

305.40 94RE



LIBRARY
INTERNATIONAL REFERENCE CENTRE
FOR COMMUNITY WATER SUPPLY AND
SANITATION (IRC)



GOVERNMENT OF UGANDA



**Regional
Urban Sanitation Workshop**

**Eastern and
South Eastern Africa**

PROCEEDINGS

***Mukono, Uganda
23rd-26th May 1994***



HABITAT



WORLD BANK

305-40-94RE-12410

PREFACE

Participants from six countries (Ethiopia, Kenya, Malawi, Tanzania, Uganda and Zimbabwe) attended the four day **Regional Urban Sanitation Workshop** together with resource staff from the United Nations Children's Fund (UNICEF), United Nations Centre for Human Settlement (HABITAT), World Bank and the UNDP/World Bank Water & Sanitation Program. It was held in Mukono, Uganda, May 23-26, 1994. The workshop, which provided a forum for exchange of urban sanitation experiences, problems and solutions, was officially opened by Mr. Ben Dramadri, the Permanent Secretary of the Ministry of Natural Resources, Uganda. This document comprises the proceedings of the workshop.

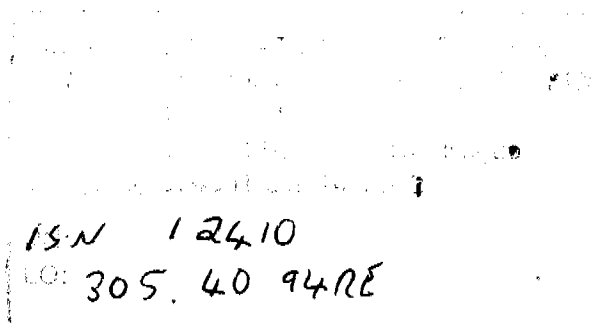


Table Of Content

I	Summary	iii
II	Introductory Remarks.....	v
P1	Overview on Health and Sanitation.....	1
P2	Institutional Arrangements (I).....	1
P3	Strategic Sanitation Planning.....	2
P4	Sanitation Planning Tools.....	2
P5	Country Sanitation Notes.....	2
G1	Group Work 1: "Enabling and Hindering Factors".....	3
P6	Technology Choices.....	4
P8	HABITAT: "The Challenge of Urban Development".....	5
P9	UNICEF: "Process and Interventions in Peri-Urban Development".....	5
P10	Field Trip Report.....	7
P11	Institutional Arrangements (II).....	8
P12	Case Studies.....	9
G2	Group Work 2: "Key Areas".....	12
G3	Group Work 3: "Country Group Work".....	15
P13	Follow-Up and Additional Issues.....	20
P14	Participant's Assessment.....	21

ANNEXES:

- A Opening Remarks
- B Workshop Agenda
- C List of Participants
- D Bibliography
- E Planning Tools

UNPUBLISHED ANNEX:

Country Sanitation Notes (Participants received copies at the workshop)

TEXT INDEX: 'P' = Presentation, 'G' = Group Work.

SUMMARY

The workshop began with presentations of the current situation in relation to urban sanitation from each of the six countries. During the presentations and ensuing discussions, common constraints and problem of the six countries became apparent: e.g. *inappropriate policies and regulatory framework; inadequate financing and poor resource allocation (financial and human); inappropriate institutional arrangements; a narrow range of technology options available to the users; and insufficient attention given to community/user participation in the overall process of sanitation improvements.*

Three case study presentations (Kumasi, Lesotho and Dar es Salaam) highlighted sector practices which have contributed to improved services to the intended users. The advantages of placing sanitation services in the context of environmental management, through the use of the "rapid urban environmental assessment approach", were demonstrated by the Dar es Salaam case study.

Present sector trends and practices, synthesized from recent global experiences, were presented concurrently with the case studies: (i) demand driven service delivery; (ii) community management; (iii) strategic planning; and (iv) increased private sector involvement. In addition, a field trip to Katwe (lower income section of Kampala) demonstrated various community participation activities in a sanitation pilot project.

The sharing of innovative practices and important issues, such as those highlighted in the case study presentations, provided the opportunity for the participants to question and rethink the way urban sanitation is being addressed in their particular countries. The case study from Kumasi discussed the importance of assessing demand for urban sanitation services, through mechanisms such as willingness-to-pay (WTP) studies, in order to implement interventions which are sustainable. The involvement of the private sector in Lesotho and Kumasi in satisfying demand was also highlighted as a way of improving service delivery and sustainability. Strategic Sanitation Planning was offered as an alternative to the conventional master planning exercises.

Historically, engineering master planning approaches have not taken enough cognizance of issues such as cost recovery, institutional arrangements, financing mechanisms and technology options for sanitation services in urban areas. Supply driven implementation of sanitation plans has thus had very limited success in dealing with the sanitation needs of increasingly expanding urban populations.

A fundamental point debated was to what extent demand-driven approaches to urban sanitation service delivery can improve the chances of the sustainability of the investments. The workshop agreed on the basic principle that, in order to better plan and implement sustainable sanitation programs, there should be an identified demand for improved services, i.e. users should be willing to contribute towards the services for interventions to be sustained in the future. In order to achieve faster progress in urban sanitation improvements financing for the investments must be secured in accordance with adequately assessed demands. To better assess and meet these demands, existing roles of the actors in the subsector will require rethinking, e.g it is essential that the private sector and the community become more involved in the process.

Following group discussions during the workshop, the six countries reassessed their urban sanitation policies and delivery mechanisms, keeping in mind the "best practices" - promising cases - presented in the course of the workshop. While policy reforms are not realized overnight, the important first step was the recognition of areas where changes may be required. The main accomplishment from the four days of discussions was the exposure to current sector trends (global) and exchange of experiences between the countries (regional) leading to a renewed commitment towards urban sanitation service delivery.

The participants left the workshop on a positive note (confirmed by the workshop evaluation), expressing desire to have a follow-up meeting in the near future to compare notes on how their respective strategies have been advanced. It was concluded that the new approaches raised much interest. However, in order to help the participants adapt it to country specific conditions there is a need for more documented experiences on where the "demand driven approach" has been applied .

