Urban sanitation in South Asia

Policy recommendations for increased accountability and inclusive sanitation progress

Freshwater Action Network South Asia

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Acknowledgements

This report is a consolidated analysis of six urban case studies carried out in five South Asian countries. The studies aim to inform the deliberations at SACOSAN V and thus contribute to the formulation of concrete commitments targeting the coverage of the poor, marginalised and vulnerable communities under sanitation development policies and programmes in an urban context. We are very grateful to The Bill and Melinda Gates Foundation (BMGF) for having the trust in FANSA and providing the funding support that enabled this study. Our special thanks go to Dr. Roshan Shreshta from BMGF for his continuous support and guidance throughout the study by providing timely feedback and support in improving the content of this report. I would also like to gratefully thank the FAN Global Secretariat for providing feedback on draft reports, insights in strengthening the analysis and recommendations and also addressing the contractual obligations.

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I hope the study findings will be helpful in influencing SACOSAN V deliberations and convincing decision makers to act on identified gaps and recommendations in addressing urban sanitation issues.

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Introduction

Providing sanitation services to urban populations in South Asian countries is a significant challenge for the respective governments. The fourth South Asian Conference on Sanitation (SACOSAN) IV held in Colombo, Sri Lanka in April 2011 made fourteen commitments, including a commitment on designing and delivering context-specific equitable and inclusive sanitation and hygiene programmes for the poorest and most marginalised groups. Despite this commitment basic sanitation services continue to remain an unfulfilled desire for a large number of poor and vulnerable urban communities. In order to illustrate the challenges specific to South Asia, FANSA initiated six case studies from selected urban areas of Bangladesh, India, Nepal, Pakistan, and Sri Lanka. The objective of these studies is to explore specific challenges in urban environments and suggest potential solutions. This report is a regional compendium of case studies providing evidence from the ground that can inform the deliberations of and contribute to shaping the SACOSAN V outcomes and any other policy and programme formulation process related to inclusive urban sanitation development.

The countries where the studies were carried out are Bangladesh, India Nepal, Pakistan and Sri Lanka. Due to the geographic scale and diversified nature of poor urban settlements, in India two cities were selected, whereas in the other countries only one city was considered in each national context. The universe of the study was atleast 1,000 households in each city and the sample size of households for survey was approximately 200.

Problem and the Study Context

All SACOSAN countries are confronted with major Water Sanitation and Hygiene (WASH) related service delivery challenges because of two key factors i) a rapidly expanding urban population pushing a large proportion of new settlers to the periphery of cities and the reach service delivery and ii) the difficulties most government service providers face in coping with the increased demand which results in the exclusion of poor and marginalised groups. A review of the reach, coverage and depth of the current level of WASH services indicates that the SACOSAN commitments have not made a very small difference to the services received by a large numbers of poor and vulnerable communities who continue to suffer for want of basic sanitation services across the urban areas of the region. The ensuing need for a well-co-ordinated and evidence based advocacy effort led by CSOs to hold South Asian governments to account for the commitments they made during SACOSAN IV sets the context for this case study based regional analysis.

Six case studies from selected urban areas of five countries provide evidence of exclusion and vulnerability in sanitation services. Issues of vulnerability documented in urban areas range from exclusion based on geographic and political factors, as well as socio-economical factors and issues of physically disability and old age. The case studies also focus on analysing technology barriers in human waste management often resulting in low coverage for poor and marginalised

communities in slum areas. The significance of sanitation financing mechanisms in extended services to the urban poor has also been studied. Where applicable, existing examples of breaking these barriers towards progress on inclusive sanitation have also been analysed and reflected in the study recommendations. Each country case study provides a national overview of various aspects of urban sanitation, a more detailed analysis of the six selected cities and an analysis of the status of sanitation for poor and marginalised communities based on primary data based analysis. The compendium of these case studies constitutes the framework to inform and influence SACOSAN V to, more concretely, commit for meeting the sanitation needs of the urban poor. Upon completion of the case studies, FANSA completed a regional compilation and developed "key policy asks" for SACOSAN V and beyond. FANSA believes that the urban case studies provide reliable evidence for civil society's advocacy efforts during SACOSAN V.

Methodology

The countries and specific locations within each country, where the studies were carried out are listed in the table below.

