

# WSUP Learning week

17<sup>th</sup> -21<sup>st</sup> May 2010



*Alison Parker (Cranfield University), Kevin Tayler, Helen Pankhurst (CARE), Rob Clarke (Halcrow), Mark Waite, Patricia Schelle (WWF), Alan Etherington (WaterAid)*

*Edited by: Alison Parker*

## Contents

Introduction	3
1. Capacity building	4
2. Policy	6
3. Funding	8
4. Gender	9
5. Sanitation	11
6. Hygiene	13
7. Partnership	15
8. Water	19
9. Household impacts	22
10. Environment	23
Appendix 1 – Notes from questionnaires	
1. Capacity building	26
2. Policy	27
3. Funding	28
9. Household impacts	30
10. Environment	31
Appendix 2 – Additional tables	
1. Capacity building impacts	33
5a. Latrine details	34
5b. Other sanitation issues	38
6. Hygiene promotion strategies and details	42
8. Lessons around water	43
9. Household impacts	46
10a. WSUP Environment Strategy	48
10b. Overview of past and current environment activities	49
10c. Learning points from completed work	51

*Cover photo: Water kiosk in Gatwekera, Alison Parker*

## Introduction

The inaugural WSUP learning week was held on 17<sup>th</sup>-21<sup>st</sup> May 2010. The aim was to supplement the learning at the Project Implementation Workshop, usually held in November, with a series of telephone conferences on different themes. Thus WSUP is formally learning from its projects and partners on a biannual basis.

The preparation for the learning week involved sending a questionnaire to all project managers, which asked them to list the “successes and contributing factors” and “challenges and obstacles” under a series of different topics:

- Policy/enabling environment
- Capacity building of water and sewerage utilities
- Capacity building of municipalities/City Corporation
- Capacity building of SSIPs (for-profit) and CBOs (non-profit)
- Partnerships
- Water Services
- Sanitation Services
- Hygiene
- Environment
- Gender and inclusion
- Programme Funding

The Project Group studied these questionnaires to spot common themes (see appendix 1) and compiled a series of questions to be asked in nine telephone conferences. The telephone conferences were attended by Project Managers and other key project staff and partners (not all projects were represented at every call). This document contains the notes compiled following the calls by the Project Group members

The ten calls, and the questioner and note taker were:

1. Capacity building – Alison Parker
2. Policy – Kevin Tayler
3. Funding – Alison Parker
4. Gender – Helen Pankhurst
5. Sanitation – Alan Etherington
6. Hygiene – Alan Etherington

7. Partnership – Helen Pankhurst
8. Water – Rob Clarke
9. Household impacts – Mark Waite
10. Environment – Patricia Schelle

Acronyms:

AdeM	Aguas de Maputo
BBMP	Bamanga,ore Municipal Council
CBO	Community Based Organization
CMCM	Maputo City Council
JIRAMA	Antananarivo Water Utility
LSP	Local Service provider
Naivawass	Naivasha Water Supply & Sanitation Agency, Kenya
NCWSC	National Water & Sewerage Corporation, Uganda
NRW	Non- revenue Water
SSIP	Small Scale Independent Provider

## 1. Capacity Building

### Questions

1. Do you think it's important to build LSP capacity overall, or should WSUP focus on pro-poor service provision?
2. What role do you think personal benefits (like international travel or expenses) play in engaging key LSP staff?
3. Have you provided a comprehensive plan for urban poor service provision in your city? How was it received?
4. Are exchange visits/demonstrations valuable in sharing experiences on technology and finance with other cities? Why? Would/Are key LSP staff be willing to take part?
5. How do you incentivise community members who have undergone capacity building to remain in the community? Or is their migration to other communities beneficial to the city as a whole?

### Learning points

1. *Do you think it's important to build LSP capacity overall, or should WSUP focus on pro-poor service provision?*

The experience so far is that building LSP capacity more generally puts them in a better position to reach the peri-urban areas with more supplies. A struggling utility will inevitably prioritize services to those who can afford to pay. Capacity building also provides an incentive to LSPs to work with WSUP programmes.

WSUP LSP capacity building activities can be beneficial for both the LSP and the urban poor. The urban poor get a good service, whilst the LSPs (e.g. AdeM and JIRAMA) increase their customer base and revenue. However it can be harder engage municipalities (e.g. MCN and CMCM) due to their limited resources.

2. *What role do you think personal benefits (like international travel or expenses) play in engaging key LSP staff?*

Question not addressed

3. *Have you provided a comprehensive plan for urban poor service provision in your city? How was it received?*

City-wide water and sanitation implementation plans are always well received by LSPs, especially where stakeholders have ownership of the plan and it takes in account their priorities and needs. Neither the LSP nor other stakeholders have a full picture of the needs of the community, so

bringing all three together is very valuable. In addition, LSPs (e.g. CMCM and Naivawass) may have no capacity to create such plans.

*4. Are exchange visits/demonstrations valuable in sharing experiences on technology and finance with other cities? Why? Would/Are key LSP staff be willing to take part?*

Visits to other low-income countries can have a big impact as they can engage LSPs. Also the situation observed is close to the LSPs' own and they can share experiences and strategies. Travelling overseas also gives staff the opportunity to manage oneself in an unfamiliar country with limited resources, and address issues outside the utility.

*5. How do you incentivise community members who have undergone capacity building to remain in the community? Or is their migration to other communities beneficial to the city as a whole?*

Capacity building of CBOs is viewed positively by LSPs who are then keen to engage with them. However some projects (e.g. Naivasha) have a shortage of CBOs which makes project delivery challenging. Only Nairobi and Dhaka had a problem with the migration of CBO members. They consider the capacity building of CBOs to be a continuous process because implementation takes a long time and CBO membership might change during this time. If CBO members move to another area it should be considered a gain to WSUP as they will take their experience with them. However CBOs need capacity building in recruitment to make it easy for them to maintain numbers. Migration was not considered a problem in Tana or Maputo.

#### **Additional points**

The experience of commencing a capacity building programme with LSPs varied. For some (e.g. AdeM, a private contractor) it is difficult to recognise their weaknesses across the spectrum of service provision, particularly in front of other organisations if they have been contracted on their reputation as a specialist on an international level. However, others have been keen to carry out a capacity building self-assessment (e.g. NCWSC, BBMP, Naivawass).

Capacity building managers and directors can be worthwhile as lessons learned can be diffused through the organisation. Staff who have attended training courses are often more rapidly promoted, particularly if the training course resulted in a qualification. This type of capacity building work typically concentrates on a small number of individuals. However, if these staff leave their experience is lost to the organisation. Alternatively capacity building could focus on technicians and private operators who are working on the ground. This can be done at lower cost and hence involve more people, LSPs in Kumasi and Naivasha simply do not have sufficient staff working on the ground.

The table below shows where Capacity building is still required in the areas of:

Topic	Maputo	Nairobi	Naivasha	Tana	Kumasi	Bangalore	Dhaka
Leakage							
NRW							
Corruption							
GIS							
Business planning							
Contracting							
Modern development strategies							
O&M							
Roles and responsibilities of different stakeholders							
Appropriate technology							
Revenue collection							
Community liaison							
Pro-poor services							

Appendix 2.1 details some capacity building activities and their subsequent impacts on the LSPs and the low-income settlements.

## 2. Policy

### Questions

1. What (if any) policy areas should WSUP focus on, who should it talk to regarding these policy areas and should efforts to influence policy follow or run in parallel with field implementation?
2. How can WSUP influence policy relating to water and sanitation services to the poor, particularly those living in 'informal' areas?
3. How can WSUP influence policy on sanitation and hygiene promotion, making sure that each is given the resources that it needs? (In the case of sanitation, there are the additional questions of who should do and pay for what and what government and outside agencies should subsidise).
4. How can WSUP help to build coalitions to influence policy?

## Learning points

### *General*

It was generally recognised that having the right policies in place is crucial to successful project implementation. We need to both explain the ways in which policy affects WSUP supported projects as well as the more general need to actively advocate for better policies in order to make these projects easier to implement. One point that emerged is that WSUP's position as a cross between business and NGOs that is actually implementing programmes puts it into a good position to support advocacy for policy change.

#### *1. What policy focus?*

There was general consensus that the most serious policy gaps relate to sanitation and hygiene. Often, there is no clear policy on who should be responsible for elements of sanitation provision other than sewers. Partly as a result of this, resources tend to be directed to water supply and sewerage rather than sanitation as such. With respect to this point, it is important to recognise that organisations such as Dhaka WASA do not have a remit to either provide or promote sanitation. It seems fairly clear that WSUP cannot completely ignore such policy gaps. However, it was recognised that these are big subjects on which WSUP cannot bring about changes in policy on its own.

It may be better for WSUP to focus on demonstrating better ways of delivering services to the poor as a precursor to efforts to influence policy. One approach to this would be to lobby for by-laws and restrictive regulations to be relaxed in WSUP project areas, which might be treated in some way as 'special development zones'.

An important point to emerge is that good policy may be a prerequisite for change and development, but is not in itself sufficient. It is also necessary to ensure that those who are responsible for implementing policy accept it and are prepared to implement it. Perhaps WSUP can play a role here in sensitising LSPs.

#### *2. Policy on services to the poor*

Another general area of concern was policy in relation to 'informal' areas with uncertain legal status. This is not a new concern and is not an easy issue to deal with. Certainly here, it seems that WSUP will only have an impact if it works with other organisations. One key point emerging from the discussion is that WSUP does not have to advocate for changes in policy towards land ownership and tenants rights as such. What it can and should do is advocate with government and LSPs to ensure that informality is not a barrier to receiving essential services.

There does appear to be scope for advocacy for policy change in relation to points such as charging arrangements for house connections to make connection more possible for urban poor households. There seems scope to advocate for implementation of practical solutions/approaches (such as a lower cost of household connections or spreading its cost over a long period)

One specific point to emerge is that there is a need for pro-poor regulation. It is possible for WSUP to engage on this point in Kenya because there is a regulatory body and WSUP has a good relationship with this body, at least in Naivasha.



### *3. Sanitation and hygiene*

The group clearly recognised the importance of advocating for better policies on sanitation and hygiene, starting with recognition of the need to assign clear responsibilities for these areas and to provide the funds necessary to ensure that policy requirements are implemented in practice. It was less obvious what this might mean in practice and the consensus appeared to be that WSUP can best address sanitation and hygiene issues by demonstrating approaches and working with others to advocate for required policy level change.