"Urban Sanitation still has a long way to go!" was one of the participant's comment in the workshop evaluation. This workshop was able to outline some important elements of a new "road map" for more efficient and sustainable sanitation improvements in the future.

Introductory Remarks

Mr Ben Z. Dramadri, the Permanent Secretary of the Ministry of Natural Resources, Government of Uganda warmly welcomed all the 'Sanitation Ambassadors' from Kenya, Tanzania, Ethiopia, Zimbabwe, Malawi and of course the Ugandan participants. He also thanked the various agencies, specifically the World Bank, UNDP, HABITAT and UNICEF for making the workshop possible.

He wished everyone fruitful deliberations and declared the workshop open.

The Permanent Secretary's opening words were followed by brief introductions by:

- Mrs Catherine Cravero, the UNICEF Resident Representative in Uganda;**
- David Kithakye, Urban Settlements Advisor - Habitat;**
- Mr G. Tschannerl, Task Manager - The World Bank;**
- Mrs Mukami Kariuki on behalf of Mr Tore Lium, Manager of the UNDP-World Bank Regional Water and Sanitation Group in East Africa.**

A summary of the opening remarks appears as Annex A.

The workshop was officially closed by Mr Sam Mwesigye, Central Government Representative (CGR) in Mukono District.

P1 Overview on Health and Sanitation

A brief presentation was given on the health impact of water and sanitation improvements. The presentation quoted a paper by S. Eserly *et al.* giving statistics for the expected reduction in diarrhoeal morbidity, from various individual interventions (see below). The presentation was partly a comment on the "80% coverage theory", i.e. unless a "critical mass" of 80% coverage in a community is not reached the health impact will be limited for the individuals. It also pointed out the relative importance of sanitation in relation to water supply as shown below.

Water quality	15%
Water quantity	20%
Water quality and quantity	17%
Hygiene improvements	33%
Excreta disposal	36%

DISCUSSION:

These figures started a discussion on their interpretation, basis and relevance. Several people found it hard to understand why improved quality and quantity of water combined did not have a greater impact than a single intervention. It was stated that even using unclean (bad) water for washing and hygiene improvements would have a positive health effect. It was not possible to clarify if the excreta disposal figure included hand washing.

P2 Institutional Arrangements (I)

This presentation started by asking what the basis of our (sanitation) investment programs should be? If our goal is improved health then it is essential that the improvements be sustainable (as opposed to short lived). This leads to an (economic) demand driven approach, which in many aspects is a change from traditional approaches.

P2.1 KEY CHOICES

INVESTMENT CHOICES

- Where to provide services
- Technical options to use
- How to arrange for the production of goods and services
- How to finance provision of the services
- How to monitor the performance of those who produce the services
- The degree to which private provision of the services should be regulated

INSTITUTIONAL CHOICES

- Assignment of responsibilities for:
 - making investment choices
 - implementing investment choices
- Choice of service boundaries
- Assignment of revenue generation authority.
- Structure of central regulation
- Local political accountability

P2.2 TRADITIONAL APPROACH

These choices generally do not reflect user preferences. The choices are driven by:

- Affordability
- Public Health
- Demographic factors (e.g. density)
- Technical type (Institutional Choices)
 - Utilities for sewerer options
 - Local Governments for non-sewerer options. leading to:
 - A narrow range of technical options
 - Tariffs driven by supply-driven technical choices
 - Trunk sewers built before feeder units

The consequences of the Traditional Approach is often disastrous because it leads to:

- Mismatch between supply and demand
- Heavy subsidies which benefit the rich
- Limited coverage - the poor are last in line to be served.
- Cost recovery level low
- Investments often unsustainable.

P2.3 DEMAND BASED APPROACH

- Investment choices should be based on preferences and establish how much people are willing-to-pay (WTP) for their preferences.
- Institutional choice incentives

HIDDEN ASSUMPTIONS

- Different groups of people face different types of sanitation problems
- There is a range of feasible solutions to the problems facing each set of people
- The task of service provision is to:
 - identify the specific types of sanitation problems facing each group of people
 - identify the range of feasible technical options for addressing the specific problems
 - assess demand for alternative technical options
 - help users to make informed choices between options
 - arrange financing and institutional arrangements for sustainable implementation of choices

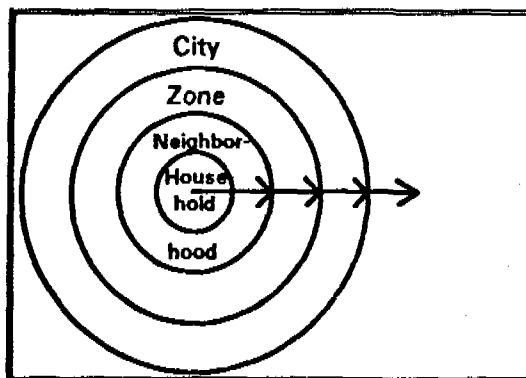
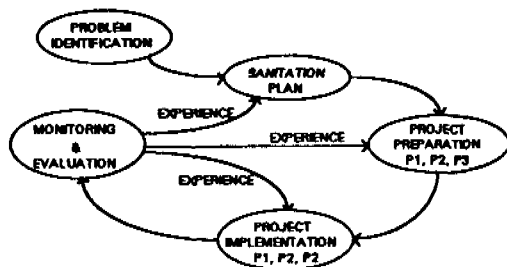


Fig P2.1 Decision Making Levels in environmental sanitation

P3 Strategic Sanitation Planning ("Think Holistic")

The Strategic Sanitation Planning (SSP) approach is a holistic way of approaching the planning, financing and implementation of the entire range of environmental sanitation needs of a city (or community of any size). I.e. it represents one approach/package of tools for improved Institutional Arrangements (see P2). In short it can be summarized:

- Begin with a comprehensive situation analysis
- Take into consideration all aspects of urban sanitation
- Establish a sustainable institutional and implementation framework
- Select first stage projects(s) based on demand from beneficiaries
- Detail out institutional and financing options for components
- Implement projects
- Feed back lessons and scale up.



