

Frankfurt, 8-9 October 2009

KfW Water Symposium 2009 – Financing Sanitation
“Improving Hygiene awareness and sanitation”

**Main Findings and
Recommendations for Development Banks**

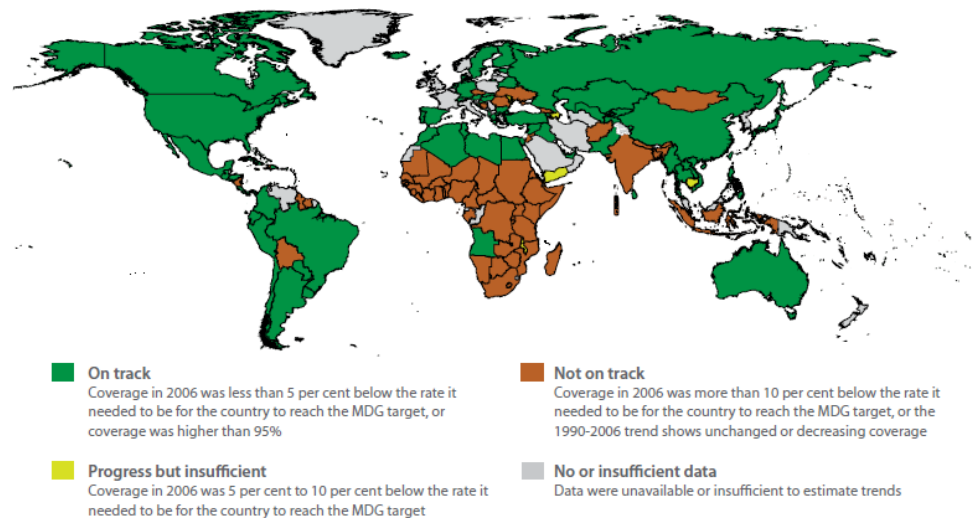


Sanitation Still Remains a Challenge

Sanitation is one of the most important foundations of health, dignity, and development. According to the 2008 WHO/UNICEF JMP report, the improved sanitation coverage in developing regions was 53%, a long way away from the Millennium Development Goal of 77% by 2015.

This means that two and a half billion people remain without improved sanitation facilities, mostly in sub-Saharan Africa and Southern Asia.

Countries not on track to meet the MDG sanitation target



The follow-up of the International Year of Sanitation 2008

The central objective of the International Year of Sanitation was to put the global community on track to achieve the MDG sanitation target. The year was successful in increasing awareness and commitment and mobilizing governments. However, one year later, it is still difficult to keep sanitation high on the agenda, while practical action is required to encourage demand driven and sustainable solutions. With the support of the German Ministry for Development and Cooperation and together with the European Investment Bank EIB and the French Development Agency AFD, KfW organised a two day Symposium to specifically address ways in which financing institutions can better promote the achievement of the MDG sanitation target.

The Symposium

The Financing Sanitation Symposium took place on the 8th and 9th October 2009 in the KfW headquarters in Frankfurt. More than 70 experts from various backgrounds explored the challenges of sanitation and discussed ways to further develop innovative financing mechanisms for improved hygiene, sanitation and wastewater management in low-income countries.

Four thematic areas were tackled by detailed background papers, presentations and high-level open floor discussions. The Symposium was very results-oriented and led to the formulation of some general recommendations as well as of specific recommendations in each of the sessions.¹

¹ for the presentations refer to: http://www.kfw-entwicklungsbank.de/EN_Home/Topics/Water_supply/Activities.jsp

General Recommendations

A theme that appeared in all four sessions concerned the process of project design by development banks. Recommendations to improve it in order to best tackle sanitation issues were as follows:

1. address the entire **sanitation chain**²



2. **plan for all urban areas** including informal housing areas and slums
3. ensure the **sustainable operation** of all sections of the sanitation chain (long-term effectiveness)

Session 1:

Financing Change in Personal Hygiene Behaviour and Demand Creation for Sanitation

Motivation

Earlier sanitation investments were mainly centred on subsidised household level hardware. This however proved to be very costly. Even more worryingly, many sanitation facilities that were built in the past have proved to be unsustainable (problem of pit emptying) or no longer in use.

