awareness and communication activities, including community consultation on sanitation needs and preferences. It became clear, however, that there was little to gain from launching national or city level promotional campaigns before strategies and resources were in place to respond to demand for improved sanitation, should it be generated. Much of the promotional activity could only be carried out, therefore, once a certain stage had been reached in national sanitation strategy development and city planning. For this reason, there was no separate promotional component for awareness campaigns in Phase II. Instead, program communications concentrated on policy advocacy targeting government decision makers rather than service users.

Meanwhile, the public-private partnership for hand washing with soap initiative continued to operate independently, via the Ministry of Health. This was not explicitly linked to the city planning work in selected cities except when special promotional events were held on global hand washing day; see Box 3.

Box 3: Hand Washing With Soap (HWWS)

It has been established that soap is almost universally affordable in Indonesia and even very poor families use it. The challenge is to increase the frequency of handwashing with soap at critical times in order to reduce the incidence of diarrheal disease, in line with government targets.

ISSDP developed a communications strategy for HWWS and this became an initiative in its own right, independently operated by a coordinator appointed by WSP together with Ministry of Health. It is informally linked to the global HWWS program and participates in meetings and video conferences of the Global Handwashing Initiative.

A national HWWS Public Private Partnership core group was established under the Ministry of Health with representation from the Bappenas, WHO, UNICEF, USAID and the companies Unilever and Reckitt Benckiser. With the help of its coordinator, this group developed a common national framework for HWWS promotion and adopted a national logo that brought together isolated HWWS initiatives under one umbrella. This helped to improve efficiency, ensure a coordinated approach and facilitate mutual support and learning among the various stakeholders. Based on formative research, the coordinator used the ISSDP HWWS communications strategy to develop media messages and publications, and organized high-profile media events. As with ISSDP itself, the focus of support was on creating an enabling environment for the promotion of HWWS, rather than undertaking the promotion directly.

As in most countries, partnerships in hygiene promotion and Corporate Social Responsibility are new in Indonesia and, not surprisingly, it took some time for government and private sector partners to work together effectively - both were wary at first. The relationship proved to be fruitful, however: not only did the companies continue to fund promotional campaigns which were implemented by local NGOs; but they also brought considerable promotional expertise to the initiative, and adopted detailed quality assurance procedures in the use of promotional tools and techniques. Exposure to this expertise has been very beneficial to the Ministry of Health and other government actors involved.

3. Outcomes

ISSDP had a slow start, partly because it took time to identify appropriate personnel for some key project positions, but also because the task itself was complicated and the way forward was not obvious; for many people involved - both program staff and government partners - it was difficult to grasp what it meant in practical terms to create an 'enabling framework' for the sector. This meant that the program was a learning exercise for all involved. The active engagement of the SanTT was also limited at first, partly because its lack of formal status led some members to regard its work as informal, with no binding implications (this was later resolved through official recognition of the group's functions).

As the city level work began to show progress, and national advocacy became more effective, the program began to deliver on its outputs, and by January 2010 government

commitment to urban sanitation was at its highest level for many years. Progress against key indicators in the program document confirmed that the program purpose has been largely achieved; see Table 3.

3.1 City sanitation planning

ISSDP tried, through the planning process, to address head-on the shortcomings of the existing sanitation services environment in the cities, particularly poor inter-departmental coordination, a history of ad hoc, supply-driven investments and a lack of essential information for decision-making. When the program ended, the 6 cities involved from the start had all produced and formally adopted city sanitation strategies, while another 5 had produced them with formal adoption pending from the mayor and city governing council. A status summary for each of the original 6 is provided in Table 4.

Table 3: Program outcomes against indicators

Indicators of success (purpose level)	Outcome
Increased central and local government sanitation investment	 Medium-term allocation up 400 percent for 2010-2015 National budget allocation up 200 percent Special Allocation Budget up 200 percent Local budget allocations up 300 percent
Reform agenda features in government plans	Roadmap Accelerated Sanitation Development in Human Settlements adopted. Urban sanitation included in national and local budgets and work plans (in targeted cities)
High-level policy statements and announcements	Announcements by Vice President, Ministers of Public Works and Health, and the National Development Planning Agency
Roles and mandates of stakeholders defined and implemented	High-level Sanitation Steering Committee and Working Group established formally in 2006, meeting regularly from then onwards City and provincial stakeholders increasingly active, and better coordinated, in sanitation planning via formally constituted working groups
City Sanitation Strategies formally adopted by municipalities	6 CSSs approved, 5 pending approval

Table 4: Status summary of 6 original ISSDP cities (January 2010)