### *4. Coalitions and with whom to build them*

The general consensus was that, on its own, WSUP is not in a position to actively advocate at higher government levels. However, the possibility of advocating for change in association with networks of civil society organisations, international agency partners and LSP partners was recognised by most. The situation is not the same in every country with some countries projects suggesting that LSPs could not be partners in seeking policy change while others, for instance the Kenyan projects, recognised that some LSP partners (in the Kenya case the Regional Water Boards) could have a role. Naivasha also noted the value of partnership with SNV while Dhaka and Bangalore both noted the value of working through networks and in partnership with NGOs.

#### **Additional points**

Next steps: This is probably a subject for further discussion. With WSUP budgets likely to be constrained in the immediate future, it seems that concerted efforts to policy change will have to be deferred, but is there anything that we could and should be doing in the policy area?

## **3. Funding**

#### **Questions**

1. How can WSUP help in unlocking government funds?
2. Does your team have sufficient capacity to influence national budgetary allocations?
3. Should assisting LSPs to develop proposals for IFIs and the government be a key priority for WSUP? Would it lead to real mobilisation of funds??
4. How can WSUP (Secretariat, PG) best help you to write successful funding bids?
5. What does WSUP have to do to increase donor funding into peri-urban areas?

#### **Learning points**

1. *How can WSUP help in unlocking government funds?*

In India WSUP needs to be strategically positioned to attract government attention. WSUP is perceived as a low-key organisation amongst lots of other organisations. It needs to assert its position as an organisation with expertise on urban water and sanitation, by publishing documents, writing sanitation plans, policies, hosting dialogues about the urban poor, sponsoring events and

getting its logo seen. Working together with other, more established organisations (like WaterAid) may also influence funders.

2. *Does your team have sufficient capacity to influence national budgetary allocations?*
3. *Should assisting LSPs to develop proposals for IFIs and the government be a key priority for WSUP? Would it lead to real mobilisation of funds??*

Some countries have basket funding (e.g. Kenya and Zambia). WSUP have engaged with the major contributors to the basket funds who may have the biggest influence on the allocation of funds, although WSUP's role here is questionable as the emphasis should be on local ownership, accountability and leadership. For example, lobbying the Water Boards who can influence the Ministry of Finance, the councillors who can lobby the Local Authority, the Ministry of Local Government or WSP.

If Large scale projects (e.g. treatment works, reservoirs and pipes) achieve funding (e.g. Mozambique, India). WSUP teams need to advocate for these funded LSPs to invest in urban poor settlements.

Donors do not give funds directly to LSPs, the funds come through the ministries (e.g. Bangladesh). This is particularly challenging as there can be delays in the funding arriving, resulting in periods of inactivity. Core operating costs need to be covered during dormant periods.

4. *How can WSUP (Secretariat, PG) best help project teams to write successful funding bids?*

The WSUP teams would prefer to be assisted to write funding proposals themselves, rather than have this done at the Secretariat level. However, the teams would welcome both the capacity building of existing staff, and the employment of additional staff to write good proposals. However finding staff with the relevant skills (including understanding donors' criteria and writing good English) is not easy – these people exist mainly in NGOs, but even in NGOs there can be skill gaps. There is a possibility that this could be done by a consultant, but still someone is needed to attend meetings and knock on doors. Lots of proposals require portfolio approaches which makes it challenging to involve project teams. LSP staff also need capacity building and support to prepare funding proposals. These do not necessarily have to be focused on the poor. The Secretariat have a role in influencing donors to invest in peri-urban areas.

5. *What does WSUP have to do to increase donor funding into peri-urban areas?*

WSUP can invite influential individuals to visit their successfully implemented, scaled-up programmes. This will not only illustrate the poor conditions which are unique to urban areas (e.g. flooding, overcrowding) but also how it has solved problems (e.g. narrow streets). However WSUP may not be able to invite influential enough people to visit the projects.

### **Additional points**

Although donors promote an integrated approach to water, sanitation and hygiene, in general there is considerably less funding for sanitation. Barriers include governments prioritising drainage and public (not communal) toilets and a lack of land tenure making communities ineligible for grants.

## 4. Gender and vulnerability

### Questions

1. Are there any WASH gender strategies in place that you are aware of/using?
2. How visible are women in leadership roles and decision-making?
3. Does the implementation work include any targets and if so are these institutionalized or WSUP only targets?
4. Are there any specific gendered or vulnerability-focused approaches in the implementation work?
5. What is the structural/institutional WSUP model regarding gender?

### Learning points

2. *Are there any WASH gender strategies in place that you are aware of/using?*

Generally, WSUP projects are not aware of and therefore not working under any guiding gender strategy applicable to the sector. It is unclear from the responses whether these just don't exist, or whether if they exist they are rhetorical only and with no clear implementable implication.

However within the wider public sector context, there is a one third women reservation for political appointees in India and a thirty percent target in government institutions in Kenya. Also in Bangladesh, a National Gender Strategy was developed but it created some controversy and is being reviewed.

Donors also have policies in terms of gender and vulnerabilities that should be guiding projects, for example, USAID has standards on accessibility, for example, based on analysis that on average 10% of the population have a disability and that this is greater in developing countries (80% of disabled are in developing countries).

3. *How visible are women in leadership roles and decision-making?*

There is significant variation across the project areas in terms of women's visibility in leadership. Generally formal government structures linked to this sector are dominated by men – with the main exception being in Maputo.

There is also a sense that maybe this is changing, particularly due to targets for women's representation in the case of Kenya and possibly to a lesser extent in India.

4. *Does the implementation work include any targets and if so are these institutionalized or WSUP only targets?*

Overall there seem to be some level of targeting of women, but this is more clearly articulated and more explicit in some cases. For example, in Gatwekera the project seems to have separate targets for the percentage of women members, leaders, provided employment, and trained.

Where there are targets, these are part of the sector's understanding of good practice not specific to WSUP. There is little evidence of targeting linked to vulnerabilities such as physical disabilities.

5. *Are there any specific gendered or vulnerability-focused approaches in the implementation work?*

Overall, there is some evidence of attention to differentiated gender needs - less so to other vulnerabilities within WSUP work to date.

There was also a sense that a clearer upfront policy of assessments of differentiated needs and appropriate cost-effective options would be useful, instead of the current practice of addressing these concerns on an add hoc basis.

6. *What is the structural/institutional WSUP model regarding gender?*

Generally, although gender training is included in the field work, the degree to which staff members themselves are trained is a reflection of chance not strategy - an indication that the issue is not embedded in WSUP processes, policies or structures.

Likewise, the gender composition of WSUP staff varies and there is no policy to support inclusive approaches.

**Additional points**

The overall conclusion is that, although in practice there is evidence of sensitivity to gender issues and to a less extent to vulnerabilities, this is the result of gender sector good practice rather than a conscious WSUP approach. The discussions identified a need for a WSUP gender policy to inform all aspects of the work and that this should be linked to or that in addition, a separate policy on diversity/addressing vulnerabilities is also needed.

## **5. Sanitation**

### **Questions**

1. Have you tried to strengthen the supply side of the sanitation market? (i.e. supporting the suppliers of goods and services such as latrines, sludge removal, transport, treatment and disposal) If so how? What progress has been made to date?
2. Have you tried to increase the demand for sanitation goods and services? (e.g. Segmenting different groups, understanding their different drivers and barriers for latrines. Developing marketing strategies and implementing these. Offering different sanitation options to meet different circumstances and needs?). If so, how? What progress has been made to date?

3. Is there a plan for city-wide or neighbourhood-wide sanitation coverage? If there is a plan, has there been any serious attempt to implement it? With what progress?

### Learning points

1. *Have you tried to strengthen the supply side of the sanitation market? (i.e. supporting the suppliers of goods and services such as latrines, sludge removal, transport, treatment and disposal) If so how? What progress has been made to date?*
  - Supply has received less attention than demand
  - Strengthening of sludge removal capacity: in Dhaka WSUP has ensured project communities know of the two groups who use vacutugs to empty septic tanks, and is an issue requiring attention in Tana (one truck run by commune in CUA, insufficient capacity); Maputo (trying to identify / establish operators in each barrio to remove and transport to STP) and Gatwakera (NCWSC has one evacuator truck charging USD 51 to evacuate and transport to STP; eventual plan to use new sewer line)
  - The relatively innovative DEWATS is included in Bangalore (costs with sanitation block ranges from USD 115,000 to 177,000)
  - Some training of masons in Tana for latrine construction as well as establishing artisan groups to retail san plats etc
  - Naivasha working with local artisans to develop appropriate latrine design options

### Issues

- Bangalore municipality does not welcome small scale providers using “gulpers” etc and gives them a hard time when they try to dispose of sludge at the STP;
  - Supplier regulation is required in Kumasi to prevent “toilet wars” and patronage in awarding franchises for pay and use public latrines, as well as ensuring reasonable maintenance;
2. *Have you tried to increase the demand for sanitation goods and services? (e.g. Segmenting different groups, understanding their different drivers and barriers for latrines. Developing marketing strategies and implementing these. Offering different sanitation options to meet different circumstances and needs?). If so, how? What progress has been made to date?*
    - Existing demand is already very high in Bangalore and Kumasi and does not need stimulating.
    - Market segmentation done in Naivasha and Tana: (see table below)

### Latrine Options

- Dhaka offers only one latrine option – a Sanitation Block
  - Kumasi will probably provide only public / communal
  - Gatwakera offers 2 options – bio-gas sanitation block and HH latrines
  - Maputo has provided 4 seater sanitation blocks (one built so far and another 4 underway) and also developing a shared pit option – one pit serving 4 HH latrines;
  - Naivasha offers 3 options – single HH, shared (for renters in one compound), communal / public
3. *Is there a plan for city-wide or neighbourhood-wide sanitation coverage? If there is a plan, has there been any serious attempt to implement it? With what progress?*
    - No plans in Dhaka or Naivasha
    - Maputo has carried out baseline surveys in all barrios as a first step to design a sanitation plan for each barrio, which will feed into a city wide plan;

- In Tana planning is underway for city centre and 29 peri urban areas
- Nairobi is considering the idea of a city wide approach that will include all informal areas;

### **Additional points**

Appendix 2.5a list latrine details and appendix 2.5b lists other sanitation issues.