Since the 1990s, initiatives fostering hygiene behaviour change and demand creation have been increasing. This type of software investment aims at changing social norms regarding sanitation (e.g. open defecation). An interesting finding was that non-health messages were often the most successful in motivating sanitation behaviour change. Improvements in comfort, safety and status had a much greater effect.³ Two encouraging examples are PHAST and CLTS. The “participatory hygiene and sanitation transformation” (PHAST) programme was developed for rural communities and aimed at changing a number of inadequate sanitation conditions and hygiene behaviours. The “community led total sanitation” (CLTS) programme with its narrow focus on eradication of open defecation, has proved quite successful in broad public mobilisation.⁴

Sanitation marketing has proven to be an important complement to demand-creation campaigns. The promotion of hand-washing with soap and support to local traders and artisans in marketing a range of locally adapted products are ways to strengthen the supply side of the sanitation market.

Software investment programmes leading to the creation of a sanitation market can be very cost-effective (see the numerous examples from countries such as Bangladesh, India, Vietnam, Lesotho, Ethiopia, Burkina Faso or Benin).⁵ What is needed is that sanitation facilities are wanted by their users.

The cost-effectiveness of financing change in personal hygiene behaviour and of demand creation for sanitation is an important message that should be emphasised in political dialogue. Promoting hand-washing with soap is particularly cost-effective. According to Cairncross, the intervention costs approximately 1 US\$ per capita or 3.35 US\$ per disability-adjusted life year (DALY) gained. The promotion and social marketing of latrines is also a cost effective intervention (11.15 US\$ per DALY gained). Oral-rehydration therapy, another main measure to prevent diarrhoea mortality, costs an estimated 23 US\$ per DALY gained.⁶

² As presented by Evans and Tremolet (2009). “*Targeting the Poor – Facilities and Improved Services*”

³ Cf. the campaign carried out in Benin, Session 1 slide 8

⁴ Jenkins et al. (2009). “*Financing Change in Personal Hygiene Behaviour and Demand Creation for Sanitation*” mentions the cases of Benin, Ethiopia and India.

⁵ Cf. background paper for Session 1 for detailed information

⁶ Sandy Cairncross and Vivian Valdmanis (2006). “Water, Sanitation, and Hygiene Promotion” in *Disease Control Priorities in Developing Countries*, pp. 771-92. New York: Oxford University Press.

Recommendations for development banks

A very important first step is to always invest in **solid project preparation**. It is fundamental to understand the actual motivations behind the sanitation behaviour of different social groups (depending on social status, gender, age) as well as the bottlenecks for behaviour change. This includes families' spending habits and priorities.

It has been suggested that development banks should avail themselves of **professional marketing expertise** (where possible, national, and not international, experts), in order to develop tailored campaigns. All messages and products to be marketed require **careful pretesting** before going to scale.

Incentive schemes (cf. CLTS) are an important element of well designed programmes. The chosen approaches should facilitate people's participation on the basis of **informed choices** and help to generate **community action plans**.

As part of the effort to **create a sanitation market**, informal sector providers and masons should be trained and supported. A sanitation market and in particular the demand side should be developed not only for toilet investment, but for the entire sanitation chain (see general recommendations), including pit emptying, the transport and treatment of sludge and its disposal or reuse.

The success of software investment depends on the ability of the different agents in the sanitation sector to cooperate and **form alliances**. Important institutions are those operating in **health** and **education**. School children can play an important role as agents of change in sanitation behaviour. Also alliances with **private sector** operators such as the soap industry, sanitation service suppliers, micro-credit⁷ or even insurance companies can provide a valuable contribution.

To make software investment more effective and sustainable over time, development banks should allocate adequate funding also for the **monitoring, evaluation** and cost-effectiveness analysis of projects. Incentive schemes also need to be backed by reliable independent verification mechanisms.