City (Population)	Comments
Banjarmasin (600,000)	CSS formally adopted and action plan incorporated into annual municipal budget. This municipality is very concerned with wastewater management and action post-CSS included development of a sewerage master plan, which was funded using the city's own resources. The city is receiving AusAID assistance via the Indonesia Infrastructure Initiative (IndII) for the development of a Business Plan for PD PAL, the local wastewater company. It is awaiting further AusAID funding for house connections under an output-based aid (OBA) scheme for poor households.
Blitar (127,000)	CSS formally adopted and action plan incorporated into annual municipal budget. This municipality is focusing on a community development approach using the city's own resources; it is not looking for large-scale external funding, though the delays in launching through the same trust fund small pilots caused some disappointment. A number of local projects are being integrated into a poverty alleviation movement known as the War Movement for Fighting Poverty. During ISSDP Phase II, Blitar served as a center of excellence for nearby cities that had recently joined the program. To sustain and strengthen work on sanitation, the municipality has facilitated the establishment of sub-district and neighborhood sanitation pokjas. It has also used the CSS as the basis of a proposal to the provincial government for the co-funding of some sanitation activities.
Denpasar (560,000)	CSS formally adopted and action plan incorporated into annual municipal budget. The capital of Bali is benefiting from a number of projects that have been brought under the umbrella of the CSS. They include a JICA-funded Denpasar Sewerage Development Project; 'Sarbagita,' a regional waste-to-energy project covering 4 local governments (Denpasar, Badung, Gianyar and Tabanan), which will sell power back to the grid; a number of small recycling and composting initiatives; and an integrated sanitation pilot project called 'Santimadu' in a priority neighborhood. This combines solid waste management, drainage and wastewater and emphasizes community involvement. It is funded from the city's own resources.
Jambi (450,000)	CSS formally adopted, allocated IDR 4 billion (approximately USD 420,000) in municipal budget 2010 and to be included in Local Medium-Term Development Plan (RPJM-D) and Medium-Term Investment Plan (RPJM). Jambi chairs AKKOPSI, a recently formed network of districts and cities concerned about sanitation, which facilitates the sharing of information and lessons. The role of the municipal sanitation pokja is being formalized, with a name change to 'Sanitation Coordination Team of Jambi City'.
Payakumbuh (105,000)	CSS formally adopted and action plan incorporated into annual municipal budget. The mayor of Paya- kumbuh is one of the foremost promoters of sanitation in Indonesia. The city received a Healthy City Award in late 2009 from the Minister of Health and has launched a campaign to assist 1,000 poor families in getting hygienic toilets. The municipality is also advocating for the establishment of a regional waste disposal site.
Surakarta (660,000)	CSS formally adopted and the action plan incorporated into the annual municipal budget. Corporate social responsibility schemes have been negotiated and funds are being provided by a local company and Unilever for <i>wastafel</i> (hand washing facilities) near cafes in the city park area. The municipality is also cooperating with the NGO Rotary Club in providing public toilets in a low-income area, and awaiting AusAID funding under and output-based aid (OBA) scheme for the extension of waste-water connections to poor households.

In Phase II (2008 onwards) 3 provincial pokjas were supported with the intention being that they would, in time, facilitate the scaling up of city sanitation planning to other cities, and undertake a monitoring role. This initiative was somewhat experimental and only 1 of the provincial pokjas developed an active role in the program. Interestingly, this pokja had been specially created for the purpose of developing the provincial role in urban sanitation; the other 2 were pre-existing working groups concerned more with rural water supply and it became clear that they would not readily adapt to an urban sanitation role. To date the role of provinces in urban sanitation development remains somewhat uncertain although national strategy indicates that it will continue, a key function being to facilitate intercity learning and the sharing of information.

By March 2010, the original 6 city pokjas were still active and, following formal local adoption of their SSK, most were taking concrete steps to identify funds and begin some level of work on related action plans. This was unfortunately hampered by long administrative delays in the launch of a separate activity, which was to provide limited funds for initial pilot works under CSS action plans (though this was never intended to be the major source of funds for CSS implementation).

As ISSDP progressed, the city-level planning process gained a lot of attention from other urban water and sanitation programs in Indonesia, some of which adopted it, or a variant of it. The new roadmap aims to bring all sanitation programs under one national umbrella, with production of an urban sanitation strategy being a common objective as a first step for all urban areas.

Another interesting spinoff from ISSDP was the establishment in late 2009 of AKKOPSI, an alliance of municipalities working on urban sanitation improvements that would continue to facilitate peer learning and support following a successful series of inter-city meetings known as 'City Sanitation Summits'.

3.2 The enabling framework

From the outset, ISSDP had a strong advocate in Bappenas - albeit at sub-ministerial level - while the Ministry of Public Works, which administered centrally funded urban infra-

structure investments, was less directly involved at first.

An early recommendation by ISSDP for the designation of a new lead government agency for sanitation was rejected by government, which preferred instead to strengthen the roles and responsibilities of existing players. The problem of fragmented responsibilities therefore remained, highlighting the need for a clearly articulated strategy, and effective coordination, at both national and city levels.

In Phase II, the program intensified advocacy at senior levels of government, through a combination of one-on-one meetings with decision makers and a number of high profile meetings at which some city representatives spoke enthusiastically about progress in their city and their commitment to sanitation improvements. Central government decision makers began to recognize the value of the city planning process, which had evidently energized local stakeholders, including city mayors, councils and senior planning, medical and public works officials.

A number of milestones marked a progressive shift in the attitude of central and local government towards sanitation. The first came in March 2007 when the mayors of the 6 participating cities signed the 'Blitar Declaration', which stated that:

- proper sanitation represents a fundamental human need and is of great significance in determining the dignity and quality of life of Indonesian people as a whole;
- improving sanitation conditions in slum areas represents a strategic step toward alleviating urban poverty; and
- urban sanitation services are still far from satisfactory.