#### *Possible proposals to funders - what is working well and is scalable?*

- City wide plans that contain a variety of technologies and approaches and based on trial and error
  - in Tana - long term sanitation marketing, drainage, sewerage, communal sanitation and sludge treatment (Tana)
  - In Maputo – community SBs, mixed approach with sewers, sludge management in all areas, (with funding would identify, train and equip Small Service providers (SSP) in all areas) + establish mechanism for disposal at STPs, + address financial viability of SSP
- Sludge management (Dhaka)
- Nairobi – NCWSC has taken a recent interest in on-site sanitation and is working with NCC on this – what is the best approach at scale?
- Micro-credit for sanitation and water connection charges

#### *How can WSUP help project teams to deliver sanitation?*

- Sharing of designs, approaches and experience between WSUP projects
- Guidance on regulation of public latrines
- Guidance on credit including administration of revolving loan fund
- Guidance on different technologies – DEWATS, Low cost sewers etc as well as on-site sanitation
- Guidance on market segmentation & HH sanitation (e.g. between Tana and Bamako)

#### *Constraints mentioned:*

- lack of / ambiguous land tenure,
  - congestion,
  - a resistance to new technologies
  - a fear that better services will accelerate slum growth;
  - the slow pace of sanitation marketing
- a. there seems to be more emphasis upon the short term output of latrine construction rather than the longer term outcome of strengthening sanitation markets and building enabling conditions;
  - b. from the latrine annex below we can see that all 7 projects with an explicit sanitation component include shared latrines as one output: sanitation blocks in Dacca, Bangalore, Maputo and planned in Kumasi; multi purpose blocks in Tana, bio gas multi purpose blocks in Gatwaker, compound latrines in Naivasha; how well managed are these units? How are they cleaned? Is a user – pay system in place? Are they sustainable?
  - c. it is helpful to distinguish between sanitation promotion and sanitation marketing; e.g. Tana subsidised latrine promotion to lower income groups and marketing to high and middle income groups;

- d. it is important to build learning and flexibility in any city - wide sanitation plan by including pilots and analysing their results; area -wide plans may be more useful and can be seen as a step towards a larger plan;
- e. We need to look again at the viability of the vacu-tug. My (KT) impression is that they have only been viable up to now with NGO support and some subsidy. On the other hand, the management model used seems to be top heavy so there would appear to be scope for reducing costs. Also, perhaps part of the problem has been lack of demand and this might be helped by both promotion and marketing approaches - promotion for awareness and marketing to encourage people to use the service. Another issue is ensuring places to dispose of the sludge
- f. Issues for PG: How to support projects on credit options; technical design options (both detailed and broad choices), sanitation marketing and regulation

## 6. Hygiene

### Questions

1. Is there a communication strategy for hygiene promotion? Does it divide the target population into different segments with different priorities, communication channels and messages?
2. What are the key hygiene messages? How have these messages been tailored to the particular circumstances of the urban slums and informal settlements?
3. With which agencies does WSUP partner re hygiene promotion programming? Is there a budget for hygiene promotion in any of these agencies?

### Learning points

*1. Is there a communication strategy for hygiene promotion? Does it divide the target population into different segments with different priorities, communication channels and messages?*

- No strategy developed yet in Maputo (but working in schools) or Kumasi;
- strategy developed but not implemented in Tana; delayed by focus on sanitation and by lack of access to schools (only teachers can work there, some of them are not skilled enough to answer hygiene questions)
- Focus on general public in Naivasha, using theatre and considering mass media
- Sub-contracted to WaterAid in Dhaka (need to obtain details)
- Gatwekera incorporates HP into capacity building, targets schools with HWFs and now working with Unilever

*2. What are the key hygiene messages? How have these messages been tailored to the particular circumstances of the urban slums and informal settlements?*

#### Maputo

- using World Water Day; Environment Day; World hand-washing day to work with schools; etc.;
- Key messages – boil water for drinking; need for hand-washing; cover storage containers; sanitation block management

#### Tana

- member of National WASH consortium;
- use only a very few messages re hand-washing, use of latrines; hygiene and good storage;

#### Dhaka

- Messages are prepared by WaterAid;
- hand-washing with soap before eating; hand-washing with soap after defecation; protecting water in safe place – water storage/water safety; Wash vegetables before cutting; Use latrines in a proper way; stop misuse of water;

#### Naivasha

- wash hands with soap and clean water; wash hands with soap after using the latrine; wash hands with soap before eating and handling food; Proper sanitation saves lives; proper sanitation is my right;
- media messaging should be supplemental not the prime source – not everyone has access and/or is interested;

#### Nairobi

- Wash hands after using the toilet; Wash hands before eating; wash hands after changing a child; Boil water before drinking; wash hands with clean running water;
- for Water Vendors from NCWSC – clean your tank once per year; liaison with the water company to check water quality in households;

#### Kumasi

- hand-washing with soap; water safety source to house; environmental sanitation messages;
- food safety – issues around how food is handled by food vendors ;
- The formative research they are doing will help them to develop the messages and identify the target groups;
- we shouldn't see this as just being about giving messages – need to build capacity and use technology –
- messages will create awareness but we also need to change attitudes and behaviours –
- the enabling conditions are very important;

#### Tana

- Proper hygiene promotion campaign needs to clearly understand the situation beforehand in order to measure the impact – this can be expensive but is necessary to be able to assess the impact –
- a key question is how do we ensure the message is transferred into practice;
- need to consider hygiene promotion on a case by case local basis - there are many different factors that affect behavior change and contribute to lack of change as well.

*3. With which agencies does WSUP partner re hygiene promotion programming? Is there a budget for hygiene promotion in any of these agencies?*

Maputo – Working with Unilever but lifebuoy too expensive for the project area;

Tana – WaterAid contractor is a NGO ECA – working at all levels local to town wide;

Dhaka – WaterAid have local contracting partners



Naivasha – Working with: Red Cross for hand-washing and hygiene at hh level;  
Ministry of Public Health and Sanitation – for materials, target group;  
With WSP

Nairobi – Working with Unilever – lifebuoy is too expensive, looking for a cheaper alternative;  
Water services trust fund – using their HP materials;  
Collaborating with WSP on their ongoing program on HP;

Kumasi – With Environmental Health Dept. of the Municipality – this work is EHD routine activity but they are under resourced;  
Schools – taking part in drama for hygiene issues.

Appendix 2.6 list the hygiene promotion strategies and details.

## **7. Partnership**

### **Questions**

1. Receive comments on the summary main lessons namely:
  - Different kinds of partnership are involved and critical to success: issues of common interest, clarity of expectations, good communications and\and joint agendas
  - Importance of phasing work, building on previous lessons.
  - It's as much about building capacity of each partner individually and the partnership as a whole as it is about providing WASH services
  - International lessons and local contexts need to be distilled and continuously reviewed
2. What in terms of partnership processes they are really proud of;
3. What in terms of partnership processes would they have done differently if starting again?
4. What needs to be put in place in terms of partnership going forward?

### **Learning points**

1. *Comments on the summary lessons document*

See under additional points a rethinking of the main lessons based on the discussions

2. *What in terms of partnership processes they are really proud of;*

Areas highlighted were the quality of the partnership with utilities' developed over time, and which are consolidated with MOUs, for example in Gatwekera, Maputo and Tana.

The quality and ‘fit’ and the alignment being backed up with significant components by the partners within WSUP partners was highlighted by Tana, whilst the relationship with a local NGO was focused on by Gatwekera.

*3. What in terms of partnership processes would they have done differently if starting again?*

Responses to the question highlighted the issue of how difficult partnership is in practice and that in retrospect they would have focused more on maintaining strong communications and ensuring a clarity of roles and responsibilities, time-frames, etc in an ever evolving context of staff changes and changing priorities and concerns i.e. the issue of building/maintaining relationships in a contractual context.

It was also suggested that addressing the specific priorities of utilities at the point at which WSUP engages with them, rather than coming with a wide plate of issues. The value of widening the set of implementing partners and thinking about scale-up possibilities through capacity building and participation by a wider set of partners was also fed-back.

The value of starting with support in developing overall city wide sanitation plans and then fitting specific implementation pilot work within that context, rather than working the other way round was also referred to.

*4. What needs to be put in place in terms of partnership going forward?*

Answers to this question focused on the critical area of partnerships with service providers requiring significant fostering, including through institutional and individual capacity building and referred directly to the additional points outlined below.

**Additional points**

Overall, WSPUs findings on partnership to date can be summarized as follows:

WSUP – itself a partnership organisation – is involved in complex, multi-tiered partnerships of different kinds in each project. These are constituted in different ways, with varying degrees of formality and different degrees of fit with WSUP. We need to have a better conceptual map of these partnerships and how the sum is greater than the parts in each project. The whole raison d’être of WSUP is partnership based and we therefore need to understand the issues, dynamics, and processes involved in brokering and fostering partnerships, in order to maximize our value added.

A mapping of the partnerships should clarify which partners are involved in particular phases and types of partnership, in what way and why. It should help WSUP increase the effectiveness of its partnerships both in particular projects and overall – This process can identify if there are gaps and duplications. The discussions highlighted that partners that have aligned strategies and programs (e.g. in WSUP partners in Tana) seem to come together more easily than those where the common agenda needs to be worked on (e.g. Maputo and Bangalore). On the other hand, the very differences between NGO and public or private utility for example provided comparative advantages for each when developing the common agenda. It was also clear that there are situations in which a different portfolio of partnerships and tighter or looser relationships might have been more effective. Also the discussions identified the value of very specific specialized/niche partners providing significant benefits to the overall partnership (e.g. World Bike) involvement in Naivasha in

solid waste collection structures. Likewise the mapping and follow up work should help provide tools for how to foster partnerships, how to address conflict within partnerships, etc. Hopefully the work planned with the support of BPD (see Annex 5) will help to provide WSUP with a better conceptual underpinning of its current partnership approaches in the field, together with ideas about how to improve them.

For now we can identify a typology of three types of very different partnerships in all project areas. These are:

- A. The structural partnership of WSUP members themselves
- B. The wider stakeholder partnerships brought together in structures such as joint steering committees which include service providers, municipality, government ministries, community structures and non-governmental organisations
- C. Looser or more specific partnerships within this wider grouping which could be one to one relationships within category B above or more focused relationships with other players such as with funders and the media.

It might be worth considering this type of classification and developing it further in internal discussions, for example where is the leadership and drive within each of these categories of partnership? What are the breaks and constraints? What role is WSUP and its constituent members playing in these partnerships? Many of the other points identified below could also be reflected on terms of these different categories of partnerships within each project with lessons that could be shared within the WSUP model more generally.

It is evident that all these partnerships are critical to the whole undertaking. The partnerships need to be fostered and valued for their own sake as healthy partnerships are catalytic to all other outcomes and impacts. This understanding then translates into an understanding of the importance of activities such as communication, capacity building and partnership review related activities.