Challenges

Behaviour changes take time, so programmes will have to span over longer periods of time than they have so far.

Another element that should be considered is that sustained and national scale campaigns, which are necessary for successful sanitation behaviour change, require investment in human capacity.

As regards social marketing campaigns, development banks must ensure that messages are coherent and easily understandable, to maximise their effectiveness.

Market mechanisms will not emerge if some technical solutions are heavily subsidised. Output based aid that allows the customer to choose the preferred technical option and contractor (cf. ONEA in Burkina Faso) is less likely to distort market mechanisms.

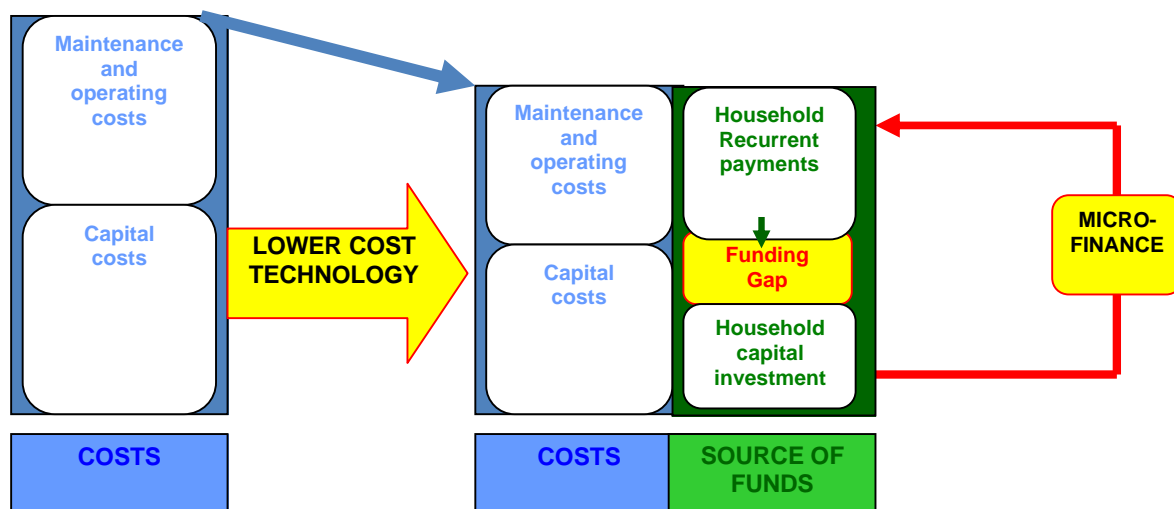
⁷ For example, the Grameen Bank in Bangladesh requires a toilet being part of the investment for any housing loan.

Session 2 Targeting the Poor with Facilities and Improved Services

Motivation

Sanitation can provide its full benefits – to users, society and the environment – only if the coverage is universal (or almost universal). This means that also the poor must be included. Besides problems with social norms and patterns of behaviour, there is often a funding gap that prevents the poor from meeting the capital and the recurrent costs of sanitation facilities. Financing mechanisms aimed at closing the funding gap should be chosen according to their potential of targeting the poor in terms of effectiveness, leveraging, sustainability, and scale.⁸

Interventions to reduce the funding gap:⁹



Knowledge is increasing on how well various approaches manage to target poor people. Public spending per additional toilet in a number of Asian programmes (e.g. Vietnam, Maharashtra/India, Bangladesh) is far lower than in Latin America or Africa. Asian programmes mobilise more private investment. However, this may limit the accessibility for poor households.¹⁰

Recommendations for development banks

Approaches targeting the poor should be formulated as a defined strategy in national policy. Such a **policy framework** is the basis for successful local strategies. Development banks should be active in promoting this process.