Mayors from an additional 9 cities added their signatures in late 2008 (the Payakumbuh Declaration). These commitments were subsequently mirrored at national level during the first and second national sanitation conferences, in 2007 and 2009. In 2007, a Memorandum of Understanding was signed by both ministers and mayors. The MoU signalled a commitment to improve the coverage of sanitation services nationwide, make sanitation a priority sector, and support healthy behavior, community-based action, capacity building and sector networking for mutual learning and support. A further step forward came in April 2009 when the Minis-

ter of Public Works announced that city sanitation strategies and local co-funding would in future provide the basis for central allocations to municipalities for sanitation investments. This effectively created an incentive for better planning, one that was later formalized via the new national program, PPSP (see below). The minister also met with a group of provincial governors, mayors and senior officials to discuss the new developments with them.

The most significant milestone was reached in 2009. Building on the evident commitment voiced at 2 key conferences in April that year, and the explicit support of the Minister of Public Works, Bappenas, in collaboration with Ministry of Public Works and the SanTT adopted an ambitious set of targets which they brought together in the form of a roadmap to "Acceleration of Sanitation Development in Human Settlements" (PPSP) 2010-2014. The roadmap targets 330 cities that have sanitation problems, and focuses on 3 goals to be achieved by 2014:

- 1. Freedom from open and careless defecation. To include: new and expanded sewerage networks in 16 cities, serving an additional 5 million people; and constructing community-based decentralized wastewater management systems (known as SANIMAS) in every city this is an ongoing government initiative with a provisional target of 26 systems per city per year.
- 2. At-source reduction of waste generation by 20 percent via the '3Rs' (Reduce, Reuse, Recycle) and more environmentally-friendly waste management including sanitary or controlled landfill. Waste management services to be improved in 240 cities.
- 3. Reduced flooding and water ponding.

To facilitate this progress, the roadmap envisages that all 330 cities will produce a City Sanitation Strategy, with implementation underway in half of them (160) by 2014. The Ministry of Public Works subsequently indicated that it would appoint and deploy facilitators and regional consultants to support the process.

The formal adoption of the PPSP roadmap by the SanTT and its member ministries, and its public launch in December 2009 by the Vice President of Indonesia, with the Governor of Jakarta and all the relevant ministers present,



Drainage system construction in Blitar, East Java

provided the strongest possible evidence of a new government commitment to urban sanitation, building on the foundation laid by ISSDP. The key ministries agreed to establish new institutional arrangements to support implementation of the new program, including a Sanitation Program Management Unit under Bappenas, to support the SanTT, plus Program Implementation Units in the Ministries of Public Works, Health and Home Affairs. The Dutch government approved a new program of technical assistance, [Dutch-funded] Urban Sanitation Development Program, to support this government-led initiative, and both PPSP and USDP took off from early 2010.

Adoption of the roadmap means, in effect, that Indonesia now has a national urban sanitation program, though a substantial amount of the funding needed to meet the ambitious targets has still to be identified. An added benefit of the program is that it brings together a number of previously unconnected programs, for example the SANIMAS scheme for the scaling up of decentralized wastewater management systems.

3.3 Sector financing

Both the quantity of development funds, and municipal access to them, have now improved though for the funding of major investments there is still a long way to go. Specific advances include the following:

- Municipal expenditure on sanitation has increased threefold (in total) in the first 6 targeted cities; see Figure 1.
 This was enabled by integrating action plans made under CSSs into the established annual planning and budgeting process known as *musrenbang*.
- The central infrastructure funding program DAK now includes a dedicated budget line for sanitation; previously there was a category titled 'Water and Sanitation' but in practice nearly all of the funds were allocated to water supply projects. Roughly half of the allocation is now earmarked for sanitation, and total DAK funding is being increased significantly, with some Rp. 386 billion budgeted in 2010. CSS adoption will be a precondition for DAK funding under the new roadmap.

Figure 1: Increasing local government expenditure on sanitation

Local Government Sanitation Expenditure in 6 Cities 140,000 Expenditure (in Million Rupiah) 120,000 100,000 80,000 60,000 40,000 20,000 2004 2005 2006 2007 2008 Year Payakumbuh Jambi Banjarmasin Surakarta Blitar Denpasar

While this is encouraging, it proved difficult to develop a sector financing and investment framework during the lifetime of ISSDP; there was little interest or demand for it from government, possibly reflecting that the annualized planning and budgeting system was still entrenched or that is was too daunting a task.

In addition, there is still some way to go in clarifying existing funding sources and mechanisms, and making sure that provincial and city governments understand how to access them.

A further challenge is that, at the time of writing, government has committed at least Rp. 15 trillion (USD 1.6 billion) out of the estimated Rp. 58 trillion (USD 6.1 billion) needed to implement the roadmap in full, and is now less reluctant to take on multilateral loans. The mood is clearly changing. There are signs that government is becoming more open to the idea of loans, as implementation gets underway and funding needs become more urgent. Furthermore, by providing a clear and rational basis for resource deployment, the roadmap could open the door to increased bilateral aid to the sector.