Issues contributing to healthy partnerships were identified as:

- Identifying common goal and interest
- Ensuring a clarity of expectations and ability to contribute
- Maintaining good communications
- Developing joint overarching strategies
- Following up with joint implementation agendas
- Ongoing understanding of each others constraints/challenges
- Understanding motives of partner organizations and the individuals involved
- Importance of building and maintaining trust
- Identify and give systematic attention to capacity constraints

Tools for good partnership identified included:

- Strong participatory and inclusive start up processes, e.g. stakeholder introduction then start up workshops
- Clear MOUs, formal contracts, clarifying roles and responsibilities
- Setting up and maintaining effective steering committees or other structures appropriate to the different forms of partnerships involved (note the point about mapping and classification of partnerships)

- Joint plans: developing these consultatively which takes time and the lack of clarity can be frustrating to partners but it ensures greater ownership and better fit with specific context
- Maximizing mutual benefits, or win-win situations e.g. initiatives within the slum areas that can ripple to other parts of a utility's outreach and that therefore is particularly important as a motive for the utility's engagement, e.g. minimizing non-revenue water,
- Build the capacity of partners individually and the partnership as a whole: there is beginning to be a systematic set of issues that WSUP is finding as critical in the portfolio for building the capacity of utilities for example, (including planning tools, financial management tools, technical capacity and quality improvements in appropriate designs etc). Furthermore, The more innovative and collaborative the processes the more joint capacity needs to be built
- Proximity/distance: proximity in terms of shared offices was identified as a useful tool at least in the early stages of some partnerships (type A in particular), possibly shared offices being a hindrance in later stages

Understanding that partnerships take time and can be thought of in terms of having phases. The importance of building on previous lessons and phases and not expecting everything to happen at the formative stage of partnerships. In particular there are lessons around the importance of piloting, expansion and scale up phases (build trust, test out approaches, set systems up that have multiplier effects). Linked to this is an awareness that key players change, resulting in varying levels of interest and impetus – the importance therefore of widening ownership/engagement, succession planning, and working with the windows and open-door opportunities as they present themselves and possibly putting on the back-burner partnerships that seem to be stalling – until a new opportunity/angle/leadership present themselves.

International lessons and local contexts need to be distilled and continuously reviewed. The discussions highlighted the importance of building on local contexts and the importance of bringing into this context, international experiences, particularly from within WSUP where experiences can more easily be shared.

Long term partnership vision possibly as part of the mapping of the current partnerships it would be useful to be clear about the long term vision of the different partnerships – in order to review achievements against this and keep the partnerships on track - increasing the pro-active and strategic rather than reactive and ad-hoc approaches to the partnerships involved.

## **8. Water**

### **Questions**

1. Were the choices of project location and proposed solutions for improved water delivery right? What have you learnt about these that would help WSUP to choose other project locations and solutions?
2. What are the main obstacles that face you in implementing the improved water delivery to the project recipients? Did you expect to encounter these obstacles or are they a surprise?

3. What would make the implementation of improved water delivery easier?

### Learning points

1. *Were the choices of project location and proposed solutions for improved water delivery right? What have you learnt about these that would help WSUP to choose other project locations and solutions?*

In Maputo, neighbourhoods chosen already had nearby secondary networks but they were not served, there was a need for the tertiary network so that households could be connected. There were many illegal connections and leakages. Household connections are being encouraged and taking place in Maxaquene A and B. For Chamanculo C there has been an investment in improvements to standpipe operation and management. Pre-paid meters are considered to be a good option. The baseline study enabled the existing situation and community to be understood and the right solutions to be found. The work done during the baseline study enabled closer engagement with the communities.

Input from Baghi regarding EMA: A small local operator has been able to provide improved water delivery in Liberdade, under a contract with AdeM. There has also been an extension into other areas. The Liberdade experience has been unusual and WSUP played a key role in brokering a unique subcontracting arrangement between AdeM and EMA, the contractor. The first time it has been done in Maputo. EMA now has a good incentive to extend the network.

The above shows two different situations and both have the right solution for their particular challenges.

In Tana, the feasibility study was done in collaboration with the stakeholders and the locations were chosen because there were indications that water would be available and a network could be constructed.

There is the only water company supplying water in the Bamako area but they lack the capacity to deliver to the urban poor. Peri-urban areas are not well provided with water. The WSUP project focussed on areas where the network has been lacking and is working in the biggest commune. The choice of location is good and is a priority in the local developments plans.

2. *What are the main obstacles that face you in implementing the improved water delivery to the project recipients? Did you expect to encounter these obstacles or are they a surprise?*

Obstacles in Maputo: Getting households connected is the final proof that the project has worked but users have not been aware that they need a contract and processes for gaining approval have been slow and have delayed progress. The cost of a connection is high (\$150) and even the option of paying through 3 instalments is not attractive to poor residents. The OBA scheme, managed by FIPAG, has clear criteria for eligible families and requires very poor households to pay 10% of the total connection charge but even this is too expensive for them. There have also been weaknesses in the contractors which have led to delays of 4-5 months. The contractors are typically small, local outfits with a low-turnover that put in low bids for the contracts which are accepted by AdeM. They

then use the first payment for salaries and hence have no money to buy materials. AdeM also delayed making connections and sending invoices. There is a challenge in Ferroviario due to the presence of many small private operators. In other bairros identified by WSUP, namely Maxaquene C and D, work has already been started by FIPAG and AdeM so they will need to be reviewed before the WSUP project moves in. It may be that there is not enough for WSUP to do and others bairros outside the original targets are included.

Problems in Tana: An EIB project that was expected to assist Jirama to improve water availability was delayed and the WSUP project found itself without water. Advocacy efforts by the WSUP team enabled an understanding between WSUP and Jirama and a compromise was adopted that enabled limited water to flow into some of the communes that WSUP had identified. WSUP then worked with Jirama to identify the best locations so that there could be a water supply, but it isn't as much as was anticipated. Now, WSUP has a positive relationship with Jirama and is collaborating on supplying water into central area of the city where there are large numbers of urban poor. Twenty service points are in place and work is being done to look at other locations and assess the factors affecting demand. A key factor will be the support given to local Water Users Associations to improve demand.

Obstacles in Bamako: The availability of water and lack of expertise in local authorities, who are responsible for implementing water projects. In some areas lack of access means that prices are high. Materials have to be imported and are expensive. People are not well organised.

### *3. What would make the implementation of improved water delivery easier?*

Improvements needed in Maputo: To encourage more households to connect to the network, the connection fee should be scrapped and the costs built into the water charges. There needs to be more support to CBOs. Help is required to facilitate payments by the consumers so that they can get connections. The use of revolving funds (25% subsidy) and the OBA scheme should help, but CRA want to see evidence it will work and someone will have to administer it. There is a need to understand the weaknesses of contracting firms. WSUP will continue to work on these with AdeM.

Improvements needed in Tana: WSUP is currently the main investor and there is a need to encourage Water Users Associations and local providers. They will need access to the funds for the initial capital investment and incentives to make this happen are needed. Tackling Non-revenue water will make more water available to poor areas.

How to make the implementation easier in Bamako: More cooperation is needed between stakeholders. Capacity building of the local authority is required. Need to work with local suppliers and help them be better organised. There is a need to improve water quality, reduce connection costs and lower the price of water and the project team is assisting the communities to engage with the Ministry of Water and local authorities to bring this about. EdeM is also implementing a new system of connection called collective distribution. Ideally the connection cost should be built into the tariff.

### **Additional points**

Appendix 2.8 lists the lessons around water.

Other comments: Water availability is a serious issue and the only option for improvement is to drill more boreholes, which is an expensive activity. Other suppliers have been inhibited by the cost. EdeM isn't interested in being involved and say that it is the responsibility of the communes, but the communes have limited experience and it is a big challenge for them to manage this sort of project.

Supplementary question from Sam: The key requirements when choosing a project location and the solution seems to be good availability of water and a demand from the community. How do we ensure this?

Maputo: Having a baseline study enabled the demand to be assessed and it was high. However, it is not always possible to be certain so it is necessary to do as much consultation as possible. Mapping of existing points and the locations of houses can be useful. There is a need to look at behaviour patterns to find the reasons why eventual demand is less than projected. One challenge in Maputo has been the households with existing wells with low quality water and the challenge is to encourage the residents to give up using the wells and use improved water sources.

Comments from other projects:

Nairobi: Water kiosks are being built and a social connection policy has been developed that means that the water company will provide reticulation to a meter within 50m of the network. The water company provides materials and the NGO does the construction. The cost of the meter can be built into the bills. Water pressures which were low, have improved. The location of facilities needs to be done in collaboration with the water company and fit with the master planning for the area.

Dhaka: More service points were provided but the consumption decreased. It seems there is a need to engage with users to ensure that the new services are used. The locations were good and there was acceptance. Users pay less than they did before the project. Water usage has been 55l/day to 60l/day but there has been an increase in the number of illegal connections before the meter reaches the households (which probably accounts for the decreased usage after the meter). There needs to be collaboration with the local engineer to see how this can be tackled. For the future, there needs to be good communication with DWASA and permissions are also needed.

Naivasha: This has been a good location for learning. It is a small town, more peri-urban than urban. The WSUP team didn't have previous experience of working with a local service provider and should have looked at the capacity of the LSP. The source and availability of the water should have been looked at before the project began. There is low availability in Naivasha. Water delivery will only be through water kiosks which are no more than 100m from users. There are no plans for household connections or yard taps until when operations are taken over by Naivawass.

## 9. Household impacts

### Questions

1. What indicators/parameters should we be using to measure household impact; (aim to try determine the top 5 most useful/important parameters);

2. What negative impacts on household have been experienced by projects and how can we plan in order to avoid them;

3. What experience have the project teams had of household surveys; are the results helpful; are the results being used to re-direct the programme; how are the results being fed back into the city authorities so that maximum value can be extracted from them. Are we collecting enough household data?

## **Learning points**

### *1. Indicators*

A variety of indicators are in use or considered to be of use, some of them are the same across projects others are project specific. Some are easy to measure, some require more detailed and/or technical support.

The top five indicators were:

- Reduction in the incidence of water related disease in the household;
- Reduction in the cost of water and sanitation services to the household;
- Improved access to water – proximity; 24 hour availability;
- Income generation through use of water by households;
- Improved quantity of water available to the household;

In order to evaluate impact it is necessary to obtain accurate and appropriate information about the situation before any intervention (baseline information); it is also necessary to follow up after an intervention (which may be a small component within a larger program) to obtain accurate and appropriate to provide comparative information;

It is important to define the impacts that are to be achieved at project formulation stage and budget for appropriate baseline and follow up evaluation work – this may not necessarily be expensive but there needs to be a process identified that is objective and verifiable;

Use of UNICEF/WHO Joint Monitoring Program (JMP) core questions – e.g. use not access – to allow comparison with other urban measures;

### *2. Negative Impact (no mitigation measures discussed)*

All projects recognised that there is potential for negative impacts – common amongst these were:

- Loss of revenue by groups or individuals currently providing supplies (water vendors, illegal on-sellers, etc.) - in relation to water;
- Drainage problems made worse through more water being available – drainage should be considered during project design;
- Negative impact of pit latrines on shallow-well water supplies;



- Landlords increasing rents because of improved services resulting in less access for the very poor;
- Access to facilities removed if unable to pay;

### 3. Households Surveys

General consensus was that these are very useful in understanding the real situation in an area; sharing of information amongst partners/stakeholders is very important; Results of surveys can be used to successfully re-direct programs and avoid mistakes being replicated.