Lower cost technologies, both in the phase of investment and during the subsequent operation of sanitation facilities, should be the priority of any sanitation programme aimed at the poor. The recommendations from Session 1 also apply when identifying **adequate low cost solutions** and appropriate financing mechanisms: good project preparation; considering the entire sanitation chain; and reliable monitoring and evaluation. Development banks should foster **city-wide planning of basic-needs-services delivery**, identifying critical areas of need and developing action plans.

Micro-credit is the second element that can increase the poor's capacity to cover investment costs. A major advantage is that the decision on what investment to carry out is left with the households. Thus, the supply side of the sanitation market is not distorted.

⁸ Criteria set out by Evans/Trémolet in the background paper for this session.

⁹ Cf. presentation Evans/Trémolet

¹⁰ See Trémolet's presentation slide 18: hardware investment as % of below poverty line hh income varies between 2% (Senegal) and 30% (Vietnam).

Sanitation programmes should **partner with micro-financing institutions** (MFIs) to make full use of their resources. MFIs would benefit from an enabling environment for their initiatives in the sanitation sector; measures to foster this include training, market research or providing technical advice.

Development banks should also play a role in evaluating the financing regimes of their borrowers and grantees (e.g. utilities) and encourage well targeted, effective and sustainable **cross subsidies** (e.g. subsidised house connections) or **payment facilities for poor households** to reduce their initial capital investment costs.

By making an effort to understand what opportunities and constraints poor people face in accessing sanitation, development banks can encourage the formulation of financing regimes that can go to scale. This should include **planning and project design for poor housing areas** as well as a reliable downstream management of sewerage and faecal sludge, since poor people are generally the worst affected by deficits in this component.

Where development banks encourage household investments, they should favour **long-term and sustainable approaches** to reach the poorest, because they often benefit last. The first beneficiaries tend to be middle income households without safe sanitation since they know better how to make use of support.¹¹

The preceding recommendations do not exclude that subsidies in the sanitation sector might be justified, if the goal is a benefit to society as a whole. For health benefits, only full sanitation coverage really makes a difference.

Challenges

The operational costs for on-site systems (and of the necessary off-site services) are often underestimated and not affordable for poor people. Very low initial costs may not be sustainable over the entire lifecycle of the investment.

Due to high transaction costs, the interest rate of micro-credit loans is often high and repayment periods are short. Hence micro-credit can reach some poor households without safe sanitation, but it generally cannot reach the poorest households. Project design should ensure that very poor people are not put into excessive debt.

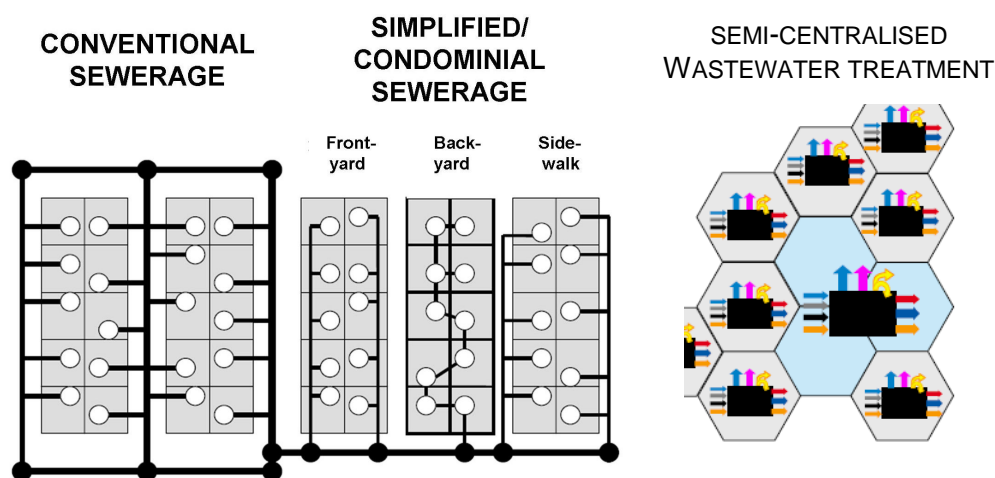
¹¹ cf. the Strategic Sanitation Plan of Ouagadougou http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2003/08/28/000012009_20030828113145/Rendered/PDF/266280PAPER0English0Blue0Gold0no1010.pdf

Session 3 Urban Spaces – How to Provide and Finance Service to Peri-urban Areas

Motivation

The third session addressed the great challenge that the sanitation sector faces in the upcoming years: the tremendously high urban population growth. This requires an open mind to evaluate and take into account all available technical solutions.