3.4 Advocacy and communications

Advocacy at policy level was bolstered by professional communications support. Among other things, this included active engagement with mass media, especially when high profile sector meetings took place, for which carefully crafted messages and briefings were prepared; also the production of clear, concise and attractively presented advocacy documents in Indonesian and English. The most notable and well received of these was a creative production entitled "It's Not a Private Matter Anymore!" Investing in professional communications proved to be highly productive, enabling the press to produce colorful, well-informed and reliable articles that helped to make sanitation an issue of public debate.

4. Lessons learned

It is too early to judge what impact city sanitation strategies will have on investment and service delivery, but at national level ISSDP has made a very significant contribution to sector strategy and planning and, importantly, government commitment to the sector. Much has been learned from the experience, and some of the key lessons are outlined below.

4.1 Design to suit local circumstances

Use a broad definition of sanitation. Government encouraged ISSDP to use a definition of sanitation that encompassed not only excreta and wastewater management but also drainage and solid waste management, since these were inter-connected and politically urgent issues. Including the issue of flooding helped to position the program as addressing a government priority. Solid waste disposal was also intrinsically linked to flooding, due to the clogging of drains and waterways with indiscriminate dumping. Water supply is also a closely related subject but was not included in order to keep the focus on the long-neglected subject of sanitation. This said, 3 of the Phase II cities are now including water supply improvements in their CSS - there is evidently demand to address this subject too.

Work within the government framework. ISSDP worked closely with government partners at national and city level and sought to make best use of established government systems and procedures rather than setting up parallel structures. The formation of city sanitation pokjas was facilitated by ISSDP, but based on familiar structures used in other programs. By Phase II the pokjas operated largely within the government framework and with municipal funding.

Use city level experience to inform national strategy. ISSDP facilitated good communication between national and city level actors and ensured that policy dialogue was well-informed by ground realities and practical experience. City level engagement provided valuable first-hand experience of municipal sanitation services and the administrative framework under which they operate, with its many institutional, financial and human resource constraints.

Focus on planning and strategic improvement first. Both the donors (the Embassy of the Kingdom of the Netherlands and Government of Sweden) and WSP knew that by focusing on planning and national strategy it might be difficult after 4 years to show tangible results, but they were willing to take the risk. Far from limiting the program's influence, the absence of an investment component enabled ISSDP to focus on developing the enabling environment without the distraction of administering large scale procurement and donor accountability processes. Moreover, since there was no pressure to disburse investment funds, events could unfold at the government's own pace, with the consultants providing additional technical assistance and capacity to keep the momentum going.

4.2 Adopt a holistic view of technical assistance

Look beyond the usual mix of technical and 'soft skills'. While ISSDP was working in the infrastructure arena, it focused on planning, advocacy and sector strategy and this required a wide range of skills, not all of which are commonly found in conventional engineering firms or in sanitation projects. The technical assistance contract for ISSDP was awarded to a partnership led by an international engineering company DHV BV and this background lent credibility to their advice on sanitation-related matters which might not have been the case (from the government perspective) had they been a social development-led organization. It was necessary, however, to bring in personnel from a wide range of disciplines to address the range of issues under ISSDP. The key tasks of city level planning and national advocacy needed to be led by local consultants and in both cases it was difficult to find people with the right experience and seniority, though this was not surprising given that sanitation is a longneglected subject in Indonesia. Eventually a highly skilled and senior co-team leader was appointed to lead the dialogue with government, but in the case of city facilitators there was no standard qualification for this role and people from a range of backgrounds were appointed to learn on-the-job with support from a broad range of national and international specialists.

In Phase II, the contract was time-based to reflect the process-oriented nature of some aspects, with output-linked payment retained for outputs that were more directly under the consultants' control. While administering the time-based component was a huge burden for WSP, both parties felt that this was a fairer and more appropriate arrangement, and the government was more comfortable not to be under time pressure to sign off specific documents.

4.3 Consider a range of measures for creating an enabling environment

Creating an enabling environment takes time and there is no single right way to do it. When the program began, there was no blueprint for creating an enabling environment, neither was there strong high level government commitment to sanitation. A combination of intensive activity at city level and creative advocacy at national level, drawing on city level experience, were fundamental to progress. This progress was in part made possible by earlier policy work from 1999 onwards under WSP's Water Supply and Sanitation Policy and Action Planning project, which helped to facilitate a strategic shift from top-down to bottom-up approaches to water and sanitation development in Indonesia, in the context of government decentralization. Government officials came to see the benefits of the new approach, which was adopted in a number of large programs, and by the time ISSDP was launched, a cadre of young professionals were now in mid-level positions where they could put the approach into practice. This helps to explain why government was positively disposed towards large scale community-based programs and did not limit its vision to massive centralized schemes. Similarly, the concept of a city sanitation strategy had developed over a period of time from discussion among sector stakeholders, drawing on lessons from earlier programs. The concept was not, therefore, totally new by the time ISSDP was launched.

Wholesale reform is not always a precondition for progress. ISSDP found that existing institutional and financial arrangements were potentially viable, but were not well understood at each tier of government. The immediate challenge, therefore, was not reform so much as enabling municipalities to make better use of these arrangements.