Households surveys are a useful tool that should be incorporated into WSUP project preparation and implementation.

Appendix 2.9 details the answers to these questions by project.

#### **Additional points**

Measurement of household impact should be incorporated into WSUP M&E framework

Budget should be made available for appropriately designed surveys (baseline, intermediate, post implementation) and results of surveys should be utilised in project design and management.

#### *Further Questions*

- How important is economic efficiency in delivering impacts, and should this be estimated at project formulation stage
- Should WSUP define an acceptable relationship between subsidy/grant and impact;

## **10. Environment**

### **Questions**

1. Water security: How can WSUP ensure that a sustainable source of good quality water will be available to allow LSPs to connect additional populations to water distribution systems
2. Climate & carbon: In what ways are urban watsan services vulnerable to the impacts of climate change and how can WSUP projects incorporate resilience in its project design and implementation?
3. On- and off-site management: How can WSUP best assure that negative environmental impacts of project interventions are dealt with in an integrated approach and prevent transfer of impacts off site?

### **Learning points**

#### 1. *Water security*

- Long term water security is recognised as an issue, but strategies are generally lacking.
- Addressing NRW will help to some extent, increasing efficiency reduces the amount of water taken out of the system, but in real terms in many places demand will increase as population

increases, together living standards/water consumption

(key responses from written feedback)

Bangalore noted “WSUP has a good opportunity to look at alternative sources of water like ground water/ponds/lakes etc”; Naivasha said “WSUP contributes to freshwater conservation through.... water resources exploitation (well managed ground and surface water abstraction)”

## 2. *Climate and carbon*

- A quick round of projects showed agreement that climate change is going to be an important issues in the short-medium term; also agreement that we lack understanding of how it will affect projects and how we can respond;
- unpredictability makes the situation particularly difficult; also effects may be indirect, for example through failing of food crops, increased migration into urban areas;
- What WSUP can do in practice is limited, but 3 possible approaches identified:
  - contribute to the planning process; WSUP to sensitize itself and its partners to the risks and opportunities from climate change
  - reduce carbon footprint where possible
  - implement appropriate adaptive technology

## 3. *On and off site management*

- Environmental Impact Assessment (EIA) was mentioned often in the written feedback, but it seems that in practice in most places a formal EIA is not a requirement for projects at WSUP scale
- In some places an internal EIA process is in place

### **Additional points**

The environment theme in WSUP is guided by the WSUP Environmental Strategy (Appendix 10a). The strategy was adopted by WSUP in August 2009 and is used to ensure that all environmental work conducted by WSUP contributes to one or more of the 5 strands of work. These are:

- Water security
- Climate & carbon
- On- and off site management of impacts
- Regulation
- Conservation

Most projects address environmental issues (Appendix 10b) and across the portfolio most strands of the environment strategy are addressed. However, the strategy is not used at a project level to plan and implement environmental activities, and despite the strategy having been introduced in the November PIW, many project managers are still unfamiliar with it. For the time being the strategy has most value at PD and PG level, but it will be important to translate it more directly to project level. Learning points at this stage are limited and practical examples from the projects are missing, but the discussion has been very useful in increasing common understanding of the environmental issues facing WSUP projects.

Suggested next steps:

- Build on the discussions to increase awareness on environmental issues amongst project teams (distribute environmental strategy, develop supporting information and practical approaches)
- Assess all projects to identify current environment activities (see Appendix 10b) and possible new areas for engagement;
- Make the environmental case for reducing NRW;
- Extract practical approaches and lessons learnt from past and ongoing activities (see Appendix 10c)

## Appendix 1 – Notes from questionnaires

### 1. Capacity building

Bangalore commented that engaging the main water utility has proved challenging.

Bangalore and Kumasi commented that providing comprehensive plans for urban poor service provision can trigger the interest of LSPs, although these need to include participation at both LSP and community to give a sense of ownership, although there is resistance to the latter.

Naivasha commented that capacity building (systems, staff, operation capacity) of the utility in pro-poor services management is key. This should not be very narrowly limited to the pro-poor service provision, but should seek to support the overall capacity of the LSP to attain commercial viability. Only when commercially viable, that the LSP will prioritize pro-poor services.

Naivasha commented that WSUP support is highly appreciated, but can only be effected when the WU is viable, and already looking into the urban poor population as a target market. A struggling utility will inevitably prioritize services to “those who can afford to pay”

Different cities commented on the capacity building needs of their LSPs:

- Bangalore: awareness of appropriate, revenue generating technologies for serving the urban poor.
- Kumasi: financial and managerial skills to implement pro-poor strategies and revenue collection
- Maputo: Sanitation, community work and leakage reduction
- Naivasha: strategic sanitation

Bangalore commented that demonstrations and examples of appropriate, revenue generating technologies would be useful. Maputo commented that District Metered Areas were set up after the visit to Manila.

Tana commented that they were able to engage with JIRAMA after the training on business planning and a demonstration to Water Utility that serving large number of the poor people via community infrastructures can contribute to increase WU incomes. However, they need a timeline for all the components of the capacity building programme. For the municipality, they found comparing learning with doing and involving all stakeholders at all stages of the project cycle to be the most effective capacity building method. However, the different levels of knowledge of local authorities on laws and on their responsibilities and opportunities (local tax system) has proved a challenge.

Different cities commented on the barriers for successfully capacity building CBOs and SSIPs:

- Bangalore: a lack of credit facilities
- Dhaka: slum dwellers are “floating people”
- Kumasi: literacy rates of women

- Nairobi: lack of co-ordination, poor communication and rumours, overstay of leaders in office, lack of knowledge of constitutions, migration of trained personnel to other settlements
- Naivasha: transparency and accountability
- Tana: training of trainers on Hygiene and Sanitation Promotion

Naivasha commented additionally that in a most cases, CBOs should be encouraged and empowered to demand appropriate, reliable, affordable and socially accountable service delivery. Experience in Kenya has shown that CBOs can run social enterprises funded through grants, but not commercially viable and market-financed businesses.

## 2. Policy

Dhaka made the point that it takes time for new ideas to be adopted. *Is there a need for a greater focus on the way in which institutional constraints (Including attitudes and assumptions) constrain change and capacity enhancement?*

Dhaka also noted that DCC (Dhaka City Corporation) policies and programmes ignore slum dwellers. This is perhaps an example of a deep-seated attitudinal constraint which makes it very difficult to make fundamental changes in policy. What should be WSUP's response to this? A similar point was made by Naivasha, which noted the lack of a pro-poor policy environment. It suggested that one way of addressing policy issues is to work with the regional regulator (the Water Service Boards in the case of Kenya). The learning question here might be *'Through which institutions might WSUP seek to address policy issues? A subsidiary question might be 'What methods should be used to engage with these institutions? One relevant point, also made by Naivasha, is the need for a success story to be used as a sellable and scalable model for infrastructure improvement in low-income areas. The key questions here might be 'Should efforts to influence policy only start once WSUP has scalable models? and 'How might WSUP be involved in the national scaling up process?'*

Dhaka made the interesting point that there is no national policy agenda for hygiene promotion for people living in low income settlements and slums. This is probably a common situation and suggests the question *'how might WSUP be involved in promoting a policy agenda for hygiene promotion?'*

Similarly, Maputo noted the issue of limited institutional capacity for sanitation provision, which presumably relates at least in part to either lack of ownership of or fragmented responsibilities for sanitation. The question here is *how WSUP might engage with efforts to provide clear policies on sanitation promotion and provision. In particular, who should be responsible for different aspects of sanitation provision and what should be the policy on subsidy?*

Bangalore said that showcasing and documenting examples of good practice can disseminate ideas and this could presumably be seen as a first step in the policy dialogue. *What might the next steps be to ensure that pilots don't just spawn more pilots?*

Another key question is *can WSUP play an effective role in achieving policy change on its own or should its normal approach be to work in cooperation with other organisations? If so, how can the*

*links be made and sustained?* In this context, Bangalore mentioned SACOSAN. So, the question is *what is the role of organisations like SACOSAN?*

In Ghana, there has been progress in developing a pro-poor national water policy. This has been influenced by NGOs, advocating a rights-based approach to water provision. However, there appears to be a lack of financial and managerial capacity to implement policy initiatives in the field. Two questions suggest themselves here. First, *how might WSUP help to ensure that policies are widely owned and adopted* and second *how might WSUP help to develop the capacity (including appropriate attitudes) to implement policy?*

A specific point made by Kumasi was the high cost of service improvement in poor settlements, resulting from poor layout. Over the years, there have been many attempts to develop and implement more 'sympathetic' approaches to upgrading services in slums but it seems that we may still be faced by inappropriate standards and the difficulties created by poor layouts. *What, if anything, should WSUP be trying to do to introduce appropriate standards, explore (rediscover?) more cost-effective approaches to service provision in slums and ensure that both are absorbed into policy?*

The Nairobi response focused mainly on matters relating to policy at the 'project' or settlement level – perhaps the key question here is *'Does WSUP needs to focus on project-level issues before moving towards involvement in overall policy issues or can the two be tackled simultaneously?'* *To what extent is the answer influenced by limited resource availability (both money and people)?*

Naivasha also questioned the wisdom of being involved in city-wide sanitation planning. They suggest that producing and implementing local sanitation plans would be more useful than producing city-wide plans that will never be implemented. *What light can WSUP's experience to date throw on the choice between city-wide and local planning?* (The point might apply to water supply as much as to sanitation). Tana's response to questions suggests a more positive view of city-wide planning

Another question arising from the responses is *'Is it good policy to develop water supply first in response to demand before focusing on sanitation, for which there may be less demand?'*

Another key question emerging from Maputo's response but widely relevant is *'how should WSUP deal with issues relating to insecure tenure'*, which is often a feature of low-income areas.

Tana noted the difficulties associated with frequent changes in government staff. *Is there anything that WSUP can and should be doing to develop more stable government systems?*

### **3. Funding**

Bangalore comments that there are lots of government funds available for urban poor service provision which need to be unlocked. Naivasha comments that WSUP should be influencing national budgetary allocations.

What are the main barriers to government/utility investment in urban poor service provision?

Which part of the government (i.e. which department) is most likely to invest in urban poor service provision?

How can WSUP help in unlocking government funds?