On-site sanitation might be still adequate in lower-density urban areas and shared facilities might be the only option in very poor and very crowded areas. However, experience from rapidly growing urban areas in Latin America and Asia¹² shows that simplified (condominial) sewer systems and integrated modular (semi-centralised) systems are often a suitable option provided that water supply and land tenure are reliable to a certain extent. This applies not only to poor housing areas but to all rapidly growing urban areas.



In order to implement low cost solutions, often a transformation in the mind-sets of project managers and planning engineers is necessary.

Recommendations for development banks

To make full use of the low-cost solutions available, development banks should ensure high level **in-house knowledge about sanitation** among project managers and engineers, whilst also facilitating South-South learning. Specifically, simplified (condominial) sewerage systems coupled with suitable treatment and disposal/reuse systems should be envisaged where they are potentially appropriate (available data indicates that this amounts to a population density higher than 160 – 200 inhabitants per hectare).¹³

Development banks should set adequate **standards for project preparation** and communicate them to their partners. The standards should be conducive to locally adapted and efficient solutions for the entire sanitation chain. As an integral part of investment activities, they should foresee **community participation** during the planning and implementation phases of projects.¹⁴ A proposal put forward during the Symposium was for a document clearly stating the “Quality of Proposals that Financing Institutions expect from Authorities and Utilities.”

In order to ensure that households can connect to a working system of simplified sewers, incentives may be required to lower connection costs, e.g. in form of **output based aid**. Project implementation and operation necessitate constant **monitoring**¹⁵, with more

¹² The background papers for this session provide details for projects in Brazil, Bolivia and China.

¹³ Cf. Background paper by Prof. Mara – Session 3

¹⁴ Cf. Session 1

¹⁵ Cf. Session 1 and 2

indicators than only coverage. The evolution of land use rights, the process of slum upgrading and wastewater / sludge treatment and disposal should also be monitored.

Development banks are in a good position to **encourage broad sector dialogue** supporting the adjustment of legislation and technical standards in recipient countries. From a technical point of view, these standards should allow for simplified sewerage and for integrated modular systems for water supply, wastewater and solid waste management with energy and water reuse.

Investment should also be directed at smaller towns, but in these cases particular attention must be devoted to ensure that services are managed professionally. Examples from Uganda and Zambia show that clustering between utilities might be required. Also in this context, **alliances with the private sector** can provide valuable support.

Development banks should contribute to identify **viable business models for small emptying service providers** and encourage them to serve areas where such services are required. Furthermore they should support utilities in the construction of an adequate number of transfer stations and treatment facilities. This approach might also involve **cooperation with local government authorities** or health departments.

For dense informal urban settlements, development banks should also consider ways to support investment in public or community toilet blocks, including downstream processing.

Challenges

One of the reasons for the limited use of simplified sewerage systems might be the lack of data on its operational costs vis-à-vis those of conventional systems. There is also limited knowledge on how to best reduce and manage operational problems, such as blockages, that might arise in simplified sewerage systems.

Users must accept that sewers are constructed on their private land and they must know how to use simplified sewer systems properly (no disposal of household solid waste). In some societies the necessary community participation is difficult or impossible to obtain. Parallel to this is the problem that decision makers are by nature risk-averse and thus have no incentive to innovate.

Finally, discussion in this session did not address storm water drainage in detail, but it emphasised the importance of doing so. Storm water management has great impact on sewerage systems in many areas and thus requires practical and cost-efficient solutions. These include on-site infiltration, rain water retention, preservation of natural drains and separate drainage. The management of storm water drainage should be done in connection with messages raising citizens' awareness on sanitation and cautioning them not to use it as means of garbage disposal.