Plan Elements:

- * Situation Analysis
- * Institutional Options
- * Technical Options
- * Implementation Strategy
- * Financial Options

Fig P3.1 Strategic Sanitation Planning Process.

P4 Sanitation Planning Tools

Various tools (methodologies) are available to assist with 'listening', 'consultation' and data collection as aids to planning, mobilization, feasibility studies, design, monitoring and implementation of programs and projects. They are tools for **assessing demand** and are for example included in the SSP (see above). Some of these are:

- * Beneficiary Assessment
- * Willingness to pay
- * Sanitation Survey
- * Rapid Urban Assessment

For more details on these methods, see annexes and bibliography.

DISCUSSION

C: The issue of supplying services in advance of development (i.e. in advance of demand) was raised.
A: Demand can be expressed in future terms as well as present demand.

Q: How do we separate the demand between household and community and on the potential conflicting interest between household, zone and neighborhood. e.g. solving one problem and creating another elsewhere.
A: It is the job of the implements to inform people on the implications of their choices and to consider the whole sequence of technical implications of the proposed systems.

C: Planning happens when problems have already arisen - and as something is being done. Constraints such as lack of land are problems in implementing the solutions.

C: By the time problems arise, baseline data is usually out of date due to inadequate information systems.

C: Sanitation problems in squatter areas are not the core of the problems - but are rooted in land policy problems. Deeper political solutions are needed.

C: Land policy must be sorted out and planning in advance is needed for controlled development.

C: Approaches to solve existing problems are different from those for planning new situations.

Q: Are we discussing demand from landlords or from tenants?

C: Which should normally be provided first - housing or sanitation? Prevention of problems is best.

C: 'Normal' situations often do not occur, so we have to plan for abnormal and unexpected situations. Migration and other 'backlog problems' have to be dealt with. So called 'normal' situations often only apply to the middle classes.

C: The demand approach applies to both 'backlog' situations and new situations.

CONCLUSION

The discussions on the sessions concerned mainly the concept of "Demand" and revealed various differing perceptions of this concept e.g. some participants felt there was a need to be supply driven in order to have planned urban development.

P5 Country Sanitation Notes

The six participating country delegations each presented a brief paper on the urban sanitation situation and policies and/or details of a particular sanitation project in their countries. The papers had been prepared in advance and all participants had copies. They can be made available upon request. These 'situation' papers formed the a basis for discussions throughout the workshop.

DISCUSSION

Q: How does the revolving fund work in Malawi? Does the Government sale of Sanplat slabs in Malawi undercut the private sector? **A:** Yes it does. (MAL)

Q: Where does the solid waste in Ethiopia go? (ETH)

C: If facilities are improved in the rural areas will it really reduce rural-urban migration? **A:** From several countries: It may help. (GEN)

C: Secondary urban centers are growing at high rates - apparently limiting some of the growth in the capitals.

Growth in urban centers is not only from economic migrants, but often people fleeing from drought, strife and conflict. They are more easily fed and looked after in towns and may not return to rural areas after the crisis is over. (KEN)

Q: How does Z achieve 100% urban sanitation coverage? How are 'informal' settlements dealt with?

A: Over crowding of urban plots, use of (doubled) sewer lines, and moving "squatters" outside municipal boundaries to prevent spread of informal settlements.

Q: How are overcrowding & disease solved? A: A major problems, but as houses have water, sanitation and shelter problems are minimized. (ZIM)

CONCLUSION

The previous discussion on Demand/Supply driven planning biased the questions and comments arising from the presentations of the various country situations.

G1 Group Work 1: Enabling and Hindering Factors in Sanitation

This session identified key urban sanitation issues facing the various countries in the region. Through "brain storming" in groups the participants reviewed the enabling and hindering factors associated with the improvement of urban low-cost sanitation projects as presented in the country presentations/sanitation notes. The plenary thereafter developed a common list and consensus of these key issues. The following is a list of the issues identified by the various groups. These issues were grouped under consolidated headings: Financial; Technical; Institutional; Government; and Community Participation.

HINDERING		ENABLING	
FINANCE			
1 Lack of funds at all levels & misuse of funds	2 Lack of subsidies	1 Private sector funding	2 Availability to credit
3 H/holds not paying enough for services	4 Expensive services	3 Beneficiary contribution	4 Good resource allocation
5 Lack of collateral for credit		5 Cost recovery	
TECHNOLOGY			
1 Inappropriate technology		1 Availability of a wider range of options	
2 Unsuitable soil, high water table		2 Technical know-how	
3 High population density (for on-site)		3 High population density (for piped systems)	
4 Site limitations & unplanned development		4 Availability and Use of local materials	
5 Service level expectations		5 Service level expectations	
6 Resistance to change by technical personnel		6 WTP studies	
INSTITUTIONAL ISSUES/PARTNERSHIP			
1 Lack of planning & training	10. Provider dependency	1 (Good) Staff incentives	
2 Lack of capacity to provide services	11. Mismgmt	2 Accountability	
3 No clear role for all partners	12. Political instability	3 (Good) Monitoring	
4 Donor's excessive control over funds	13. Land tenure (problems)	4 Political will	
5 Rigid and/or inappropriate by-laws	14. (Poor) Information flow	5 Private and public sector partnership	
6 Lack of inter-sectoral collaboration		6 Stimulating self-help	
7 Low priority given to low-income areas		7 Donor funding for demonstration	
8 Physical boundary responsibilities			
9 Institutional arr. are inconsistent with demand driven approach.			
GOVERNMENT POLICY/LEGISLATION			
1 Fragmented legislation		1 Planning ahead	5 Govt. Promote, <u>not</u> Provide
2 Gender issues (poor awareness)		2 Incentives to move to other urban centers	6 Citizen's rights
3 Lack of legislation and enforcement		3 Govt. priority on W and S	7 Land reform
4 Govt. funds directed to middle and high income groups		4 Review of processes	
5 Govt. insisting on unaffordable options			
COMMUNITY PARTICIPATION/SOCIO CULTURAL			
1 Lack of awareness/knowledge of disease trams.	6 Cultural beliefs	1 Homogeneity of communities	5 Community strategy
2 Decision making is dominated by donors	7 No expressed need	2 Heterogeneity	6 Community Involvement
3 Lack of community empowerment		3 KAP studies	
4 Resistance from technical personnel		4 Multi disciplinary approach	
5 Under-estimation of community ability			
OTHER ISSUES			
1 Disasters/emergencies			

Fig G1.1 Summary of Hindering and Enabling Factors

P6 Technology Choices

A brief overview was given of the main sanitation technology options grouped under the headings On-Site and Off-Site Technology.