Develop municipal obligations and incentives to improve services. There are differing opinions on the merits of putting municipalities under an enforced obligation to improve sanitary conditions. For now, the Government of Indonesia has opted to maintain a voluntary approach, backed up with the incentive of access to funds via the adoption of city sanitation strategies. Minimum service levels and technical standards for sanitation have also been discussed, developed and documented by ISSDP working closely with

Ministry of Public Works, and these set coverage targets for wastewater, drainage and solid waste management services at the city level. However, they still need to be formally adopted by the Ministry of Public Works (along with minimum standards in other sectors) and municipalities before they take effect. This 'light touch' approach reflects the decentralized context; centrally funded schemes can provide the motivation for action on sanitation, and central government can determine minimum standards, but it is difficult (and arguably inappropriate even) in Indonesia for government to dictate to cities, given that sanitation is a decentralized service. Implementation of the roadmap will be demand-led in that cities will be free to take up the offer of technical and financial support if they want it, but it will not be imposed on them. By the same token, technical assistance may be removed if a municipality requests support but does not make adequate progress within a given time frame. It remains to be seen how many of the proposed 330 target cities under PPSP will respond positively to what is on offer.

4.4 Promote strategic planning as a management tool

Planning is not an end in itself. A great deal of time and effort went into developing city sanitation strategies, but these were only a milestone on the road to improved services. Further work was needed to move from planning to implementation and many uncertainties remained concerning these next steps, which would involve detailed technical design and procurement, apart from the challenge of identifying funds. Importantly, though, the strategies provided a rational framework for detailed technical design and implementation, which should in turn enable effective use of the investment funds available. This 'added value' would not be proved, however, until the implementation stage was reached.

Planning is not a one-off event. Many of municipal staff participating in ISSDP had never before engaged in a long term, strategic planning exercise and it was in effect a learning-by-doing activity with external support. ISSDP emphasized that planning is a dynamic process and that plans should be regularly reviewed, updated and modified in the light of experience and new insights.

Make complex problems manageable. Addressing longstanding deficiencies in sanitation services is a daunting, potentially overwhelming task for a city. ISSDP broke this complex challenge down into a sequence of discrete, manageable tasks and this was appreciated by municipal participants, though the process was quite long, especially for the first 6 cities. In developing and refining this process, ISSDP also learned not to expect much innovation by municipalities, which are habituated to following established norms and procedures; moving too far away from them may expose officials to unwarranted scrutiny and criticism if things go wrong. This was also reflected in the selection of sanitation pilots: cities mostly proposed doing more of what they were sure about, rather than new and innovative projects.

Use the planning process to resolve technical and operational challenges. The planning process was a linear one, with each step completed before embarking on the next. This kept things relatively straightforward, but also meant that no physical works were begun before the CSS was completed. As a result, ISSDP never resolved some basic technical and operational challenges in urban sanitation, not least what to do about homes that have toilets already



but do not dispose of wastewater safely due to poorly constructed septic tanks or direct discharge into rivers or ditches, etc. Had the program done some pilot work on such issues at an early stage, tested solutions could have been incorporated into city sanitation strategies and related action plans. Interestingly, the USAID-funded Environmental Services Program, which ran concurrently with ISSDP in other cities and districts, and also developed city sanitation strategies, undertook small works alongside the planning process, partly to make the planning process 'real' for local stakeholders and so maintain their interest. The small works were appreciated by local government and communities, but also resulted in some distraction from the planning process.

Encourage wide local ownership. The city sanitation strategies may not have been perfect, but municipal staff were heavily involved in developing them and, as a result, sanitation began to receive serious attention. In other words, the planning process mattered, not just the product; had formulation of the strategies been contracted out to consultants (as is often done with master plans) this level of ownership might not have been possible.

It was also important to establish broad, multi-departmental ownership of the strategies given that sanitation is a crosscutting subject with no single institutional home. Bappenas argued that the informal status of the planning process also enhanced local ownership, since a formally commissioned plan would be the specific responsibility of a single designated department. It was left open as to how municipalities would formalize their adoption of their completed strategies: some did this via a local regulation, others by a mayoral decree.

Involving a wide range of municipal staff as well as elected representatives had the additional benefit that it reduced risk in the process; with multiple pillars of support, progress was not dependent on the commitment of 1 or 2 individuals.

Engage with the detail of government systems. ISSDP went to great lengths to harmonize the sanitation planning process, which was voluntary and informal, with formal government planning and budgeting systems so that the

strategies, once developed, could be formally adopted and budgeted for. Doing this required a detailed investigation of government administrative rules and processes from national to city level. This effort was valuable and ultimately successful, though it proved difficult to produce plans in time for annual budgeting deadlines. Municipalities found it hard to move beyond annual planning and budgeting to consideration of a multi-year approach.