Does your team have sufficient capacity to influence national budgetary allocations?

Naivasha believes WSUP should be supporting LSPs to develop funding proposals to governments and IFIs.

Maputo, Nairobi, Dhaka and Tana listed their successful, pending and unsuccessful funding bids

Maputo states that a major challenge is to get donors to invest in peri-urban areas

Dhaka comments that WSUP staff costs are perceived by donors as too high

Tana comments that they were restricted in submitting funding bids in order not to compete with other WSUP supported programmes.

Tana comments that funding was suspended due to a political crisis

Nairobi states more funds are needed to capacity build the utility

## 6. Hygiene

About half of WSUP projects include a schools hygiene programme using teachers, WWDay and GHWDay. It is important that schools have adequate facilities so that hygiene can be practiced.

TV is important in Bangalore and Nairobi is working with Unilever promoting HWWSOap and Lifebuoy.

Constraints include: small budgets, teacher turnover, a lack of knowledge and information, skill gaps and schools without WASH facilities.

### *Questions and Comments*

- 1) Unilever's product Lifebuoy is not affordable to these communities and it is now considering to focus on sunlife
- 2) While it may be preferable to wash hands with *running* water (Gatwaker), I (AE) doubt it is absolutely necessary and may constrain the practice in a water - stressed situation; it may be better to advocate for low water use Hand Washing Facility such as the *tippy-tap*;
- 3) If audiences are to be told to boil water (Maputo), research shows it only needs to reach boiling (at sea level) and then, to save fuel, the heat can stop and the water allowed to cool. It does not require more heat than this to kill all pathogens;<sup>1</sup> SODIS requires less heat but more time and management;<sup>2</sup>

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<sup>1</sup> "Boiling water will kill bacteria as well as other disease-causing microorganisms like Giardia lamblia and Cryptosporidium parvum which are commonly found in rivers and lakes. At high elevations, though, the boiling point of water drops, so that extra boiling time is required. Water temperatures above 70 °C (158 °F) will kill all pathogens within 30 minutes, above 85 °C (185 °F) within a few minutes, and at boiling point (100 °C (212 °F) at sea level ), most pathogens will be killed." Wikipedia, Portable water purification

<sup>2</sup> Solar Water Disinfection uses both UV light from the sun as well as heat; <http://www.sodis.ch>

- 4) The hygienic handling of infant and child faeces is often overlooked in HP; these are judged by public health specialists to be more dangerous than adult faeces but often considered by mothers to be harmless;
- 5) we should encourage HP programs to consider including hygiene messages specific to urban communities e.g.
  - a. food vendor hygiene; (Kumasi) and water vendor hygiene (Gatwakera)
  - b. management and use of open drains;
  - c. removal of pooled water insect breeding grounds;
  - d. the special health needs of those who handle the faeces of others such as "frogmen" those who empty pits and septic tanks by hand or "scavengers" who collect night soil;
  - e. solid waste management
- 6) LSHTM suggest that perhaps up to 20% of a population will change behaviours, so we should adopt that as a target; though our target for exposure to HP messages should be much higher
- 7) I think UNICEF now suggest to focus on the older girl child, mothers and other child minders e.g. grandmothers as priority for hygiene promotion
- 8) Is there a need to circulate resources on suggestions about how to do hygiene from e.g. WELL, LSHTM, UNICEF?

### 9. Household impacts

The learning theme is a very broad one – impact on households covers many areas - economic, health, time utilisation, access to services from LSP, personal security, quality & quantity of water available (impacting on health); access to water (impacting on time utilisation, economic), improved knowledge of factors that impact poverty – disease transmission, poor health, etc.

The table below shows the questions posed in relation to the Impact of WSUP Projects in Households extracted from the WSUP Learning Themes:

*Extract From WSUP Learning Topics*

Theme	Sub-Theme	Learning Questions/Sub-Questions
	<p>Are WSUP projects achieving improvements in service delivery to the target populations?</p> <p>Are they affordable?</p>	
<b>Impact of WSUP Projects on households</b>	<p>Are the benefits greater for certain subgroups within communities?</p> <p>If <b>yes</b>- what are the determinants and factors which drive this?</p> <p>If <b>not</b>- why not?</p>	



	<p>Does it affect livelihoods of the affected communities and households?</p> <p>If yes, then- what are the channels by which this happens?</p> <p>If not- what were the impediments?</p>	<p><b>LQ 3</b> - Is WSUP model effective in achieving its key goals at household level?</p>
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To get an understanding of impact on households at the project level project documents held on the WSUP extranet site were reviewed. Not all projects have documentation under the “Impact Of WSUP Projects On Households” section, however the M&E reports produced by projects on a quarterly basis held in the reporting section include many different types of indicator to track project implementation progress and absolute number of facilities, training, etc. given.

The M&E indicators as they currently stand don’t measure the impact of the work undertaken on the household – to understand this requires knowledge of the conditions prevailing in a household before any action is taken and comparison with the conditions prevailing after the action has been taken.

In order to identify questions to be posed to project managers during learning week a questionnaire was circulated to PM’s in April 2010, unfortunately there was no section for “Impact Of WSUP Projects On Households”.

The only comment received in relation to Impact of WSUP Projects on Households was from the PM Naivasha who commented that the WSUP model is effective in achieving its key goals at household level, as the services we help establish are affordable and positively impact on poverty alleviation.

In addition a recent post project evaluation of pilot implementations in Dhaka revealed the following impacts of the work carried out:

- anecdotal evidence of health improvements;
- cost of sanitation use/access the same, but expenditure on health reduced (anecdotal) and locations more secure;
- cost of water reduced by 90%;
- Access to water increased to 24 hour;
- Some families still not able to avail the service due to musclemen control;

## 10. Environment

Project	Success & Contributing factors	Challenges and obstacles
EIA		

Antananarivo	Water infrastructure projects are always implemented with Environmental Impact Assessment. Integration of the EIA recommendation in the design of each facility	No environmental assessment and recommendation for the sanitation program (notably about the risk of pollution of ground water)
Gatwekera	Environmental impact assessment was carried out. This was achieved through engagement of consultant.	
Kumasi	As part of the design of the water system, it is required that the consultant assist the community to develop and implement an environmental management plan.	
Bangalore	EIA for all projects to be mandatory.	
Naivasha	EIA conducted during feasibility study phase. Audit to be carried within this year, and environmental mitigation plans to be developed for any future contracts	

## Appendix 2 – Additional tables

### 1. Capacity building impacts

LSP	Capacity building activity	Impact
NCWSC	Governance workshop	Realised the challenge of corruption and formed a committee to address the issue lead by the Managing Director
NCWSC	NRW training for 75 staff, linked to activities on the project site	<ul style="list-style-type: none"> <li>• Aware that they are losing water (some is stolen, some is leaked), and appreciate components, applicability on benchmarking potential of water balance.</li> <li>• Measuring flow</li> <li>• Detected and repaired leaks</li> <li>• Carried out customer water audit</li> <li>• Managed NRW data</li> <li>• Developed systems for metering and billing</li> <li>• Using GI pipe of good quality.</li> </ul>
AdeM, FIPAG	Visit to Manila	Establishment of district areas (decentralization)
NCWSC	Visit to Dhaka	<ul style="list-style-type: none"> <li>• Drilled 50 new boreholes</li> <li>• Saw the need to engage with the low income communities. The Managing Director has set up an NGO forum which co-ordinates NGOs and ensures that no two organisations are covering the same ground (previously the NGOs had been perceived by as small, insignificant organisations).</li> <li>• Informal Settlement Unit mandated to provide infrastructure (for example pipes) into the low-income settlements.</li> <li>• Increased Informal Settlement Unit staff from 4 to 9.</li> </ul>
NCWSC	Course in Hydraulic Engineering at Cranfield University	Engineer has the ability to manage water rationing, which ultimately has benefitted the urban poor, even though he is not directly involved in the Informal Settlements Unit. He has also trained other staff working with him.
Bangalore CBOs	Training on entrepreneurial skills	Successfully launched a social enterprise for water vending to the neighbourhood
AdeM	Regular communication	More flexible water contracts process
AdeM	WSUP influencing	Pre-paid meters installed on WSUP standpipes
DWASA	WSUP influencing	<ul style="list-style-type: none"> <li>• CBO connections now given by Zone Executive Engineer, rather than centrally</li> <li>• Reduced NRW</li> </ul>
JIRAMA	Series of international visits, including Malawi, UK, Kenya and Uganda	Willingness to improve pro-poor services
Naivawass	HR Policy Development	Recruitment of competent management staff

### 5a. Latrine details

		latrines				
location	approach	construction to date / design type / no. of users	capital costs per facility	capital cost per user	subsidies for capital costs	user charges
Kazifury slum , Dhaka	replication of sanitation blocks as used elsewhere in slums	13 sanitation blocks, 46 units, twin pit, pour flush, septic tank, 3 families or 10 users per unit	Th 34,000 / unit = USD 500	\$50 per user	100% grant	Th 5 to 10 / family / month / USD 0.07 - 0.14
Gatwakera, Nairobi	supply driven allocation of HH latrines close to bio gas units	20 on -plot HH latrines / each serving 30 to 40 people	\$450 / latrine	\$11 per user	100% grant	\$1.07 monthly for some users
Gatwakera	innovative trialing of community bio - gas units	3 bio centres / each serving 600?	\$24,700 / centre	\$41 per capita	100% grant	user- pay
Tana	segmentation into socio- economic groups; variable sanitation subsidies &	1985 HH pit latrines for single family use; 166 shared pit latrines for 414 families;	pits dug by users / cost of slab and superstructure = \$75 - \$160 /	approximate total cost for 2161 latrines is \$216,100 / average cost	nominal contributions of \$1 to \$2.5 from poorest 3 segments;	

	promotion for 75% and no subsidy for 25%; small eco-san trial	10 shared ECOSAN latrines for 51 families / total 15400 users		per user = \$14	i.e > 97% grant; 25% subsidy for middle quintile; sanitation marketing planned for top 2 segments at zero subsidy	
Tana	introduction of innovatory multi purpose blocks	13 sanitation blocks (SB) with toilets, urinal and shower / 18 laundry blocks (LB) with tap stands for drinking water	Capital cost depends on the size of the infrastructure (Laundry block : 10.000 \$ to 65.000\$ and for sanitation block 22.500 \$ up)	Depend on the size of the infrastructure for exemple \$40 per user a for sanitation block in Alasora which cost 22500\$ for 580 daily users	100% grant	For sanitation blocks : 0.1\$ for bath, 0.05\$ for toilets and 0.025 \$ for urinal and for the Laundry blocks : 0.0005\$ per liter of water (0.5USD per m3)