Session 4

The Potential Role of Utilities in Sanitation Provision for Peri-urban Areas and Poor Target Groups

Motivation

The fourth session focused on professional and commercially oriented water and sanitation service providers, the so-called water utilities. Worldwide, utilities play a major role in service provision and they are the “natural” partners for development banks.

Utilities have an interest in selling water. Therefore they should take on the responsibility to ensure that the water they provide is also removed. While some countries have separate mandates for water and sanitation services (e.g. Tunisia), most experts agreed that combined service provision is generally more efficient.

Utilities can partner successfully with communities, NGOs and small private service providers in order to improve services to the poor. Regulation and financing mechanisms can incentivise utilities to serve all inhabitants, including the poor. Often, the service to the poor is not fully cost recovering and development banks should be careful not to overburden utilities but preserve their financial viability. Therefore financing mechanisms have to include sustainable funding sources where subsidies or cross-subsidies to the poor are necessary.

Recommendations for development banks

Development banks should encourage utilities to plan for the entire sanitation chain and for all city areas, including informal housing areas and slums. This planning process should also help to **clarify to what extent utilities should provide services beyond the public space** (e.g. hygiene awareness, pit emptying, standards setting for on-site sanitation) and how they cooperate with other actors.

Utilities should focus on services that they can provide efficiently (i.e. for which there are economies of scale) **and partner with other actors** to foster hygiene awareness and sanitation demand creation (actors might include local government authorities, health services, education, NGOs) or in the provision of on-site services (private sector service providers, NGOs).¹⁶ Development banks should encourage adapted decentralised solutions and also finance domestic operators of small scale water and sanitation services.

Development banks should not only invest in infrastructure but also **support capacity building**. The transfer of know-how and best-practice experiences from successful utilities is very important. Similarly, they can provide valuable input to the adjustment of the legal framework. Development banks should support a policy dialogue on regulation and foster the transparency and accountability of sector regulation (accounting standards, business plans, milestones, action plans).

The **analysis of benefit flows** will yield clarity on funding approaches to meet different types of costs. The suggested framework consists of:

- tariffs to cover private benefits (gains in time, comfort, etc.),
- taxes for expenditure that mainly provides public benefits (awareness creation, community participation, well distributed acceptance points for faecal sludge¹⁷, treatment facilities, etc.), and
- transfers, if a funding gap still persists.

The allocation mechanisms for subsidies (out of taxes or transfers) should **ensure that the distortion of economic decisions is minimised**. To this end, performance and output oriented systems are increasingly being used. Among the employed solutions, output based aid for additional house connections in peri-urban areas (e.g. Casablanca, Morocco) or trust

¹⁶ Cf. Session 1

¹⁷ Example of Kampala, Uganda

funds that allocate project specific subsidies among competing single projects (e.g. the Devolution Trust Fund, Zambia) are worth mentioning.

The classical domain of development banks is the **provision of long-term funding**, especially where there is no functioning capital market for long term (local currency) loans. This instrument is still crucial for the investment in public infrastructure such as simplified sewers and wastewater and sludge treatment facilities.

Challenges

It is to some extent a misconception that on-site sanitation is 'private.' In dense urban settlements pit latrines invariably lead to groundwater pollution and thus to economic costs for the entire society.