	SYSTEM	SULLAGE	
ON-SITE	SANPLAT - Retrofit Existing Latrines	NO	COLLECTION AND TREATMENT
	VIP	NO	
	POUR FLUSH - Water Cleansing	MAYBE? - soil conditions - water consumption	
	SEPTIC TANK - Problems Usually with Absorption Fields not Septic Tank Itself	YES	
OFF-SITE	CARTAGE TECHNOLOGIES - Bucket Latrines - Vault Latrines	NO	COLLECTION
	INTERMEDIATE COLLECTION TECHNOLOGIES - Simplified Sewerage - Flat Grade Sewerage - Sub-Divided Network - Solids Free Sewerage - Septic Tank Effluent Pump (STEP) System - Grinder Pump System	YES	
	CONVENTIONAL COLLECTION SYSTEMS	YES	
OFF-SITE	INTERMEDIATE COST SYSTEMS - Facultative Ponds - Anaerobic ponds - Submerged Anaerobic Ponds - Constructed Wetlands		TREATMENT
	SPACE-SAVING SYSTEMS - Upflow Anaerobic Sludge Blanket - Deep Shaft Activated Sludge - Chemical Precipitation		
	CONVENTIONAL TREATMENT SYSTEMS - Activated Sludge - Trickling Filters		

Fig P6.1 Sanitation and Sewerage Technologies Review

P6.1 OFF-SITE TECHNOLOGY OPTIONS

As most participants were assumed to be familiar with the On-Site options (VIPs etc.) the main focus here was on different types of Off-Site options.

- **Cartage Options:**
 - Bucket Latrines
 - Vault Latrines
- **Sewered Technologies:**
 - Conventional
 - Intermediate Cost
- **Treatment Technologies:**
 - Conventional
 - Intermediate Cost
 - Space saving systems

INTERMEDIATE COST SEWERAGE

This section was elaborated more upon, as it was assumed this is the technology least known about.

Design principle: Reduce average diameter and average depth.

Strategies:

- changes in design standards
- changes in technology

Examples ("Appropriateness"):

- For populations greater than 10,000:
 - Simplified sewerage
 - Flat grade sewerage
 - Sub-divided network system
- For populations smaller than 10,000:
 - Solids free sewerage
 - Septic Tank Effluent Pump system (STEP)
 - Grinder pump system

TREATMENT TECHNOLOGIES:

- **Conventional Systems:**
 - Trickling filters
 - Activated sludge systems
- **Intermediate Cost Systems:**
 - Facultative ponds
 - Anaerobic ponds
 - Submerged Anaerobic ponds
 - Constructed wetlands
- **Space Saving Systems:**
 - Upflow Anaerobic Sludge Blanket
 - Deep shaft activated sludge
 - Chemical precipitation

As an illustration of the "matching" of Technologies to Demand (willingness-to pay") the graphs below were presented in this session. They are also relevant for sessions P2, P3 and P4 (Demand Driven Approach).

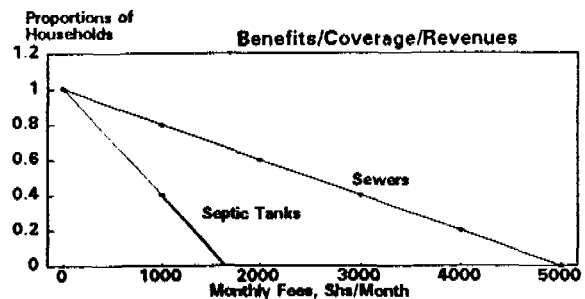
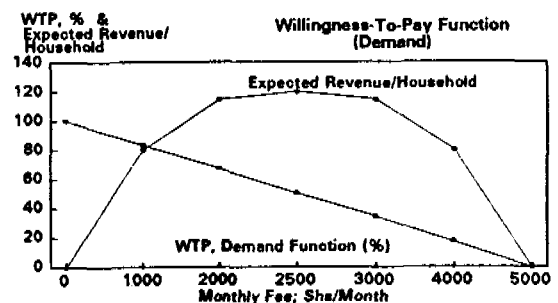


Fig P6.2 Trade-Off Coverage - Revenue

DISCUSSION

Q: What about upgradable technologies? What happens when the WTP is lower than the cheapest technology available? **A:** Funds should be used where WTP is high, the tariffs can then be structured to help subsidize the poorest.

Q: Explain the differences between the Sanplat and the VIP? **A:** The Sanplat could be described as an 'IP', i.e. an Improved Latrine which does not have a ventilated pit. The pit is sealed with a cover (usually a specially designed concrete cover) and the slab is structurally improved compared to a traditional latrine.

Q: With low gradients what moves the solids along? **A:** Certain speed is necessary, traditionally set to be 0.6 m/s. This figure is calculated from a mixture of empirical data, risk and probability criteria. Under certain conditions it is justified to use a slightly different concept than the 'minimum velocity criteria', the so called 'critical shear stress criteria'. Minimum speeds for solids can thus under these conditions be reduced to 0.4m/sec (lower diameters upstreams gives higher water table and thus higher speed; impact of malfunction are different in different areas; use and location of cleansing facilities; etc.).