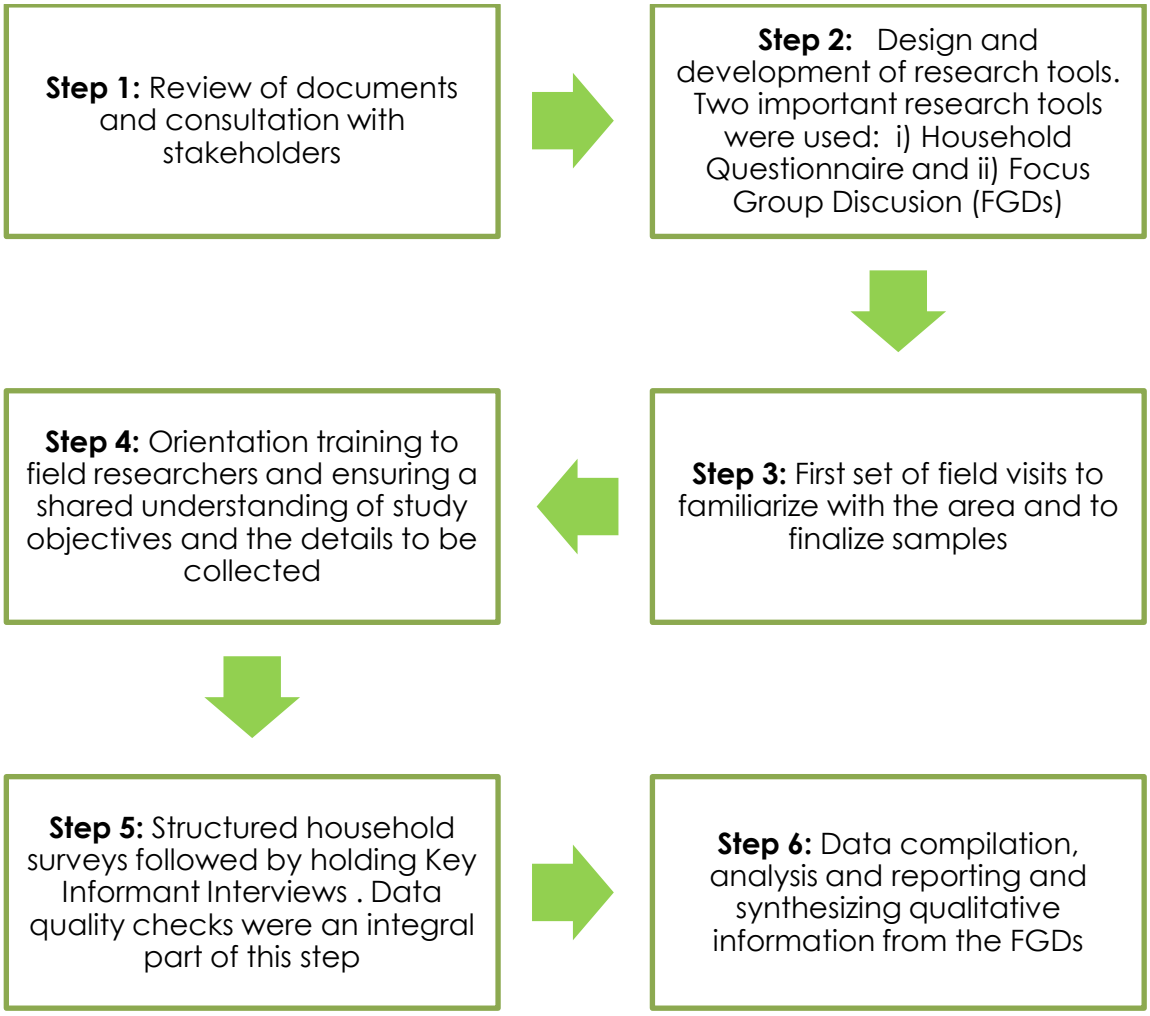
Country	Bangladesh	India		Nepal	Pakistan	Sri Lanka
Urban locations	Dhaka	Bengaluru	Lucknow	Kathmandu Valley	Lahore	Colombo
Households in the selected area	965	1,200	1,100	2,314	1,000	2,300
Sample Survey hhs	205	200	200	200	200	195

In all six countries an effort was made to keep the methodology uniform to allow for consistency and a comparative analysis at regional level. To reflect the different contexts, some country-specific variations were permitted without diluting the overall approach. Caution was also exercised to ensure that these minor variations did not entail any negative impact on the study findings. The respective FANSA national chapters anchored these studies; ensured quality assurance of the data and a good analytical framework. The FANSA regional network ensured uniformity across the five countries; provided a common thread to the study findings; drafted recommendations and provided the basis for a regional level advocacy strategy.

The Urban Sanitation Case Study survey was designed to cover a wide range of city-specific equitable and inclusive sanitation and hygiene facilities. It has covered demography, income, housing, education, health, employment, and access/barriers to toilet facilities and services. In two countries a distinction was made between non-intervened and intervened settlements. Non-intervened settlements are those where no external support was provided to change the existing situation, whereas intervened settlements are those where some form of

external support (technical or financial) has been provided during the past couple of years.

The specific steps followed to carry out the study included:



Sampling frame and sample size

Purposive Sampling was the chosen methodology to select specific areas for the survey. A stratified random sampling method was used for the selection of sample households within each cluster. Underserved areas were identified using secondary data and due weight was given to them for their preferred selection. Following the preliminary identification of clusters, rough maps of road and lane networks were drawn. Informal methods such as discussion with local people orobservations by researchers were used for mapping the area. A sample size of around200 households was covered.

In the selected areas, houses were randomly chosen while walking in the lanes/roads. By and large, a set of criteria were used for the selection of sample households viz. i) no more than two households were selected from each lane ii) no

two houses facing each other were selected iii) houses located in the extreme parts of the lane were excluded. In the event of a selected respondent who was reluctant to respond, the sampled household was replaced by the adjacent household.

The surveys in the settlements were carried out at different time periods in each of the countries but they were broadly completed between01 and 20 September 2013 by a team of field researchers. In two countries women team members conducted Focus Group Discussions (FGDs) with women groups. The teams in each country were supervised by at least one trained supervisor. The field researchers were given training ranging from three hour to six hours. Quality checks were run by the field supervisors by randomly visiting a pre-fixed percentage of the surveyed households. All unclear entries were cross checked and validated through repeat visits and doubtful or incomplete questionnaires were discarded and replaced. Interviews of officials, service providers and other key informants were carried out by the supervisors and the expert team members. Focus Group Discussions were carried out in the communities to validate survey findings. Data entry was done either using excel worksheets or using SPSS.