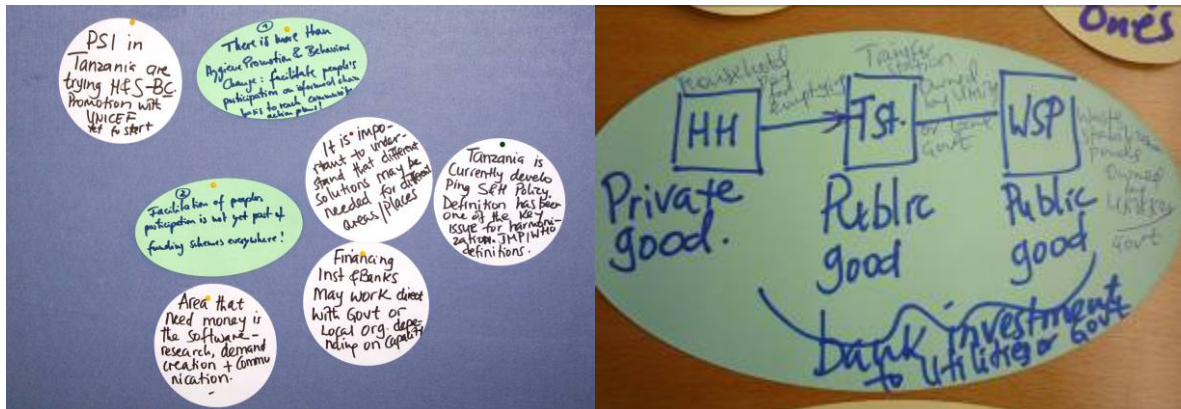
Direct hardware subsidies for on-site facilities may not be very efficient, as the case of Senegal shows. The demand for highly subsidised facilities cannot be satisfied as long as households hesitate to invest without subsidy.

Targeted subsidies to the poor are difficult to implement for political reasons: in Lima (Peru) approximately 80 per cent of utilities' clients are subsidised in some way. This results in public expectation that makes progress in tariff structure reform difficult and slow.

Utilities cannot provide a complete solution to the sanitation shortage. For a comprehensive strategy it is necessary to involve national governments and encourage them to outline long term objectives and implement them.

Annex: Comments and questions from the cards

We owe the vast range and richness of detail of the solutions proposed in this results paper to the fact that all symposium participants provided inputs to the discussion. They were highly appreciated and could be put to use also thanks to the cards on which participants wrote comments and questions to panellists.



Here is an overview of the comments and suggestions for each session:

Session 1

“The area that most needs money is the software – research, demand creation and communication”

“Financing institutions and banks may work directly with governments or local organisations, depending on their capacity”

“It is important to understand that different solutions might be needed for different places”

“Tanzania is currently developing software and hardware policy. The definition has been one of the key issues for harmonisation – 2008 JMP/WHO Report definitions were used”

“for \$/DALY: see under <http://www.dcp2.org/topics/28/sanitationCPP.org>: chapter 41 ‘Water, Sanitation and Hygiene Promotion’ – calculations and comparison of interventions”

“PSI in Tanzania (<http://www.psi.or.tz/>) is trying hygiene and sanitation [projects] - behaviour change promotion with UNICEF is yet to start”

“Are there examples for government commitment?”

“What were the motivating factors [for sanitation behaviour change]?”

“There is more than hygiene promotion and behaviour change: facilitate people’s participation on the basis of informed choices to reach community action plans!”

“Facilitation of people’s participation is not yet part of funding schemes everywhere”

Session 2

“Financing institutions need to know that they are part of the world and they can make a BIG CHANGE in hygiene and sanitation”

“The financier can support a system that would benefit the poor”

“The poor already pay more for the service. Small scale services will provide low cost services”

“Stress the role of International Financing Institutions in reducing transaction costs of pro-poor and innovative solutions (stop re-inventing the wheel for each project)”

“Subsidise the product instead of subsidising the credit/financing”

“Your [Barbara Evans’s] key message is: targeting the poor opens a funding gap – couldn’t that gap be closed, at least to a certain extent, by selling the products of sanitation as fertiliser and energy (biogas)?”

“REUSE AND FINANCING: The economic benefits of reuse (wastewater, sludge, urine, compost, biogas) was almost totally absent from the conference – surely there should be a link to financing here”

“COSTS: the least cost option may not be the most sustainable option. Engineers don’t know how to estimate the economic costs and benefits of sanitation”

“Foster city-wide planning of basic-needs-services delivery:

- Identify stress areas
- Develop action plans”

Session 3

“Lack of knowledge of the appropriate techniques is also due to lack/mode of communication – who is going to work on this? And who will pay for this?”