Plan on the basis of the funds likely to be available. Had municipalities ignored funding availability and simply called for city-wide, centralized infrastructure systems, their sanitation strategies would have amounted to little more than wish lists that could not be implemented - as often happens with sewerage master plans. ISSDP encouraged cities to think in terms of progress in incremental steps that matched the human and financial resources actually available. Having done this, it remains to be seen how many of the cities are willing and able to take the next steps towards implementation, for which they may need to hire local consultants to prepare detailed technical proposals. Early indications are positive; short term action plans are generally quite modest and have been accommodated in annual municipal budgets.

Identify a process that can be taken to scale while maintaining quality. A shorter, somewhat simplified version of

the planning process will be needed if the roadmap is to be rolled out to more than 300 cities as planned, due partly to the demands it will impose on the limited stock of city facilitators, but also because of the political imperative to meet government targets. A planning manual was developed by ISSDP and already the process has been streamlined to some extent. The challenge will be to ensure that the process continues to foster local ownership, and is sufficiently detailed to produce a meaningful strategy, not just a superficial document pulled together quickly in order to access funds. Quality assurance will therefore be important in the new national program, and outsourcing development of the plan to external consultants could be counterproductive.

Planning can be a vehicle for capacity building. Municipal participants appreciated the exposure to a new approach to planning. The planning process was in fact the main vehicle for capacity building under ISSDP, along with peer learning though inter-city summits, interaction with provincial government and national meetings. There were some requests from pokjas for training courses on additional technical aspects of sanitation, but these fell beyond the remit of city level engagement at that stage. As cities move from planning to implementation, their ability to oversee technical design work and implementation may prove to be a constraint, and for this reason the new program of support to PPSP encompasses not only process

Box 4: Lessons from Denpasar municipality, Bali

Representatives of Denpasar municipal planning department (Bappeda) reported that, by March 2010, the city sanitation strategy had not been forgotten as the action plan arising from it had been accommodated in the municipal budget. In addition a sewerage master plan had now been developed, but within the framework of the city sanitation strategy.

The 2010 action plan focused on developing small wastewater treatment plants for locations beyond the reach of the ongoing JICA-funded Sewerage Development Program, and on increasing the number of house connections to the sewerage system, in support of which connection fees would be waived. (Denpasar is a rare case in Indonesia of a city developing a sewerage network.)

The greatest benefit of the planning process was, according to these officers, that it had facilitated inter-agency coordination and prompted other departments to put sanitation on their agendas.

Government allocations for sanitation had improved at all levels over the course of ISSDP though it remained a struggle to get funds released, and delays with the launch of small pilots were frustrating.

The program also benefited from a proactive mayor with a keen interest in sanitation, who launched his own 'Comfortable City Project' which bundled together a number of small initiatives. While ensuring the municipality did what it could, he also saw the need for community action - government could not do everything.

guidance but also detailed technical assistance in a range of specialist areas.

A sanitation strategy is not the same as a master plan. The strategies formulated under ISSDP do not remove the need to develop detailed technical proposals for sanitation improvements; instead they establish the priorities for action, both geographically and thematically. In some cases - mostly larger cities - a technical master plan may also be needed based on the findings of the planning process, but ISSDP experience suggests that often this is not the case, or the master plan is needed for only part of the city.

The ISSDP planning process suited small- to medium-sized cities. It is not yet known whether it could also be applied to cities with a population greater than one million, or to a metropolis such as Jakarta. Institutional complexity; the number of players; the distraction of more attractive high-profile programs; and bureaucratic inertia might outweigh the benefits of inter-departmental collaboration. Some argue that in a big city, more singular leadership is needed to make things happen; planning by consensus might not be viable on this scale.

4.5 Ensure quality in advocacy and communications

Use communications professionals. It would have been easy for government to ignore ISSDP, especially when the outputs were reports and plans rather than physical works. To counter this, ISSDP developed a creative and highly professional approach to communications, enabled by the appointment of specialists who could produce high quality, attractive publications and engage effectively with the mass media, feeding them with interesting case studies, arresting economic impact data and memorable sound bites that helped to make sanitation newsworthy and, ultimately, a topic of public debate. The ability to respond quickly to unfolding events and provide customized messages to particular fora was particularly valuable.

The timing of promotional campaigns needs careful attention. It became clear early in the program that it would be counter-productive to launch national or local sanitation campaigns before the program had something specific and doable to promote. One municipality learned this first hand; they tried to promote the use of improved septic tanks with-

out having any practical guidance to offer on upgrading existing services.

Advocacy should focus on government, not service users.

ISSDP sought to create an enabling environment for the sector, not to change personal behavior directly - that task would come later. Similarly at city level, the immediate objective was to develop city-wide strategies, not to implement community projects. There were, in fact, 2 parallel processes running through ISSDP: the program activities and products, and ongoing dialogue with central and local governments to generate commitment to sanitation and establish conducive policy, financial, administrative and institutional arrangements. This focus on influence was a defining characteristic of ISSDP, and one that presented a risk to the program consultants, since progress depended largely on factors beyond their control.

One very useful, and unusual, initiative taken early in the program was one of the 'fast track' sector studies. Instead of a 'knowledge, attitudes and practices' study of target communities, as is commonly undertaken in hygiene promotion projects, ISSDP investigated the 'knowledge, attitudes and motivation' of local government officials regarding sanitation. This helped to shape advocacy and communications for the remainder of the program. It found, for example, that officials did not generally regard domestic wastewater management as their responsibility, and had limited technical knowledge in this area. It also revealed that an influencial local political leader was likely to have more impact on the attention paid to sanitation by local government than directives issued from central government.