P8 HABITAT:

"The Challenge of Urban Development"

This was a session representing HABITAT's view on the overall framework and environment in which urban settlement takes place (or ought to) .

WHY A NEED FOR A POLICY FRAMEWORK?

Because of the:

- Absence of clear policies
- Inappropriate tools available
- The current narrow view - sectoral basis
- Deficiencies in planning, implementation and maintenance approaches

WHAT ARE THE CHALLENGES AND REQUIREMENTS?

Management and Resources: Challenges are posed by:

- limited achievements so far
- massive health + economic costs - diseases are equal to loss of productivity
- rapid urbanization, -with the majority being poor
- urban centers the economic growth nerve centers
- the need for sustainability

This Will Require Action in Terms of:

- Coordinated national policy including:
 - Institutional interventions
 - Development agenda issue
- Integrated process of water resources and environmental management

Resources Will Be Required:

- Equity and justice in allocation of resources: There is a level of society which cannot express demand in an economic sense;
- Mobilization - local and international.

and Management Capacity With Respect to:

- Investment options;
- Transparency;
- Cost and recovery of costs;
- Subsidization.

Management Roles, Means and Responsibilities Need to be Reviewed:

- Central Government: enabling role, land tenure, legal, provisions, financing mechanisms
- Decentralized approach: Local Problem/Local Solution
- Capacity building - all levels
- Community level management leading to ownership and responsibility
- Private sector participation.

Educational Requirements will be:

- Awareness of dangers/opportunities
- Approaches to technology options
- Local cultural values

and Implementation Needs to be:

- People based
- A local process
- Demand responsive
- A restoration of dignity and value

P9 UNICEF:

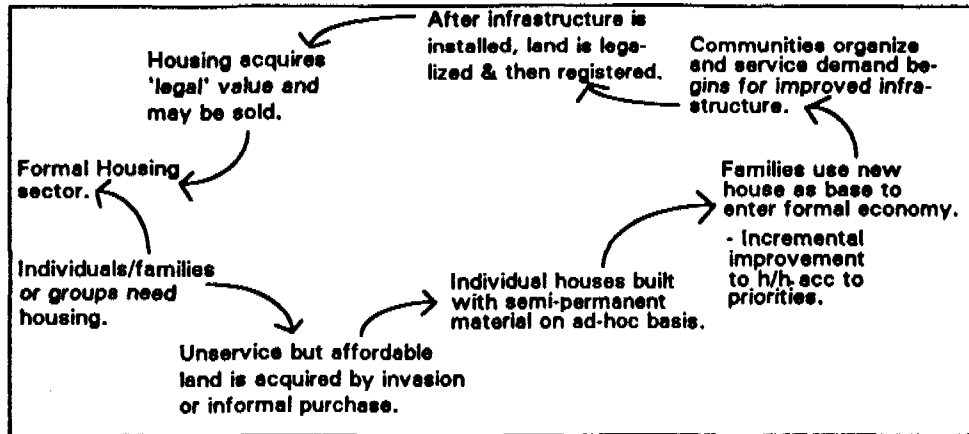
"Process and Interventions in Peri-Urban Development"

If HABITAT's presentation was on the overall urban development environment, this UNICEF presentation focused on the process of peri-urban settlement and development and how it, with the appropriate tools, can be turned into "regular" planned urban development.

UNICEF started by noting that health indicators in peri-urban areas are often worse than in the rural areas.

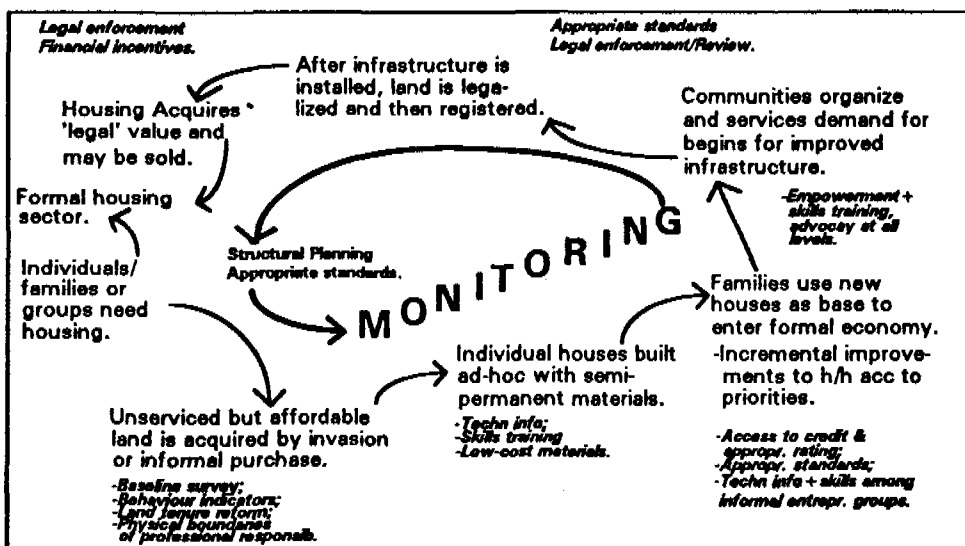
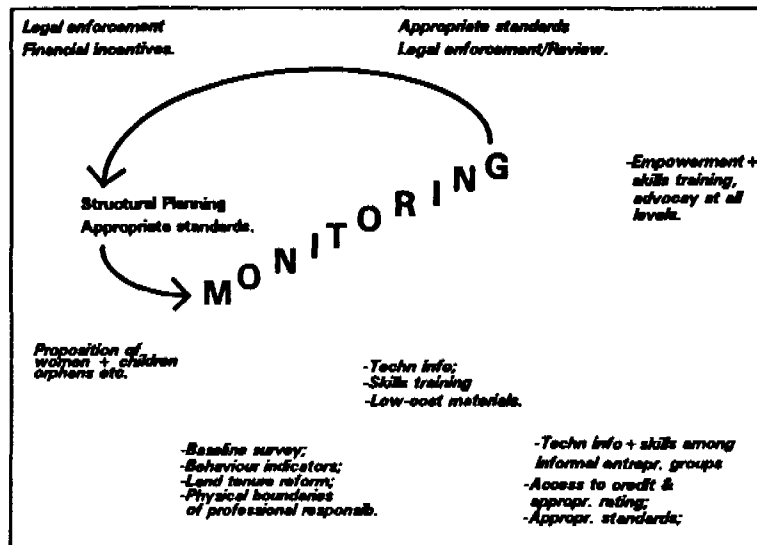
The process of peri-urbanization was explained with the various overheads. It was noted that in many countries the peri urban population is 60-70% of the total population within urban boundaries.