“The main obstacle to adopting new ideas is inside the heads of the decision-makers”

“Mr Marré said: ‘At the moment there is enough finance available to match the limited number of good project plans available’ BUT this is not true: lack of appropriate financing (quantity and quality) and even larger lack of good projects”

“There is NO development of Condominial sewerage in Africa because there is NO investment in CONNECTIONS to sewerage”

“Los sistemas condominiales no deben ser ‘vendidos’ como una tecnologia para pobres porque causa su rechago. LA HYDRÁULICA NO DISTINGUE ENTRE RICOS Y POBRES – “Condominial systems should not be ‘sold’ as a technology for the poor because that could lead to their rejection. Hydraulics makes no distinction between rich and poor.”

“Call for interested Banks and Financing Institutions: test condominial sewerage in Africa”

“The Brazilian financing approach of development banks is not easily replicated elsewhere”

“The capacity building programmes should focus on governments being able to scale up”

“Emphasise the importance of urban planning: think outside the water box!”

“Examine synergies and trade-offs”

“Systemic approach (urban & peri-urban, rich & poor, looking beyond the urban area) + flexible or phased approach”

“It would be good to finance the planning of new settlements with improved sanitation systems – this needs to be discussed with governments”

“Decision makers are risk-averse: they face no incentive to innovate (if you apply the rules you cannot be penalised even if the result fails”

“Need to create INCENTIVES to CONNECT people to a working service (via OBA) à drive the prices down and increase innovation”

“Enabling environment consists of:

1. political decision à consistency is needed
2. capacity building à also financial literacy
3. think inclusively à all along the sanitation value chain (cf. business cases)

Don’t forget to get the financiers involved in the project cycle from the start”

“Foster fast track learning through South-South links and regional centres of excellence as one-stop shop for training and public learning”

“Think about the market structure: introducing competition in telecommunication market = driver for innovation”

“There are regulatory constraints to adoption of technical options such as semicentralised solutions”

Session 4

“Financing institutions need reliable project partners”

“Do we create new institutions or strengthen the existing ones?”

“Need for an integrated sanitation strategy” +

“Need for coordinated supply-side strategies”

“Tarifas justas, subsidios a la oferta, financiamiento externo y eficiencia es la combinacion que debe funcionar para financiar los servicios en areas periurbanas. Este se debe aplicar tanto a empresas publicas como privadas” – “Fair tariffs, connection subsidies, external financing and efficiency are the combination which must work to finance service in peri-urban areas. This applies to public enterprises as well as to private ones.”

“Need to build local government capacity”

“Clustering of utilities in small towns”

“Cooperation between adjacent local authorities and utilities”

“Vehicle to combine public and private funds”

“Consider loans and subsidies to utilities / local government”

“Kick-start local utilities through grants while building capacity”

“Finance institutions to support capacity-building: INVEST IN HEADS”

“If a utility can successfully supply water, why not sanitation? Root causes of failure need to be analysed”

“Not all African utilities are a hopeless cause – let’s support and learn for the successful ones”

“Nomenclature: Mr Richards used the term ‘sanitation’ as meaning ‘not sewerage’, but that is confusing. We should, if necessary, distinguish between ‘basic sanitation’ and ‘sewerage’”

à reply from Mr Richards: I used the term “sanitation” as meaning “not only sewerage” A general point is that the issue of definitions is important to avoid confusion.

“Utilities can be also supported to reuse the sludge (dry) from treatment ponds”

“PUBLIC TOILETS for the urban poor:

- What role can they play?
- What role can utilities play in operating these?
- Source of biogas and fertiliser”

“SCHOOL TOILETS are important:

- What role for utilities?
- Financed by the health or education sector (also in KfW) à collaboration with water sector

“GROUNDWATER: misconception that on-site sanitation is ‘private’ – but in urban settlements pit latrines invariably lead to groundwater pollution”

“Managing stormwater drainage should be linked with raising citizens’ awareness not to use them as waste pits”