Naivasha	demonstration HH latrines	2 HHs currently constructing VIP latrines digging 10m deep pits	excavation 15,000 /- (\$ 200) / total cost \$ 500 per HH latrine / 5 users?	\$100 per user	100 % grant to 2 poorest HHs /	
Naivasha	compound latrines	20 ?? shared VIP latrines in rental compounds each with 2 cabins + 1 shower each serving an average of 20 people	\$ 1000 ?? Per compound latrine block	per capita cost \$50	40% grant to absentee (?) landlords / 60% grant to owner - occipiers	
Bangalore	sanitation blocks in high density slums with DEWATS	2 sanitation blocks with DEWATS	2 DEWATS constructed to date at cost of Rs 5.2 million and Rs 8 million (USD 115,000 and 177,000)			

Maputo	experimentation with different sanitation O&M options	1 Sanitation Block (SB) built, with 2 toilets and showers for woman, another 2 for man plus 2 tanks for washing cloths, serving around 37 families / 195 persons; 4 more SB with the same type, in construction, to serve around 94 families /400 persons	SB 1 cost around \$17,000; next 4 will be \$5,450 each; total USD 21,818	The first one =USD 87/person . The 4 ones in construction is USD 54/person	100% grant. The communities contributed with labour	First 6 months \$1.7 per HH per month, then \$0.66. HHs rotate responsibility to clean the SB.
Maputo	identify lower cost options for families	plot - based, shared latrines, envisaged to be single pit / 4 latrines				
Maputo		school san block rehabilitation planned				

Kumasi	initial focus on public latrines subject subject to the development of a model of management and regulation that promises sustained and hygenic use	plans to construct 1 20 seater sanitation blocks / public latrines			Project and/or private sector	
Bamako	initial focus on HH waste water management	Currently looking at household level soakaways for grey water and experimenting with urine diverting latrines.			Largely project funded but households will cover small percentage by digging pits and small contribution to costs	



Lusaka	LWSC leads & CARE supports santrn; considering eco - san but uncertain how to manage compost harvest. There is increasing concern re cholera, drainage, flooding					
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**5b. Other sanitation issues**

<b>Location</b>	<b>sludge management</b>	<b>supply side support</b>	<b>city / neighbourhood - wide san planning</b>	<b>current perspective of key issues for future WSUP support</b>
Kazifury slum , Dhaka	DSK & another NGO use vacutugs;	CBOs linked to sludge removal services when required	no plan but national aspiartion to meet MDG target	effective sludge management; exposure visits for officials to see alternatives in action;

Gatwakera, Nairobi	NWSCC has one exhauster truck, charging 4,000/- to transport and dispose at STP; sewer line planned which will allow off site sanitation	Gulper provided and used by few HH latrines to exhaust	Nairobi City Council and NCWSC preparing a plan, that will include informal settlements;	build on NCWSC recent openness to work with NCC to address on-site sanitation
Gatwakera	Outlet pipe provided within the expansion chamber for connecting the bio-centres to the sewer when implemented			
Tana		training of masons, artisan groups & commune sanitation clubs formed and promotion of san plats	T; Tana - wide planning underway for Antananarivo commune and 29 peri - urban areas.	long term sanitation marketing; drainage & sewerage; communal sanitation & sludge management; how to manage sanitation RLF with many partners
Naivasha			no plans	how to structure the sanitation market

Bangalore	by municipal services, disposal to sewers;	promoting use of gulpers by SSPs but their disposal resisted at STP by municipality		
Maputo	plan to establish an operator in each barrio to provide services. SB no. 1 already used service at cost of \$58.	ABASBU CBO has capacity to provide this support		more sanitation blocks, low - cost sewers, de-sludging; financial viability of SSPs; move towards a city - wide plan;
Maputo				design options for blocks and shared latrines; DEWATS, low cost sewers and other options
Kumasi				WSUP supporting a study by BPD on latrine regulation options
Bamako				stronger link & sanitation exchange with francophone Tana

## 6. Hygiene Promotion Strategies and Details

location	hygiene promotion strategy	hygiene messages / audiences / communication channels etc
Kazifury slum , Dhaka	WSUP sub - contracts WAB, who uses a local NGO ECA	HWWS at key times; water storage; wash vegs; don't waste water
Gatwakera, Nairobi	HP part of capacity building; HWF & soap provided to schools; now starting to work with Unilever but Lifebuoy too expensive and looking for cheaper alternative e.g. sunlight	HWWS; use clean running water and the HWF provided; water vendors clean tanks 1 / year; liaise with NCWSC to check water quality in HHs
Tana	strategy developed with LSHTM but delayed by focus on sanitation efforts; working with WAM and local partner ECA	HW, storage, latrine useage; no direct work in schools as only govt can do this; constrained by limited communication skills e.g. ability to answer questions
Naivasha	work with PH Dept. to define issues, target audience etc; target general public , no segmentation; also working with Red Cross, WSP	HWWS + clean water; santn saves lives; proper santn is my right; using street theatre and now considering radio
Bangalore		
Maputo	no strategy; intended to be done with LSHTM; now working with Unilever but Lifebuoy is too expensive for barrios	for schools boil water before drinking; for sanitation block communities the need for HW
Kumasi	no strategy yet in place; will work with Env Hlth Dept of KCC,	HWWS; water storage; food vendors hygiene; plan for schools programme using drama
Lusaka		
Bamako		

## 8. Lessons around water

Project	Location	Solutions	Obstacles	How to improve implementation	Learning points
Maputo	Baseline indicated need and numbers. Existing secondary network in place Illegal connections could easily be dealt with.	HH connections Public Standpipes Pre-paid meters	Need for connection contract not well known.  High connection charges despite subsidies /OBA.  Small contractors have financial problems  Administrative delays in water company  People with wells don't want to switch to other supplies	More support to CBOs.  Facilitate payments for connections – maybe incorporate connection costs in the tariff  Need to understand weaknesses of firms.  WSUP to work closer to water company	Baseline study important  Ability to pay is a major consideration  A mix of solutions meets the needs of a wider community  Contractors limitations need to be understood  Expansion can impact the capacity of the water company to administer.  Existing supplies, even when quality is poor, may compete with new schemes.  The need to understand behaviour patterns indicates a greater need for social inputs.
Maputo (Liberdad)	Willing parties in place that needed to be brought together.				WSUP brokered contracting arrangement has enabled rapid progress without direct involvement in project delivery.
Tana	Feasibility study in collaboration with community indicated good location and solutions. Subsequent lack of water availability put project at risk. LSP had other priorities.	Water service points being built	Delays in another project resulted in not enough water for the WSUP project.  WSUP is the main investor. WUAs do not have access to funds	Consultations have resulted in compromise locations that interest the water authority more. WSUP will work in these areas.	Feasibility study should not rely on assumptions.  Need to ensure availability of water  Need to understand the priorities of water authorities.

Project	Location	Solutions	Obstacles	How to improve implementation	Learning points
					Improved access to finance is needed for local investors.
Bamako	Project targets large communes with no network. These feature in local development plans.	Borehole with network extensions	<p>Lack of available water</p> <p>Drilling boreholes is the only practical option</p> <p>Drilling is very expensive and deters other investors.</p> <p>Water prices high.</p> <p>Water company not interested in target communes.</p> <p>Local authority lacks expertise in water operations</p> <p>Materials need to be imported and are expensive</p> <p>People /suppliers not well organised.</p>	<p>More cooperation between stakeholders is needed.</p> <p>Capacity building needed for local authority and suppliers.</p> <p>Improve water quality</p> <p>Reduce connection charges</p>	<p>The views of all the stakeholders need to be understood, especially the water authorities.</p> <p>Advocacy may not be anticipated but may be required to change negative attitudes towards the urban poor.</p> <p>The capacity of key partners should be understood.</p> <p>Sources of materials and resources should be understood.</p> <p>Costs to the consumer and the authorities need to be fully understood and agreed.</p>
Supplementary information from other projects					
Dhaka	Location had a need and an ability to pay due to pre-existing high prices. New prices are lower than before.		<p>Illegal connections to the network have caused the quantity of metered water to decrease.</p>	<p>Need to work with water engineers to remove illegal connections.</p> <p>Need to work closely with the local water authority.</p>	<p>There is a need to understand behaviour patterns and consider how to discourage illegal connections, which will compromise the quality of network water. Greater social inputs are indicated.</p>
Nairobi	The location had a need and an ability to pay.	Water kiosks and household connections - fit social connection policy.	<p>Water pressures were low but have improved.</p> <p>Connections costs (meter and pipe into house) are high</p>	<p>Tackling NRW has improved pressure.</p> <p>Scope to incorporate connection charge into the tariff.</p>	<p>Project and facility locations should be undertaken in collaboration with the water authorities so that they fit into master plans.</p>

Project	Location	Solutions	Obstacles	How to improve implementation	Learning points
Naivasha	Small town – peri-urban	Boreholes feed kiosks with inbuilt fluoride removal.	Local service provider lacked capacity to deliver to the poor. Water availability is an issue	No HH connections or yard taps.	Need to understand local water company's limitations. Availability of water should have been better understood.

## 9. Household impacts

### Maputo

**Indicators in use** - No of legal hh connections; Reduction of leakage; reduction of water related disease; Improved availability of water; Improved quality of water; Improved volume of water;

**Negative effects** – Revenue of stand pipe operators has reduced a lot – planning to establish kiosks that they can utilise and have improved revenue potential; Similarly some families used to proved water through illegal connections and have lost this income – aim to work with them and establish a legal re-selling process; Existing ssp’s are also suffering as people prefer to have services from the LSP where possible;

Increase in rents Sees this as a risk but hasn’t had any experience of it yet in the project;

**Experience of surveys** – surveys are very useful to understand the reality and the need, they enhance the relationship with local authorities as they find the information very useful; Results are used to identify priorities and plan the work that is done as well as guide program implementation; the results are shared with all partners – WSP and the School of Architecture have used this information in presentations they have made; data was also used to support FIPAG’s master plan by providing more accurate information;

### Tana

**Indicators in use** – hh’s with water; hh’s with sanitation facilities; Population using public facilities; %age of households with soap and water available for hand washing;

**Negative effects** subsidies are not used – still need to do some work on behaviour change; some poorer groups can’t afford to use them; Laundry blocks installed are quite attractive but are being used by the better off in the communities –

**Experience of surveys** – They have done customer surveys to obtain information for LSP and carried out hh surveys for sanitation segmentation and used to identify 5 socio-economic groups; The results area used to re-direct the program; the Sanitation segmentation work was sued as the base for subsidies and feasibility for the project; WTP and ATP data are very useful; They don’t feedback information to the authorities currently due to local political disturbances/issues; on the sanitation program this is being implemented through local subcontractors to WaterAid – they are experiencing difficulties with surveys as the subcontractors are very slow; The most critical information gathered through the surveys is considered to be in relation to ability and willingness to pay; They consider a main difficulty being how to measure hygiene promotion impact;