Exploit media and peer pressure to stimulate action on sanitation. A series of national and regional workshops on city sanitation were helpful in moving the program forward through the sharing of information and lessons learned, promoting inter-city competition and exposing national decision makers to what was happening at municipal level. At city level, political leaders proved quite susceptible to media and peer pressure. One city, for example, was reported as being the dirtiest in Indonesia and this persuaded the mayor finally to take a serious interest in sanitation; in fact he turned the situation around and

became one of the most dynamic leaders in the program. By the same token, press reports and inter-city summits provided a means of celebrating cities that were performing well. Mayors started to see scope for political benefit and in time many became spokesmen for sanitation.

Establish multiple pillars of support to the program. Over the course of ISSDP there were frequent changes of local government staff, and periodic changes of mayor. This inevitably disrupted continuity so that, for example, a re-orientation of city councillors was needed following a round of local elections. Involving a wide range of local stakeholders: elected representatives, municipal staff and (where available) NGO and private sector representatives helped to establish a strong support base so that progress was less dependent on a few individuals. A bonus for the program was that in some cases, municipal staff who had been pokja members were promoted and took their commitment to their new position.

Highlight the economic impact of sanitation. While the various studies undertaken in Phase I were (mostly) useful in shaping program development, reports were not, in general, powerful advocacy tools - not least because few government officials read them in detail, even when they were published in both Indonesian and English. There was one notable exception, however: WSP commissioned a regional study known as the Economics of Sanitation Initiative, which investigated the economic impact of poor sanitation in 5

countries. Compelling evidence that poor sanitation was constraining economic growth provided both the motivation and the political justification for giving a higher priority to sanitation-related investments in Indonesia. This work did not form part of ISSDP but production of the report was timely, and it came to be quoted frequently in high level government meetings. See Box 5

Look for sanitation 'champions' and capitalize on their influence. Not surprisingly in a program where advocacy and influence were pivotal to progress, individual personalities both in government and on the program side - played an important part. On the government side there were 2 key champions: the Director of Settlements and Housing during Phase I and his sub-director, who was the program's key counterpart during both phases. This officer supported the program emphasis on city ownership and process development, rather than investment, and was willing to take risks in terms of new approaches; both made program delivery possible. Without this foundation, it is difficult to see how the subsequent progress could have been achieved. This said, the Sub-Director had, due to considerable hierarchical constraints, limited influence at the most senior level of government, though his impact was enhanced by the support of a senior figure on the ISSDP team (see below).

At city level too, personalities played a huge part; in some cases the mayor was the principal driving force, in others the head of PD PAL (the wastewater utility) also played a pivotal role.

Box 5: The Economics of Sanitation Initiative

The Economics of Sanitation Initiative² examined the major health, water, environmental, tourism and other welfare impacts associated with poor sanitation in Cambodia, Indonesia, the Philippines, Lao PDR and Vietnam. The study focused mainly on a narrow definition of sanitation: human excreta management and related hygiene practices.

The study found that in 2006, Indonesia lost USD 6.3 billion due to poor sanitation and hygiene, equivalent to approximately 2.3 percent of gross domestic product (GDP).

Poor sanitation, including hygiene, causes at least 120 million disease episodes and 50,000 premature deaths annually. The resulting economic impact stands at USD 3.3 billion per year.

Poor sanitation also contributes significantly to water pollution, adding to the cost of safe water for households, and reducing the production of fish in rivers and lakes. The associated economic costs of polluted water attributed to poor sanitation exceed USD 1.5 billion per year. Poor sanitation also contributes up to USD 1.2 billion per year in population welfare losses (due to additional time required to access unimproved sanitation), USD 166 million per year in tourism losses, and USD 96 million in environmental losses due to loss of productive land.

On the consultant side, it was a huge benefit that the team included an ex-government officer who had previously held a senior position in the Ministry of Home Affairs, and had some years before that been a university lecturer and taught many of the people who now held influential positions in government. This person had extensive access to senior officers in all the relevant ministries and was able to work closely with them throughout the program, meeting them individually or in small groups, and by this means helping to develop their engagement in the program and negotiate a common vision for progress. Being widely respected, and having a detailed understanding of government rules and processes, he was invited by government to help them make strategic decisions, formulate guidance to local government and, ultimately, design the PPSP roadmap. His understanding of the motivation and priorities of both government and development partners, and the constraints under which they operate, was very beneficial to the process. In Phase II, when the program team laid greater emphasis on direct engagement with senior government figures, this person's role became central. This role could not have been played by an international consultant and it was not easy to find a local person with the right background plus the advocacy and analytical skills needed to negotiate a way forward through complex government rules, relationships policies and procedures. The lesson is that such persons are invaluable and, while it may take considerable effort to find them, the potential benefits are enormous.