Overall Summary

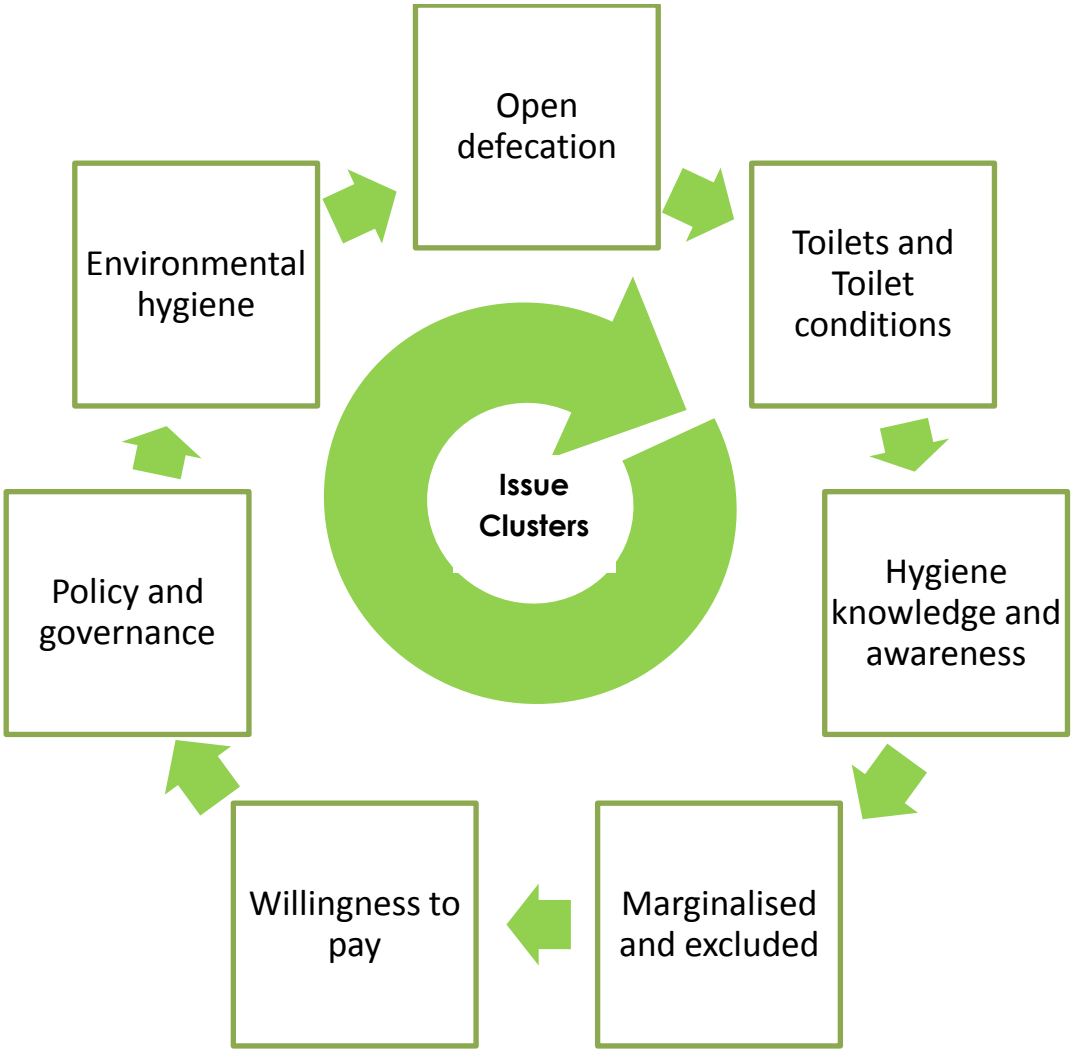
The study covered several variables. To arrive at a common understanding of key issues across countries, a common framework was used. Accordingly, the key issues were extracted from the study and grouped under seven major clusters as indicated below. Detailed explanations are provided in the regional analysis section that follows.

Issue Cluster	Specific issues covered
Open defecation	Migrant population Use of open spaces Habits
Toilet and toilet conditions	Space constraints Cleaning and maintenance of toilets Cleaning of septic tanks Community toilets Water supply in toilets User friendly designs
Hygiene knowledge and awareness	Hand washing knowledge Hand washing habits and behaviour Waste management within the house and outside

Issue Cluster	Specific issues covered
Marginalised and excluded	Coverage of poor households Disabled population Elderly people, women and children
Willingness to pay	Affordability and financial constraints Paid service variables
Policy and governance	Uncertainty over land tenure Rented premises Low sanitation priority
Environmental hygiene	Public toilets Solid waste and liquid waste management Septage management

Regional Analysis

Findings of the study in the regional context are described below. The study covered several variables. To arrive at a common understanding of key issues across countries, a common framework was used. Accordingly, the key issues were extracted from the study and they were grouped under seven major clusters as indicated in the figure below.



To provide a common approach for evidence based advocacy, findings of the study are analysed from the regional perspective and are broadly described below.

Open Defecation

Open defecation is prevalent in all the urban slum communities selected to a varying degree. For example, in the urban slum study area of Bangladesh Open Defecation rates were found to be 30%, well above the national average of 4%. In Sri Lanka 7.2% of the households are practice open defecation and this incidence was highest in Red Bana Street (Lunupokuna Ward). In Bengaluru and Lucknow the situation is better with toilet ownership ranging from 69% to 87% respectively. This is primarily because of the recent interventions by the respective municipal governments and some NGOs. The incidence of open defecation in the studied settlements varies between 5% and 30%.

Toilets and toilet conditions

Lack of availability and lack of accessibility of toilets even if available is the first key challenge. The second key challenge is the unhygienic conditions of toilets and poor ventilation. In many settlements toilets open directly into the kitchen due to a lack of space in often cramped housing conditions. The upkeep of community toilets was found to be sub-optimal across all case study areas. Water supply in the toilets is inadequate and erratic. External support for toilets is minimal in many slums. For example, in Kathmandu only 7.5% of households received external support for toilet construction. In Colombo, about 4% of the households did not own toilets and had no common toilet in the vicinity.

Toilet and other liquid waste is drained into water bodies or discharged in open spaces. For example, in Lucknow, India, 13% of households depend on soak pits which are not connected to underground drainage. The soak pits are generally overloaded and the waste spills over. The waste from these soak pits is occasionally cleared and let into drains or dumped in open spaces. Generally, there is an overwhelming preference for underground sewerage connections. Toilet designs are not user friendly and women, children, elderly people and people living with disabilities suffer the most.

Hygiene- awareness and practice

Several aspects of hygiene awareness and hygiene practices were studied including toilet cleaning, ventilation, hand washing practices, waste handling within the house and in the streets, community toilet conditions, sewage disposal and incidence of water borne diseases. Sewage disposal, for example, is a problem in all the studied slums. This is particularly the case in the selected slum in Colombo, Sri Lanka where approximately 14% of households discharge sewage into common open drains and about 12% discharge it into inland water sources (water ways, canals or rivers), equal numbers discharge waste into the ocean.