Figures Peri-Urbanization and Process illustrate the Intervention Cycle and process + Intervention Cycle on the following page.



"Pari-Urbanization" Process Cycle:

"Pari-Urbanization" Interventions:



The "Pari-Urbanization" Process & Intervention Cycle:

Fig P9.1 Intervention Cycle to meet the needs of the "peri-urbanization".

P10 Field Trip

Katwe Urban Pilot Project

A field trip was made to Katwe Urban Pilot Project by participants of the workshop. KUPP is a low-cost sanitation project in an informal settlement within Kampala. The community of 30,000 residents include a mixture of tenants and homelords (landlords). Housing is a mixture of semi-permanent and permanent in varying degrees and construction. Land tenure is a mixture of private and public. Residents do not have security of tenure.

The group reviewed three aspects of the project:

- Charcoal briquetting - refuse recycling scheme;
- Drain construction activities; and
- Slab manufacturing.

In discussions following the field visits the following observations were made:

1. High level of interest among the community;
2. Rapid results on the ground within short period after start of the project;
3. 'High Rise Pit Latrines; Indigenous - But some complications; Children?
4. Some technology questions regarding the drains and sullage emptying facilities.

Recommendations from the groups:

- Adapt, and improve, the 'High Rise Latrines' i.e. improve existing technology;
- Introduce wash slabs with the latrines.



Fig P10.1 Drain construction in Katwe



Fig P10.2 Fuel briquette production in Katwe (refuse recycling)

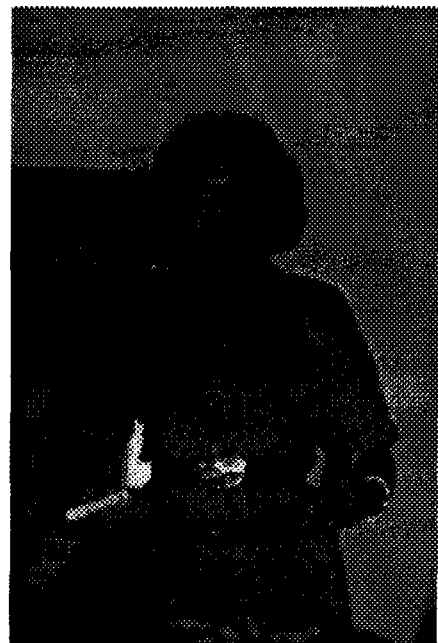


Fig P10.3 Mrs Ochwo, Community Management Advisor with KUPP

P11 Institutional Arrangements (II)

This session is both a recapitulation P2 and a more detailed look at the actors, nature and basic characteristics of (well functioning) institutions. It also looks at what the basic institutional conditions are for introducing a "Demand Driven Approach".

P11.1 DEMAND-BASED APPROACH

Goal: Satisfying people's wants in a sustainable way.

Implications: Intended beneficiaries should contribute substantially towards costs of developing and maintaining investments

Contributions can be in kind and/or cash, and there should be reliable way of mobilizing such resources. For large cities in-kind contribution is not feasible

P11.2 IMPLICATIONS FOR PROJECTS

Below follow some of the conditions and implications for introducing a Demand Driven Approach at the project level.

- **Those supposed to benefit from projects:**
 - should be aware of potential benefits
 - recognize that the benefits will not be realized unless the facilities are maintained
 - make firm commitments to maintain the facilities
 - have the organizational and financial capabilities to keep this commitment
 - should not expect to receive resources for rehabilitation if they fail to maintain the facilities
- **To accomplish this, beneficiaries should have the following rights and responsibilities:**
 - they must be willing to invest some of their own resources up front
 - they should be willing to pay back substantial portion of capital costs
- **They should further be assured that they can:**
 - participate in designing the project
 - monitor quality of work
 - examine accounts that form the basis of their financial contributions
 - hold contractors accountable for poor work.

P11.2 IMPLICATIONS FOR INSTITUTIONS

The above conditions also have institutional implications. But; What are "Institutions"?

MEANING OF INSTITUTIONS

"The social infrastructure of communities":

- The people, and the pattern of interactions between them;
- The families, tribes, churches, societies, and various groupings;

CHARACTERISTICS OF PRODUCTIVE INSTITUTIONS

They have "**the three 'R's'**":

- **Rules** that govern their actions ~ i.e. interactions and behavior of members;
- **Referee system**, i.e. system of monitoring conformity with rules, interpreting rules, conflict resolution;
- **Reward/Sanctioning System**.

They have means of fostering good performance: competition, contests, group/social pressures.

PROCEDURE FOR INSTITUTIONAL DESIGN

1. Identify decision-making units
 - Number of steps in service delivery.
2. Identify all those involved or affected by decisions at each decision-making level
 - services internal and external to them
3. Review the 3Rs governing interactions within and between decision-making units
4. Based on nature of the 3Rs, make inferences on incentives facing decision-makers and other actors
5. Check if incentives are compatible with intended goals - if not correct. ("Free Riders")
6. Check for: accountability, adaptability, equity.
7. Note: If ensuring compliance of 3Rs is difficult or costly, institution is not efficient or sustainable.

THE SOCCER GAME ANALOGY

The game of soccer can be used to describe the fundamental principles and characteristics of "Institutions". Behavior of soccer players depends on:

- i) The culture of players;
- ii) The formal rules of the game;
- iii) The referees; and
- iv) The interactions of the above i.e. rewards and sanctions system.