### Naivasha

**Indicators in use** – Frequency of diseases within the household; Quality of water; Amount o f money spent on WatSan by the home; Time and distance of facilities from the home;



**Negative effects** – No drainage; private borehole owners were in danger of losing their livelihood however they now have bulk supply contacts with the project; In addition donkey water vendors are buying from the kiosks and selling to outside the project area;

At design stage the team identified the risk of rent increases forcing tenants to move on as a potential problem and have encouraged landlords from day 1 not to increase rents but to use the opportunity to entice people to come and rent their properties – surveys pre and post of house usage (properties occupied/not occupied) which supports the fact that the facilities make property more attractive - WSUP have evidence to see if total revenues increase due a higher occupancy rate and if so use this to argue against rent increases;

#### **Dhaka**

**Indicators in use** - Improved health, reduction in diarrhoeal disease; Water collection time reduced; 24 hour water supply; reduction in the cost of water; empowerment of women; Removal of hanging latrines from the environment; Child use of facilities;

**Negative Effects** – CBO's have difficulty with O&M funds – requires more CB; Drainage – more water available through the facilities but not properly drained away; Increases in rent demanded by landlords; Rents in the project area have increased – communities have asked for support from WSUP to discuss with owners but most owners have not lowered rents;

#### **Nairobi**

**Indicators in Use**- Price of water at household level; outbreaks from contamination of water; Volume of water used; Storage facilities for water;

**Negative effects** – On plot sanitation – sharing between households where may be three or 4 families are using facilities in 1 house – not good; increased in inequity for the very poor as they cannot afford the bio gas facilities, even amongst community groups – some members cant afford the payments and are stopped from using the facilities; Use of low quality pipework for service connections leading to contamination of supply

**Experience of surveys** – not much work done in Nairobi due to low budgets; A recent survey in shared toilets provided a negative view of them – the study (April 2010) on shared pay by use latrines by Emory found that 1. Monthly payments do not work in informal settlements; 2. Management is a challenge as caretakers did not receive payment; 3. Rents had not increased; 4. The gulper was only partially used – as a result the ACF project program has been amended to change the sue of funds initially to be used for shared toilets – effective use of feedback to re-direct;

#### **Kumasi**

**Indicators in use** – incidence of water related disease; Income levels – in particular improved ability to open up other income streams – e.g food production;

**Negative impacts** – one potential impact of the sanitation program is the impact on shallow groundwater which is used as the water supply;

**Experience of Surveys** – They will be conducting a study into hygiene behaviour to analyse current behaviours and beliefs (e.g. “only need to wash hands before eating if you will eat oily foods’) and identify triggers for behaviour change – this will allow them to design the behaviour change strategy and help them to identify core target groups;

## **10a. WSUP Environment strategy**

*Incorporating environmental sustainability into water & sanitation for the urban poor*

### *Background*

WSUP is committed to using its projects to achieve positive environmental impacts, ensuring that environmental regulation and integrated water resource management principles, climate mitigation and adaptation are included in project design and implementation (WSUP Business Plan). This paper outlines the strategic framework within which WSUP will operate on environmental issues and defines the key learning objectives. The objectives are intended to ensure that WSUP’s work on the environment is a) truly innovative, b) adds up to more than the sum of its parts in terms of impact at the policy level, and c) supports WWF’s strategic objectives around water security, especially as these affect areas with existing or projected water scarcity.

The objectives are inter-linked. The common theme is building the capacity of local service providers, environmental regulators and other stakeholders so that watsan initiatives are resilient to future changes in climate and water use.

The framework allows for linkages between current (BMGF grant (packages 1 and 4), WWF contributions), proposed (Cranfield KTP) and emerging activities – ensuring that all of WSUP’s actions on the environment contribute to answering the main learning objectives.

### *Strategy – outline*

The framework consists of 5 strands of work and formulates a learning objective under each strand. It is recognised that to reach an answer on each objective, a range of sub-questions will need to be defined & answered. Annex 1 outlines current activities that already address some of these and can be used to identify gaps in knowledge which we will need to fill in future.

#### **Strand 1: Water security**

WSUP projects will aim to deliver water to large populations. The availability of water is a crucial factor in succeeding in this aim, and necessitates LSPs to engage in discussions on water allocation within the catchments. This strand addresses the issues of both water quantity & quality and explores the mechanisms through which WSUP can work with LSPs to ensure the sustainability of water supplies.

*LO 1: How can WSUP ensure that a sustainable source of good quality water will be available to allow LSPs to connect additional populations to water distribution systems*

#### **Strand 2: Climate & carbon**

The water industry has a significant carbon footprint, due to the energy required for the extraction, treatment & distribution of water. On the other hand, energy production uses vast amounts of water. This strand addresses the balance between energy, water supply & waste water treatment and aims to provide Local Service Providers, environmental regulators and donors with guidance on, and exemplars of, low carbon water and sanitation projects that will be resilient to the impacts of climate change on water resources.

*LO 2a: In what ways are urban watsan services vulnerable to the impacts of climate change and how can WSUP projects incorporate resilience in its project design and implementation?*

*LO 2b: How can WSUP projects reduce the carbon footprint on water & sanitation services?*

Strand 3: Management of on– and off-site impacts (disposal of waste water, solid waste, sludge)

WSUP projects are concerned with delivering services on project sites, but project interventions will in most cases have impacts that are off-site. This includes the downstream impacts of waste water, disposal of solid waste and collection & disposal of sludge of on-site sanitation systems.

*LO 3: How can WSUP best assure that negative environmental impacts of project interventions are dealt with in an integrated approach and prevent transfer of impacts off site?*

Strand 4: Regulation

The success of a sustainable approach to urban watsan provision, that incorporates lessons learnt under previous strands, is dependent on strong regulatory institutions in-country. This may be at a national level, but can also incorporate institutions at municipal or community based level.

*LO 4 : How can WSUP build capacity with the relevant actors to ensure that good environmental standards will be met throughout project development and implementation*

Strand 5: Water & sanitation for conservation

WWF’s mission is to stop the degradation of the planet’s natural environment and build a future in which people live in harmony with nature. WWF views its membership of WSUP as a way to ensure that MDG targets on water and sanitation are met, in a way which does not compromise freshwater ecosystems and its ability to provide ecosystem services to future generations.

*LO 5: How do WSUP projects contribute to freshwater conservation and how can WWF use the WSUP approach in a wider context to reach its conservation targets*

**10b. Overview of past & current environment activities**

	Status and funds
<b>Water Security</b>	
<i>IWRM guidelines / KTP</i>	(BMGF): In progress, work by Tom Heath in Lusaka, Naivasha and Tana

<i>Lusaka: Environmental assessment</i>	(BMGF): Study completed by James Phiri
<i>Naivasha: Household options for water security</i>	(BMGF): MSc project, starting May
<i>Naivasha; IWRM study</i>	(WWF/SIDA): Completed 2009
<b>Climate &amp; Carbon</b>	
<i>WSUP CC Guidelines</i>	(BMGF): In progress, work by Tom Heath in Lusaka, Naivasha and Tana
<i>Lusaka: vulnerability assessment</i>	(BMGF): Study completed by James Phiri
<i>Carbon footprinting WSUP projects tool</i>	Planned
<i>Naivasha: Water treatment options Carbon footprint</i>	(BMGF): MSc project, starting May
<i>Wind to power pumps Naivasha</i>	Planned
<b>On - &amp; off site management</b>	
<i>Tana site management: - Identification of environmental impacts that may arise from the project and develop plans for mitigation and training to CDD on EIA process - Technical support of an environmentalist - Measuring of the quality of effluent water from infrastructures built in pilot communes</i>	(BMGF) In progress
<i>Lusaka ecosan assessment</i>	(BMGF): Study completed by James Phiri
<i>Solid waste management Maputo</i>	(BMGF) In progress
<i>EIA Maputo</i>	(BMGF) In progress
<i>EIA Tana</i>	(BMGF) In progress
<i>Tana Solutions: Drainage canal demo</i>	(BMGF) In progress
<i>Tana solutions:Sludge collection &amp; disposal Local enterprise</i>	(BMGF) In progress
<i>Bangalore DEWATS solutions</i>	Planned

<i>Gatwekera: integrated sludge management approaches</i>	In progress
<b>Regulation</b>	
<i>Development of CB plans and EA mission (plus local support) Tana</i>	(BMGF) Completed by Environment Agency 2008
<i>Development of CB plans and EA mission (plus local support) Maputo</i>	(BMGF) Completed by Environment Agency 2008
<i>Implementation of CB plans Tana</i>	In progress
<i>Implementation of CB plans Maputo</i>	In progress
<b>Conservation</b>	
<i>Wetland restoration Bangalore MSc project</i>	(BMGF) MSc project Summer 2010
<i>Lusaka watershed management project</i>	Planned

### 10c. Learning points from completed work

#### *Naivasha IWRM study contribution to environment strategy:*

The study contributes to strand 1 “Water Security” which addresses the issues of both water quantity & quality and explores the mechanisms through which WSUP can work with LSPs to ensure the sustainability of water supplies. As the learning objectives of the environment strategy were not defined at the time the study was commissioned, there is no direct answer to the question of how WSUP can ensure that a sustainable source of good quality water will be available to allow LSPs to connect additional populations to water distribution systems. The following is extracted from the studies:

- The Naivasha project relies largely on local boreholes, rather than a central water supply; the study suggests “support for gathering water resource management data including water quality, water abstraction levels (illegal and or over-abstraction of water), and groundwater potential; eco-hydrological data including status of habitat and water catchment, determination of erosion and sedimentation in the upper, middle and lower sub-basins”;
- Even groundwater sources are reliant on the wider catchment. “Because water supply to downstream communities depends on upstream water resources management the downstream investment through Payments for Environmental Services (PES)/Payment for Watershed Services (PWS) will ensure sustainable supply from the upper catchment.”

#### *Lusaka IWRM and Climate Change study: contribution to environment strategy*

The study contributes to 3 strands of the WSUP environment strategy:

Water security: At the basin level, diversification of water sources is needed to reduce reliance on boreholes and ensure long term sustainability.

Climate & carbon: Linked to water security – supplies are vulnerable to impacts from climate change. There is a need for capacity building, particularly with LWSC

Management of impacts: Ecosan approaches offer many advantages, including on cholera control, and should be further promoted. However, there are still concerns regarding *disposal, which will* need to be addressed.

Full documents to be available on Extranet