Overall, basic hygiene knowledge exists in all urban poor communities across the studied areas. However, "know what" (knowledge) to "know how" (skills) is weak. Incidence of waterborne diseases varies from country to country and settlement to settlement with each country. Treatment of water borne diseases comes with heavy cost (as high as one month's income in a year, as evident in India. Hand washing practices again vary. The main drawback is in the technique of hand washing. Behavioural interventions have been tried out in all the five countries. The challenge, however, is transforming the knowledge to skill and sustainable practice.

Marginalised and excluded

A large majority of the underserved settlements are categorised by local governments as unauthorised. Consequently they do not receive sanitation services provided by the government and remain excluded and marginalised. Two examples highlight this phenomenon. In studied areas in Dhaka women, children, people with disabilities and elderly people suffer most due to technological inappropriateness of latrines, unavailability of menstrual hygiene care facilities and inappropriate location of toilets. In selected Lahore slums, exclusion display dominant features such as geographic, ethnic, occupational, legal and, technological. Toilets are often not accessible for younger or older people or people living with disabilities. Inclusion in decision making has also been found to be an issue and is a remote concept across countries.

Willingness to pay

Willingness to pay varies from country to country and depending on the type of service (water supply; solid waste and liquid waste). It is pegged between$1 and $ 5 per month. A large number of households demand improved services. In Nepal 100% of the respondents who did not own toilets expressed their willingness to pay for toilets. In Bengaluru about 67% of the households currently pay Rs 20/ per month and they were willing to pay more, subject to improvements in services. In Bangladesh willingness to pay is not a matter of choice; it is mandatory failing which disconnection is the consequence.

Policy and governance

Across the study areas, WASH services receive very low priority. Subsidies provided by the government to construct toilets are inadequate. Lack of affordability and lack of interest in toilet construction, make it a fit case to support the urban poor settlement with subsidies. Many NGOs fill the gap left by inadequate policy and poor governance but the coverage remains low. Governments have neither actively settled the land tenure issues of the urban poor (e.g. Sri Lanka, Bangladesh) nor recognised people living in informal settlements as genuine settlers. It is a common phenomenon across the selected areas which highlight that insecure land tenure results in a lack of willingness to invest in toilets. None of the national policies and legislations related to WASH specifically addresses the special needs of poor and marginalised groups in a definitive manner. Insufficient budgetary spending and poor planning of WASH services are common inadequacies.

Environmental hygiene

In some studied settlements, new investments have resulted in improved roads and drainage, better access to underground sewerage facilities, provision of waste bins for collection of wastes etc. Nevertheless, different aspects of environmental sanitation (solid waste collection, drainage, liquid waste management) are still not a priority in the sanitation intervention programmes by the government as well as NGOs in poor urban areas. Close to half of the households in many settlements drain wastewater into the river/streams, impacting on the environment. Regulation is often absent. A significant number of households dispose of sewage into open drains and waterways. In one country (Sri Lanka), a gulley service is provided by the local government in a limited area.

Regional recommendations

Based on the study findings, a set of recommendations have been developed. These recommendations are grouped under four major groups: policy and process-specific; resource-specific; technology-specific and education, awareness and behaviour-specific. In advocacy terms, these are the 'Policy Asks' to the respective governments participating in SACOSAN V. These 'Policy Asks' translated into specific commitments and actions will ensure that the challenges highlighted receive the attention they need from the respective governments and the challenges of access to sanitation faced by the poor urban settlements are effectively addressed. They are organised under four broad groups.

Policy and process specific

- **National policies should be in place clearly defining the 'sanitation services including the access to improved toilet' that are guaranteed to all the urban poor.** These policies should offer a basket of technology options so that urban poor have a range of choices that match their financial ability. In addition, these policies should spell out access to public finance to allow adjustments based on specific physical, social and economic conditions of the poor. A data base to ensure accurate targeting of support to urban poor must be put in place. Based on this, the state and sub-national governments should be persuaded to prepare time-bound plans to address sanitation needs for all urban poor.
- The **policies regarding land tenure should be revised and a strong resettlement plan should be developed**, in locations where resettlements are being implemented. This will ensure that the sanitation rights of people living in informal settlements are not violated during the resettlement process.
- **National policies and legislations related to water supply and sanitation should narrow down to state or sub-national issues to address the special needs of the marginalised and excluded groups** of people (e.g. poor, women, senior citizens, people working in informal sectors, people with some form of physical disability). National governments should lay down norms and standards for human waste management and enable state/sub-national and local governments to implement norms and monitor implementation. It is crucial for governments to listen to the voices of local networks and then design appropriate sanitation interventions. Reduce the widening gap in demand for sanitation (toilets, septic tank design and construction, waste management services) and actual supply in service delivery.
- An enabling environment for the **introduction and promotion of innovative financing mechanisms** such as micro-finance and PPP options should be created and executed. These opportunities should be used for waste water treatment and solid waste management
- **Sanitation services should be "delinked" from land tenure** and recognise urban poor households as "genuine users". It means the sanitation needs of urban poor settlers must be recognised and quality services should be provided to all settlers irrespective of their legal status (ownership, rent based, leased). This would allow governments to meet their obligations to ensure universal access to sanitation services to all.

- **Enlarge the concept of "Open Defecation Free" settlements to include "Open Discharge Free" neighbourhoods**. The concept of "Open Defecation Free" is limiting. In many urban situations in all countries community toilets are poorly maintained and liquid waste is discharged into the open. This results in rendering toilets unusable and the environment highly unhygienic.
- **Ensure tracking of sanitation outcomes and processes as an integral component of programme monitoring**, especially in all poor urban settlements. Currently data capturing in almost all urban programmes is restricted to tracking physical and financial progress. Full spending of the budgeted amount does not necessarily ensure achievement of acceptable sanitation standards. Therefore, the need for outcome tracking and process monitoring becomes a core activity.