The "Culture of Players" could be described as the Enabling Environment. How people respond to a given set of rules depends upon local culture and broad institutional environment e.g., although the soccer rules are the same all over the world the game still has somewhat "regional" characteristics.

KEY PRINCIPLES

Below follow a number of important principles to consider when applying a Demand Driven Approach.

1. The group of people experiencing a problem should pay for the service to address that problem.
 - private financing should be used for financing services whose benefits are internal to beneficiaries.
2. Responsibility for service provision should be assigned to the level of government or aggregation of households whose boundaries incorporate the benefits from the service.

PERFORMANCE CRITERIA

An Institution, and its actors, functioning efficiently should be judged by the following set of criteria:

- **FOR INVESTMENT CHOICES**
 - Efficiency and Benefits
 - Coverage
 - Revenues
- **FOR INSTITUTIONAL DESIGN**
 - Efficiency;
 - Equity (Fiscal equivalence);
 - Accountability - local/national;
 - Adaptability;
 - Equity (distribution aspects).
- **IMPORTANCE OF:**
 - Transparency, Local and Technical Information.

DISCUSSION

Q: There are established institutions with existing rules; How can these be changed? **A:** Always losers and winners and those who resist change, but it is necessary to think hard and find a win-win solution.

Q: How can equity in contributions be achieved? What about the poor who need subsidies? **A:** Any subsidies should not come from cross-subsidization at the local level but from City or National level Government.

Q: How are communities supposed to 'control' contractors? **A:** People must be able to complain about the quality of services they are provided with.

C: Very impressed by the Institutional Arrangements outlines above. It puts the facts of 'real life' very well.

Q: If people are asked to pay too much for services/cannot afford they will return to traditional facilities?

C: An incident was related where nothing was done about a broken water pipe, until personal contact with the Manager was made known. I.e. the existing framework does not facilitate motivation of juniors & the 'sanctioning' system does not work.

Q: Many donor projects are aimed at the poorest. However results have not been achieved under current "model". It is very difficult to meet the needs of the poorest because they cannot pay. **A:** Many projects' means of targeting the poorest are inadequate. There is a tendency for influential people to help family and friends and therefore a form of self-selection for subsidies develops.

C: Rewards are needed to give people an incentive not to steal.

C: Rules need to be known by electorates and updated. Those who run councils and spend resources often not accountable to elected leaders but to C.G..

C: Projects are formulated at 'higher' levels and implemented at 'lower' levels and go through many institutions in between. These institutions rarely meet. e.g. Villages have strong governments who do not have access to the top levels.

C: Discussion tends to be about deregulation and not about modification, review or change. Empowerment to

the community is very important to Zimbabwe, people can only be accountable when they are empowered. NAC coordinates and roles are spelt out clearly. **C:** Going from a supply-driven approach to a demand driven approach cannot be done overnight. It will require a number of steps and will affect our planning, targets and methods. In India UNICEF was surprised to find out how much people were willing to pay for water, 40% said they would pay towards the capital costs and 70% towards the operating costs. The process of interaction and consultation must be built into our institutional plans and framework.

CONCLUSIONS

The Questions and Comments in this session reflected, above all, a perceived need for:

- Institutional reforms; and
- Better time frames/improved planning processes.

P12 Case Studies

The following case studies are examples of how some of the issues discussed above have been tackled. They also illustrate how some of the planning tools discussed above have been utilized in practice.

P12.1 KUMASI AND OUAGADOUGOU

This is a presentation combining the experiences from two different projects in West Africa which have utilized the Strategic Sanitation Planning (see P3). The process in addressing urban sanitation in the towns of Kumasi and Ouagadougou is described.

P1 2.1.1 PLANNING STAGE

Process

- Planning team identification and work program
- Consultations, reviews, surveys analyses
- Technology review and demand assessment
- Institutional and financial reviews

Output = Sanitation Plan

- Situation analysis;
- Service/coverage;
- Finance options;
- Technological options;
- Institutional arrangements;
- Implementation Strategy.

SITUATION ANALYSIS

Criteria for Technology Choice

- House type/densities
- Geological condition
- User preferences
- Water Use
- O&M requirements - Options
- Population densities
- WTP/Costs

Housing Type

- Indigenous: - VIP Single/twin pit
- Tenement: - Sewerage
- High Cost/New Govt.: - Septic tanks
- Medium Cost: - VIP
- Low Cost: - Single/twin pit sp. materials.

Willingness To Pay

KUMASI (85% Tenants)

- average. bid = Cedi 600
- WTP for a VIP approx. = to WTP for sewer
- WTP for sewer low in the high cost areas
- WTP for a VIP suggested a 50% subsidy.

OUAGADOUGOU (82% Owners)

- Approx. 1000 Cfa for improved on-site/month
- Approx. 1500 Cfa for off site/month
- Approx. 4% of monthly expenditures
- 14% pay - 64% save and pay - 22% borrow

P12.1.2 DESIGN FIRST STAGE

Process

- Matching WTP with community survey
- Consultation; • Endorsement by KMA;
- Community mobilization/selection.

Output

- Institutional Development Program;
- Public Latrine Improvement/Management;
- Home Latrine Program; • Review of SSP;
- Simplified Sewerage Scheme;
- Marketing Strategy and Group Dynamics;

FINANCING MECHANISMS

Mechanism

- User contrib.-in-kind labor, material and/or equivalent deposit:
- Credit:
- User charge full cost:
- Direct payment/tariffs: (cross subsidy)
- Tariffs and direct pay for internal plumbing:

Service

- VIP latrines new + conversions
- VIP latrines
- Public lat's emptying serv.
- VIP, Pour flush latrines, soakaway.
- Sewerage (Simplified)

COMMUNITY CONSULT./PARTICIPATION ACTIVITIES

- House visits; • Discussion groups (targeted);
- Participation workshops (GRAAP, SARAR);
- Sanitation Survey (Inc. WTP); • Training;
- Community co-management; • User groups;
- Hygiene education; • Self and external monitoring;
- Marketing/promotion; • Financing of facilities;
- Labor; • Decision marker/leader briefings.