Associate with the right institutional partner. Bappenas was the ideal partner for ISSDP, having a central coordinating role in urban sanitation, a subject in which many agencies had a stake. Some earlier donor-funded infrastructure projects had been aligned with the Ministry of Social Affairs, which suited their pro-poor focus but left them disconnected from decision making processes on infrastructure development, and thereby limited the scope for policy influence. As work progressed and cities moved closer to physical implementation, ISSDP also developed closer links with Ministry of Public Works and under the new roadmap, technical assistance will be deployed in 4 key Ministries: Planning, Public Works, Home Affairs and Health.

4.6 Clarify the role of each tier of government

Some constraints to progress in sanitation lie beyond the sector. Only 1 out of 3 provincial pokjas participating in ISSDP made an active contribution, and this was the one

for which the program facilitated its creation and defined its role. Amongst other things, it helped to develop a funding mechanism to support municipalities. For other provinces to become productively involved, government would need to clarify the relationship between provincial and local government, especially in relation to funding and monitoring, and establish common goals in the case of sanitation. For now, province-city relationships are somewhat strained, protocols for interaction are not well developed and cities tend not to make available the information that provinces would need to monitor them effectively. As the roadmap is rolled out, the need for provincial level coordination will become more urgent.

4.7 Adapt capacity building strategies to respond to changing needs

Scale up capacity building alongside planning and implementation. Initially, central government had somewhat unrealistic expectations of the capacity of city officials given the complexity of the planning task and the amount of time and effort it demanded from local stakeholders; even establishing a well-functioning pokja was hard work. Local capacity varied enormously across the country (within and beyond government) and participating municipalities needed a lot of technical support.

The planning process has now been standardized and a manual produced, nevertheless the availability of skilled city (and probably provincial) facilitators will be a critical factor determining the scope for scaling up under PPSP. For this reason a new batch of city facilitators were contracted by Ministry of Public Works in 2010 and trained under the new program of Dutch assistance; in the longer term this training may be formalized and overseen by an academic institution. The provision of other technical assistance, for example on sanitary engineering and community engagement, will also prove challenging as the program goes to scale, since the pool of local private sector and NGO expertise in these areas is small compared to the size of the country. The resources available are mostly concentrated in Jakarta and nearby Bandung.

4.8 Ensure an appropriate poverty focus

Adopt a poor-inclusive approach to sector strategy and local planning. ISSDP tried to create an enabling framework for the sector as a whole, without losing sight of the

need to address the needs of the poor in both national strategy and local plans. Given that program support did not extend to project implementation on the ground, this dimension was not always explicit and was in any case complicated by the fact that in many Indonesian cities, poor households are not concentrated in highly visible slums as they are, for example, in the Indian sub-continent (though there are discrete slums in some cities). ISSDP adopted a 'poor-inclusive' approach whereby the prioritization of city sanitation needs was based on environmental health risk assessments that took poverty factors into consideration; there were also community consultations in sample lowincome neighborhoods. This helped to steer the planning process away from the common municipal approach of directing the limited resources available to high cost investments that benefit only a few people in selected commercial and high-income residential areas. This poor-inclusive nuance was incorporated into the planning manual that will now be used for implementation of the PPSP roadmap, though there are no guarantees that it will be applied in every case.

4.9 Pursue a sector financing strategy as a medium term goal

Make best use of the resources already available. The program was unable to deliver the investment framework envisaged. However, the adoption of a nationwide PPSP and its roadmap - effectively a national urban sanitation program - represents a significant step in this direction, though government has yet to identify much of the funding required. This validates the 'small steps' approach to sanitation planning; had municipalities made grandiose plans for huge capital investments they would now be sitting waiting for funds that might never come, when in fact a number of them are already implementing action plans within the constraints of the municipal budget.

The bureaucratic delays in sanitation pilot funding have been a cause of much frustration, and the expectation of this external funding may have reduced municipal incentives to explore other options within government. This again highlights the need to plan on the basis of funds actually available and avoid 'wish lists' that ultimately lead to disillusionment. Moreover, the ISSDP experience indicates that many medium and smaller cities do not need expensive, centralized sewerage in order to improve sanitation city-wide; substantial progress can be made by the incremental expansion and improvement of on-site and small networks and decentralized treatment services. This is not to deny, however, that municipalities will need funding over and above routine municipal resources - especially when sanitation investments do not generate financial returns. There is, therefore, a case for central government to continue providing infrastructure grants and soft loans.

Sound planning increases access to funding. There was little recognition within government of the need for a financing strategy or investment framework, and for Bappenas - the lead program partner - sector financing was not their primary concern. Notwithstanding this, government willingness to fund the sector increased as the program progressed. In the case of Ministry of Public Works, it was evident that the presence of a city sanitation strategy reduced the risks associated with funding since the strategy included a detailed situation analysis and a rational argument for the investments proposed. It also became evident at the end of the program that donors were willing to use the roadmap, built on ISSDP processes and experience, as a vehicle for multi-agency funding to the sector, though no decisions had been made at the time of writing.

Funding mechanisms should be supportive of strategic planning. By the time ISSDP ended, there was consensus among both government and donor agencies on the benefits of strategic planning at city level. However, municipal planning and budgeting systems were still based on an annual cycle with no provision for multi-year budgeting. Plans were in hand to resolve this, but had yet to be implemented.

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