Resource specific

- In line with the policy recommendation suggested above, **all urban areas should develop robust plans to end open defecation and ensure access to improved toilet facilities for the poor within a period of maximum three years**. Revenue of the urban local bodies, grants from the national and sub national governments should be pooled to meet the estimated costs. The grants to urban local bodies should be linked to compliance to plans and commitments of progress on access to improved toilets for the poor.
- **Low cost financing products should be made available** to enable adequate investments by the ULBs, public institutions and poor households in urban areas to end open defecation and ensure access to improved toilet facilities.
- Relevant urban bodies must have dedicated staff responsible for achieving the targets of ODF and access to improved toilets.
- Necessary mechanisms should be institutionalised to engage other service sectors catering to the needs of the urban poor (such as poverty reduction, health, education) in promoting sanitation for the poor.
- At least 20 % of the budgets allocated for sanitation development should be spent on hygiene education, review and monitoring of the planned programmes; capacity development of the implementing agencies; research on gap analysis and health and environmental gains of the sanitation progress.
- The data on improved progress, budget allocations and utilisation and all other critical parameters should be in the public domain as it enhances transparency and accountability thereby strengthening the implementation of plans and programmes.
- Adequate budgetary support should be provided by national governments and any subsidies should reach the "real poor". The urban poor and the marginalised should not suffer due to inadequate resources. National, state and local governments should ensure co-ordinated actions in WASH investments.
- Commit and allocate a fixed amount of budget by state and local governments for Operation and Maintenance of public toilets and drainage systems. This should be done based on the information generated after carrying out a city-specific baseline study

- Allocate resources in the budget in the local body budgeting systemto build capacities and skill development of CSOs working in poor urban settlements
- Promote broad based investments in sanitation from the private sector by encouraging investments under Corporate Social Responsibility. At the policy level, this can be done only by the national governments. At the lower levels of governance, implementation is done by state and sub-national governments. For example, the Government of India has recently enacted a policy to ensure financial commitments from corporate establishments in a range of 1 to 2% of their profits, based on some specific criteria. This opportunity should be leveraged by state governments to ensure adequate flow of finance to the sanitation sector. Other countries can also encourage the corporate sector to invest in promoting sanitation for the poor who are often direct and or indirect contributors to the business of these entities.This will ensure sanitation sector does not face resource constraints.

Technology specific

- National governments should ensure move away from 'one size fits all' approach and design location-specific options, target group-specific sanitation and hygiene management programmes. Leverage already available appropriate technological options such as decentralised water treatment technology.

- Promote improved toilet designs to ensure the inclusion of marginalised and the excluded groups such as women, children, people living with disabilities. A time-bound monitoring plan to ensure compliance should be put in place. This monitoring should be done on an on-going basis, preferably by a third party.

- Provide affordable septic tank emptying and septage treatment services for a large number of households dependent on septic tanks.

- In many cases the pit emptying equipment (e.g. gulley suckers) cannot access septic tanks due to space constraints in urban environments (e.g. narrow lanes in studied slums in Colombo, Sri Lanka).National governments should prioritize investments in research and development to develop appropriate, effective and low-cost technologies.

- National governments should focus on developing cost effective technologies for composting and/or re-use of human waste. Some models (e.g. waste composting, decentralised sanitation) are available in some member countries (Nepal and Bangladesh). These should be further studied, popularised and adopted by other countries

- Increase the number of public toilets in busy thoroughfares by the local governments and develop an effective system for operation and maintenance to ensure the provision of a basic standard of facilities. Develop norms by the national and state governments on user ratios, toilet maintenance, cleaning, quality of water supply, septic tank emptying etc. and place them in the public domain. A strong and regular monitoring systems should be established which outlines penalties for any poor performance by service providers.

- Invest in decentralised wastewater treatment infrastructure in poor urban settlements. Provide adequate wastewater and drainage facilities across slums. Conduct awareness and education programmes on toilet use, basic sanitation and hand washing practices on an on-going basis.

- Bring in 'value adds' to urban planning tasking using technologies such as GIS. Local governments should physically map marginalised areas in cities to better target their service delivery interventions.

Education, Awareness and Behaviour specific

- Local governments should promote the use of newly built toilets, through behavioural change interventions. The national and sub-national governments should focus on behavioural modification to ensure ownership and accessibility of toilets result in 100% use of toilets built. Monitoring should be outcome focused.

- Enable the urban poor communities to translate know what (knowledge) to know how (skills and behaviour) by investing in community education and behaviour change programmes.

- The sub-national and local governments should organize exposure visits to sanitation sector players and communities to orient them to technological innovations and best practices in sanitation. A specific budget and time bound plan should be developed by state and local governments for this purpose.

Country-specific Study Results

Country specific findings and explanations are provided below.

Dhaka, Bangladesh

Eight slums: Shinepukur; Rishipara; City PolliBosti; AinalerBosti; Bedepara; Bauniabad Porabosti; Korail Bosti and Ghuntighar Railline Bosti.

Issue Cluster	Explanation
Open defecation	Open defecation is highly prevalent in the slums. It is well above national average of 4%, varying from 5% to 30% in the study slums.
Toilets and condition of toilets	Lack of availability; lack of accessibility even if available. Sanitation coverage is better in intervened slums but a significant portion of toilets have become unhygienic or non-functional. Approximately 30% of available toilets (32% of the functional toilets) were found to be hygienic. The question of sustainability in terms of maintaining physical infrastructure of toilets remains a challenge. The lack of ownership of the toilets by the communities is the main reason for this.
Hygiene knowledge and awareness	Hygiene knowledge among the slum dwellers is satisfactory but translation from "know what" to "know how" is doubtful.
Marginalised and excluded communities	Although in programme intervention areas, sensitivity to the needs of marginalised groups does exist, inclusion in terms of decision making process is not satisfactory. Women, children, people living with disabilities and elderly people suffer most due to technological inappropriateness of latrines, unavailability of menstrual hygiene care facilities and location of toilets.
Willingness to pay	Willingness to pay is low. People understand the impact of sanitation on health and economy, and the dividend pay off from good hygiene practices; they are reluctant to pay for improved services. Affordability is also a question
Policy and Governance	Poor urban settlements are given lower priority by the government in development interventions. Mobilisation of resources is poor by the government to address sanitation needs of urban poor communities Subsidies provided by the government to construct toilets are inadequate. This is reflected in the opinion expressed during the

Issue Cluster	Explanation
	surveys that only about 25% of the households are willing to make a monetary contribution to improve the sanitation situation in their areas slum. Respondents cited lack of affordability as the key reason.
Environmental Hygiene	Different aspects of environmental sanitation (solid waste collection, drainage, liquid waste management) are still not a priority in the sanitation intervention programmes by the government as well as NGOs in urban poor areas. This is an important aspect that needs immediate attention.

Bengaluru and Lucknow, India

Lingarajapuram in Bengaluru and Paltan Colony in Lucknow

Issue Cluster	Explanation
Open defecation	The situation is far better than other similar slums within the surveyed cities. Different studies put average open defecation figures in similar slums in a range of between 30% and 70%. The key reasons for improvement lie in the facility of underground drainage laid by the local governments and the on-going hygiene education campaigns being conducted by several NGOs.
Toilets and condition of toilets	A large majority of surveyed households have toilets within their premises, although there are small and cramped, with hardly any space for physical manoeuvring. Approximately 87% of households in Lucknow are connected to underground piped sewerage, whereas only 13% have soak pits. Again, the long history of this settlement and that this is an approved colony may explain this phenomenon. For those who lack a toilet, there are three alternative options: use of community toilets in the neighbourhood; open defecation or using the railway tracks (this is not significantly different from open defecation). Community toilets are poorly maintained; water is in short supply. These community toilets are maintained by the local governments (e.g. Lucknow Nagar Nigam or Bengaluru BrihatMaha Nagar Palika). Most of the toilets are connected to underground drainage (UGD) system. Less than 2% are new and they are not connected to UGD. The septic tanks are cleared from such septic tanks occasionally and the septage is either let into the UGD by illegally opening manholes or disposed in the open spaces outside the area.
Hygiene knowledge and awareness	Hygiene awareness is reasonably good but the incidences of jaundice, diarrhoea, typhoid (20% of households have reported incidences of typhoid in the past six months) and other water borne diseases are high. This is mainly because of the poor environmental hygiene. Households spend on average about one month's annual income on coping with health issues. Behavioural change interventions have been tried out in both the places. However, the behavioural interventions are stronger and long lasting in Bengaluru.
Marginalised and excluded communities	Accessibility of toilets to marginalised and disabled people is extremely poor. Designs are not age and disability friendly.

Issue Cluster	Explanation
Willingness to pay	For waste collection most households are paying a basic fee. People are willing to pay more, subject to improvement in services.
Policy and governance	Bengaluru fares better than Lucknow. The local government in Bengaluru is more pro-active. In addition, a number of NGOs are working in the area on WASH and waste management programmes. Door to door collection of waste is implemented. The household income distribution figures also indicate that Bengaluru is better than Lucknow. The percentage of households falling in the upper income band (i.e. Rs 8,000 per month above) in Bengaluru is 34%, where as in Lucknow it is just 11%. Although this does not exactly hold a mirror to better policy and governance, it is a reflection of better income opportunities accessed by urban poor households. This is primarily due to the pro-active policies of the state government extended to urban poor households by promoting private investments in employment generation activities.
Environmental hygiene	The overall physical environment (layout, roads, drainage, hygiene, surroundings of the dwelling units) is similar to many other urban poor settlements of similar size. However, in some respects settlements in both cities fare better because of the recent infrastructure investments done by the respective local governments. The investments have resulted in improved roads and drainage, better access to underground sewerage facilities, provision of waste bins for collection of wastes etc.

Kathmandu Valley, Nepal

Seven urban poor settlements - Bagmati; Bishnumati; Hanumante/Manahora; Dhobikhola; Tukucha; indigenous settlements; and low income renter families

Issue Cluster	Explanation
Open defecation	Open defecation has surprisingly been reduced in the informal settlements. Presently, more than 92% of households have toilets. However, 50% of households dispose their wastewater into the river/stream.
Toilets and condition of Toilets	Close to 90% of households have toilets with their premises. Limited low cost technology options. The existing toilet construction and septic tank options are expensive. Community toilets are in poor condition; scores low on maintenance.
Hygiene knowledge and awareness	About 10% of households wash their hands only with water after defecation. This practice shows about two fold increase (20%) after handling waste and threefold increase (38%) before having food. The number of families with diarrhoea in the preceding month of the survey was 17%, pointing towards poor hygiene practices.
Marginalised and excluded communities	Poor urban residents are reluctant to make investment in building permanent houses including latrines because of lack of security of land tenure. People on rent are prevented from using toilets in the rented premises.
Willingness to pay	82% of families invested their own money to build toilets in their houses. All families who do not have toilet are also willing to build toilet by taking loan. People are willing to pay for services like sewerage connection and solid waste management. People in one of the informal settlement are currently paying Rs100 per month for solid waste collection services.
Policy and governance	Sanitation for urban poor and marginalised communities, the Urban Water Supply and Sanitation Policy 2009 commits to mainstream these groups as *valid customers* for service delivery. However, the government has neither settled the land tenure issues nor recognised people living in informal settlements as *valid customers.* National policies and legislations related to water supply and sanitation have not clearly addressed the special needs of poor

Issue Cluster	Explanation
	and marginalised groups. The policies broadly state giving priority to the vulnerable communities but fail to translate into doable actions
Environmental hygiene	Lack of proper drainage and disposal/treatment systems. More than 50% of households drain wastewater into the river/streams, about 2.5% use open space and only about 4.5% of the households use Municipal Sewer. Universal sanitation coverage in urban areas cannot be achieved, unless this issue is fully addressed.

Lahore, Pakistan

Shadewal; MeyonWali Gohawa (specific Mohallas); Christian Colony; YaseenGarden(Lakhoder); Mariyam Colony (Specific Mohallas) and GowalaPind

Issue Cluster	Explanation
Open defecation	Open defecation is not reported by any of the study households, though situation is not the same in other slums.
Toilets and condition of Toilets	Flush latrines are available. However, ventilation is a problem. Community latrines are used by negligible number of households. Majority observe hand washing and other hygiene practices. Piped water supply is absent. Coping cost to the communities to meet water requirements (drinking and sanitation purpose) is high. Households invest INR 15,000- INR 25,000 as capital cost to purchase motorised pump. In addition, they pay INR 500 per month to operate it. This cost is significantly higher than the standard INR 300 per month paid to the government for piped water supply.
Hygiene knowledge and awareness	A large majority of urban poor frequently suffer from water borne diseases.
Marginalised and excluded communities	Four types of exclusion noticed i.e. geographic, ethnic, occupational and legal. All the settlements located in the periphery of Lahore are devoid of mainstream development programmes. No provision for health facilities
Willingness to pay	Willingness to pay is directed at water supply; solid waste and liquid waste. Over two third households demand improved water services for which they are willing to pay between Rs 100 to Rs 300 per month. For solid waste management people are willing to pay Rs 50 to Rs 100 per month and about 18% are willing to pay even beyond Rs 100 per month. For construction of liquid waste management facilities, more than half of the households are willing to pay between Rs 2000 to Rs 5000 as one time cost.
Policy and governance	Inadequate budgetary spending on water and sanitation. Poor planning and management across agencies
Environmental hygiene	Liquid waste management is unattended to. No underground drainage. Solid waste management is also poor.

Colombo, Sri Lanka

ModaraVeediya (173 Watte); Aluthmawatha (737 Watte); KimbulaEla (Para); Red Bana Street; Mosque Road; Red BanaWatte; and Kovil Road of Colombo City Municipal District

Issue Cluster	Explanation
Open defecation	Prevalent in about 7% of households, mainly amongst poor households (common toilet users). Lack of affordability and habits (especially amongst fisher folks) are the main reasons.
Toilets and condition of Toilets	A majority of households own toilets, except for the 'real poor'. Most of the toilets have little or no ventilation and open directly into the kitchen. One aspect that cannot be ignored is that the dwelling units are unauthorised making sewer connections illegal. Sanitation conditions in common toilets often not satisfactory and maintenance is poor. The gulley service is provided by the Municipal Council free of charge. Close to 9% of toilets do not have doors. The gulley service is provided by the municipal council is free of charge
Hygiene knowledge and awareness	Awareness programmes to be conducted on a continuing basis on use and maintenance of the new housing units for families, particularly to the relocated families. The general level of hygiene in under-served households which have private toilets is fair. Comparatively the situation in the common toilets is not as good.
Marginalised and excluded communities	Lack of an Interim Plan for Sanitation for vulnerable groups (underserved settlements) in Colombo City has been identified as one of the most important aspects. But as a majority of the underserved settlements are categorised as unauthorised they do not receive sanitation services provided by the government. To this extent they remain excluded and marginalised. Although the government has a plan to resettle these people it will happen only in stages during the next decade or so. Hence an interim plan for sanitation for those who will be relocated (especially those who will be relocated at the end of the programme) is required. Currently there is no such plan.
Willingness to pay	90% of households stated that they paid for water. The National Water Supply and Drainage Board (NWSDB) also charges for the water supply to common toilets in underserved settlements. The bill is shared by the households who use common toilets. People have no issue in paying for water and common sanitation services.

Issue Cluster	Explanation
	'Willingness to pay' does not appear to be an important issue because everyone has to pay for water by law and regulation. It is not a matter of choice for the consumer but a legal requirement. Non-payment amounts to disconnection of water supply after due notice.
Policy and governance	Specific programmes and projects for achieving good sanitation have also been designed for targeted vulnerable groups. Resources and manpower for on-going projects have been allocated. The strategy for achieving good sanitation particularly for vulnerable groups is through the governments' housing policy. The government is in the process of building housing for the urban poor communities to relocate them with legal ownership.
Environmental hygiene	A significant number of households dispose sewage into open drains and waterways. In places where the gulley service is not provided on time, sewage is let out into open drains and waterways .

Country-specific recommendations & advocacy action implications

Arising out of the study findings, a set of recommendations have been spelt out below. These recommendations have implications on the design of country-specific advocacy strategies. They specifically apply to respective FANSA chapters and help them to design, develop and deliver relevant advocacy actions. These actions will have to be further broken down to specific and measurable campaigns or activities by the respective country chapters.

Bangladesh

Recommendation	Advocacy action implications
Slums across the country and particularly in Dhaka are neglected in terms of resource allocation. The local and state governments to be persuaded to give priority to WASH related development activities and stress on mobilizing required resources.	Strong advocacy with the local governments to ensure subsidy reaches the "real poor". Mobilizing local communities to raise their demand is also important. The highlight of the advocacy action should be the poor and marginalised should not suffer due to inadequate resources because WASH investments pay high dividends in the long term. The FANSA-Bangladesh to develop specific advocacy action plans in this regard and to specifically focus on local governments. The advocacy actions to be supported by budgetary evidence such as declining WASH investments and increased population pressure in urban poor settlements
Grassroots voice must be valued to ensure sanitation right of all the citizens and eliminate or reduce the existing gap in terms of equity and inclusion, particularly marginalised groups	Build local level network to amplify the voices of people. Actively advocate with the local and national governments to listen to peoples' voices and to design inclusive WASH interventions. Prepare a database on exclusion of marginalised communities in WASH programmes. The household survey data becomes one of the indicators to amplify this. Related secondary indicators also to be researched by FANSA network and be submitted as evidence.
The household survey data indicated that latrines are located at distant places access to which are difficult for pregnant women, children, disabled and elderly people and no separate cubicles provided for women and children. No special arrangement for the disabled	Initiate advocacy actions to move away from 'one size fits all' approach and design location-specific, target group-specific WASH programmes. The FANSA network to promote broad based technical options by the governments. The appropriate technical options already adopted by select NGOs and other actors and other FANSA chapters (e.g. Nepal) to be showcased. Exposure visits to local government officials and to civil society groups to

Recommendation	Advocacy action implications
and elderly. To remedy this situation, technological innovations need to be devised through research and knowledge sharing that will serve the long term sanitation requirements of the slums, and the excluded groups in low income urban communities.	be organised.
The slums are located in low lying areas where wastewater and storm water are accumulated from the slum and other part of the urban areas and not adequately drained. Therefore, environmental sanitation to be given high priority by WASAs and Paurashavas (local governments)	Advocacy strategy to emphasize on participatory and inclusive approach by WASAs and Paurashavas. They need to ensure that there are adequate wastewater and drainage facilities across slums and create awareness on the importance of environmental hygiene.

India

Recommendation	Advocacy action implications
Seek increased budgetary allocations from the municipalities. They need to prioritize WASH issues in their annual budgets	Take up strong advocacy actions to allocate increased budgetary allocations for WASH programmes. Promote innovative financing mechanisms (e.g. micro-finance and sensibly executed PPPs).
Improve both water supply and sanitation services, including waste management	Advocacy actions to focus on improving water quality. Regular testing of tap water at the domestic end will provide evidence for advocacy actions in this regard.
High level of spending on health issues can be reduced if improved health infrastructure is provided near or within the settlement	The elected representatives and municipal health officials to be presented with illness related data and outbreak of water borne diseases during monsoons. This is to be supported by loss of productivity in terms of work days lost and income foregone by the urban poor. The advocacy effort to start well before the advancement of monsoon. Advocacy actions to focus on the need for increased budget allocation to adequately cover the needs of urban poor.

Nepal

Recommendation	Advocacy action implications
National legislations and Local Government policies should be revised in order to increase finance for urban sanitation. The policies should encourage innovative financing to increase funding for sanitation services to poor and marginalised communities	Take up strong advocacy actions to allocate increased budgetary allocations for WASH programmes. Promote innovative financing mechanisms (e.g. micro-finance).
The policies regarding land tenure need to be revised. Effective resettlement plan to be developed to ensure WASH rights of people living in informal settlements thereby recognizing them as valid customers of water and sanitation services.	Initiate advocacy actions to ensure resettlement plans do include WASH rights of the real poor and marginalised. Advocacy strategies to be developed to recognize their rights as genuine users of services
National policies and legislations related to water supply and sanitation to clearly state specific provisions to address the special needs of the marginalised and excluded groups of people	
Experimental technological solutions to challenges related to urban sanitation are available within Nepal. Appropriate technological options for latrines, waste (e.g. composting) and wastewater management (e.g. decentralised waste water treatment systems) to be developed and promoted.	Take up advocacy actions to test and adopt such solutions on scale. Bring all the actors on a common platform
Build drainage and sewage disposal network. Meticulously follow the twin principles of 'Open Defecation Free' as well as 'Open Discharge Free'	Take up advocacy actions to highlight joint venture between the communities and the government to ensure 'Open Defecation Free' and 'Open Discharge Free' neighbourhoods

Pakistan

Recommendation	Advocacy action implications
Promulgate provincial sanitation policy with distinct focus on development of marginalised areas	Initiate advocacy actions to promote provincial sanitation policy, which includes pro-poor approaches
Design and develop specific programmes on sanitation improvement of low income areas	Initiate advocacy actions to promote provincial sanitation policy, which includes pro-poor approaches
Map all of the marginalised areas (GIS based maps)	To advocate for taking up this exercise as a value add to the urban planning task of the municipality and subsequent improvement in service provisions.
Improve coordination between various service delivery agencies	Actively advocate for the need for all agencies to come together for better coordination and work towards issuing a government policy on this
Civil society to play a greater role in influencing governments specifically on issues such as inclusion and equity.	Build the capacity of civil society in advocacy actions on WASH. Conduct training and capacity building programmes on advocacy skill development specifically for civil society target groups.

Sri Lanka

Recommendation	Advocacy action implications
Fix a definite timeline and achievable targets for resettlement of the urban poor. A monitoring and evaluation plan for assessment of the implementation of the housing and relocation programme must be put in place.	Take up advocacy actions on monitoring of WASH processes and WASH outcomes. Sensitize local government actors in this area. FANSA network to design monitoring framework from the civil society perspective, which includes process and outcome indicators besides physical and financial indicators and share with the government actors.
Implement awareness programmes on the use and maintenance of the new housing units particularly on the use of the new toilets and hygiene aspects.	FANSA network to promote internal advocacy actions for the communities to ensure use of newly built toilets. Put to use the capacity building curriculum already developed by FANSA network partners and conduct grass roots level capacity building programmes.
Improve coordination amongst Colombo City Municipality (CMC) divisions that are responsible for providing sanitation services.	Raise the pitch of advocacy actions to ensure improved coordination amongst various CMC divisions and hold them to account at the local level. Develop specific case studies on the negative impact of poor coordination amongst various divisions and how better coordination can improve WASH results.
An interim plan needs to be drawn up for the improvement of sanitation and/or sanitation services for underserved settlements until relocated.	Hold advocacy workshops with the local governments and emphasize the importance of interim plans. The advocacy workshops to include local elected leadership.

Freshwater Action Network South Asia

Freshwater Action Network South Asia (FANSA) unites over 450 civil society members in five South Asian countries to influence decision making on water and sanitation from the local to the global level.

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