P12.1.3 IMPLEMENTATION

Process

- Home latrine program 1 com. --> 3 comm(6,000);
- Public latrine improvement franchise
- Simplified sewerage 320 houses = 20,000 pe;
- Institutional development/re-organization of waste management functions.

Output

- Establishment of waste management department;
- Privatization of services provision.

P12.2 SUSTAINABLE CITIES PROGRAM - Dar es Salaam (HABITAT)

The SCP is working with and within the existing city structures and institutions, assisting them to collaborate, plan and implement a coherent urban environmental strategy for Dar es Salaam. Dar-es-Salaam is one of seven major cities in the developing world targeted in this program. The work on SCP is closely linked to the development of the "Dar Master Plan". Example of Planning Tool applied: "Rapid Urban Assessment".

P12.2.1 MAIN PRINCIPLES

The four main principles of the sustainable cities program are:

- Improve inter-agency coordination
- Prioritize environmental issues
- Address environmental issues
- Support environmental groups

P12.2.2 PROGRAM OBJECTIVES

Collaborating in inter-agency working groups is a major feature of the SCP. The program aims to result in:

- An environmental planning and management capacity which is integrated with relevant government, private and community sectors.
- A strategic policy framework to guide the city's future growth and management.
- A number of Action Plans prepared in enough detail to ensure implementation with committed investment capital and technical assistance.

P12.2.3 PROJECT STAGES

The four stages in the SCP process in Dar are:

1. Preparation of a city environmental profile;
2. A city consultation on Environmental Issues;
3. The preparation of preliminary development strategies, their integration into a policy framework, detailed action plans to secure capital investment and technical assistance;
4. Implementation of priority actions plans.

P12.3 URBAN SANITATION IMPROVEMENT TEAM (USIT, Lesotho)

USIT began in the early 80's as a pilot component of a much larger urban development project. The two previous case studies represented planning processes; this presents of the guiding principles in the various phases of turning a Pilot Stage to a National Program in 12 urban centers in Lesotho.

INSTITUTIONAL ARRANGEMENTS

- Ensure sustainable institutional arrangements are made from the beginning: plan, pilot and implement from the most appropriate Government department - not the most convenient. Collaborate with all the other sector institutions. Keep running costs low.

TECHNICAL DESIGN

- Chose a range of appropriate technical designs, but let the householder decide what they want and can afford to pay.

NO SUBSIDIES!

- Only subsidize if you have to - first look for many alternative ways of financing latrine construction. How do householders finance other capital items? Can a similar system be used to finance latrine improvements?

HEALTH PROMOTION

- Focus on health education and promotion. People need to understand why a latrine must be kept clean and maintained. Sanitation needs to be a higher priority in the household budget.

PRIVATE SECTOR INVOLVEMENT

- Get the private sector to build, supply slabs, materials and do some promotion. Train local builders in the principals of improved latrine construction and supervise construction.

DISCUSSION

Q: How do we start getting the right institutions in place? **A:** Different strategies are needed in different places. There is a new opportunity to change with increased democratization. Governments must set their own agendas.

Q: How are capital costs recovered for public latrines in Kumasi? **A:** There have been public latrines for years, they were filthy until grassroots organizations cleaned them up and collected money. This led to individuals beginning to profit, so the system was formally privatized.

Q: Is World Bank funding now directed at programs which show positive indicators in demand terms? Is the Demand Driven Approach the new policy? In Tanzania many people are not willing/able to pay for services.

A: Projects were identified 5 years ago and since then things have changed as the Bank is in a transition phase. The Bank is many different people, who have different approaches. A 'wind of humility' means that the Bank will listen more to the national and local governments. Increased inclination to fund 'non profitable' projects such as roads, health and education.

Q: It can be frustrating dealing with the Bank, because what ever people say in the field, its what is decided in Washington that really counts. **A:** Attitudes are generally changing in this respect.

C: There are many indications of change, UNICEF and the Bank are now working together - which was not the case 5 years ago. Donors are having to change, 'development with a human face'. There have been huge changes in the past 20 years and things are looking much better now as everyone recognizes the need for sustainable processes.

Q: What problems did USIT face in Lesotho? **A:** Regular pressure from donors to get quick (physical construction) results rather than set up long term sustainable structures. It took a long time to set up the work before things could get started.

Q: What problems is the Dar SCP having? **A:** Problems with sticking to time frames and many delays. Bureaucracy. The need to take time to consult with the stakeholders and for them to make commitments to make certain contributions.

Q: What are Katwe problems? **A:** Forgetting the main objectives and getting side tracked onto other issues. Getting 3 major things done in 2.5 years, too little money, going through the process of mobilization, sensitization and never having time to stop and think.

C: Need for encouragement in these projects, try to turn 'stumbling blocks into stepping stones'.

Q: Rational people need incentives to work. How does Katwe deal with this? **A:** By convincing them that they see the program is in their own best interests. A wide range of incentives are possible, not only cash.

G2 Group Work 2 - "Key Areas"

Based on the group work on Enabling and Hindering Factors (G1) where five key areas were identified each group now focused on one each of these areas. It was agreed that the fifth area, "Community Participation/Socio Cultural Aspects", although priority areas, were cross-cutting issues affecting all the other issues and not a separate subject for discussion in itself. Participants chose areas of particular interest to them from the headings that had been identified in the first group work session. I.e., the following four groups were formed:

- a) Planning Tools and Institutional Arrangements;
- b) Financing Arrangements;
- c) Technology;
- d) Policy and Legislation.

The groups presented the following summaries of their group discussions to the plenary session:

G2.1 Group A - Planning Tools and Institutional Arrangements

This group presented the following diagram as a summary of the planning tools that could be used by the responsible authorities in planning and implementing sanitation projects. It illustrates tools for each of the areas identified under institutional 'hindering factors' that can be realistically improved by the professionals involved in sanitation work i.e. it does not address the larger issues that are outside sector control.

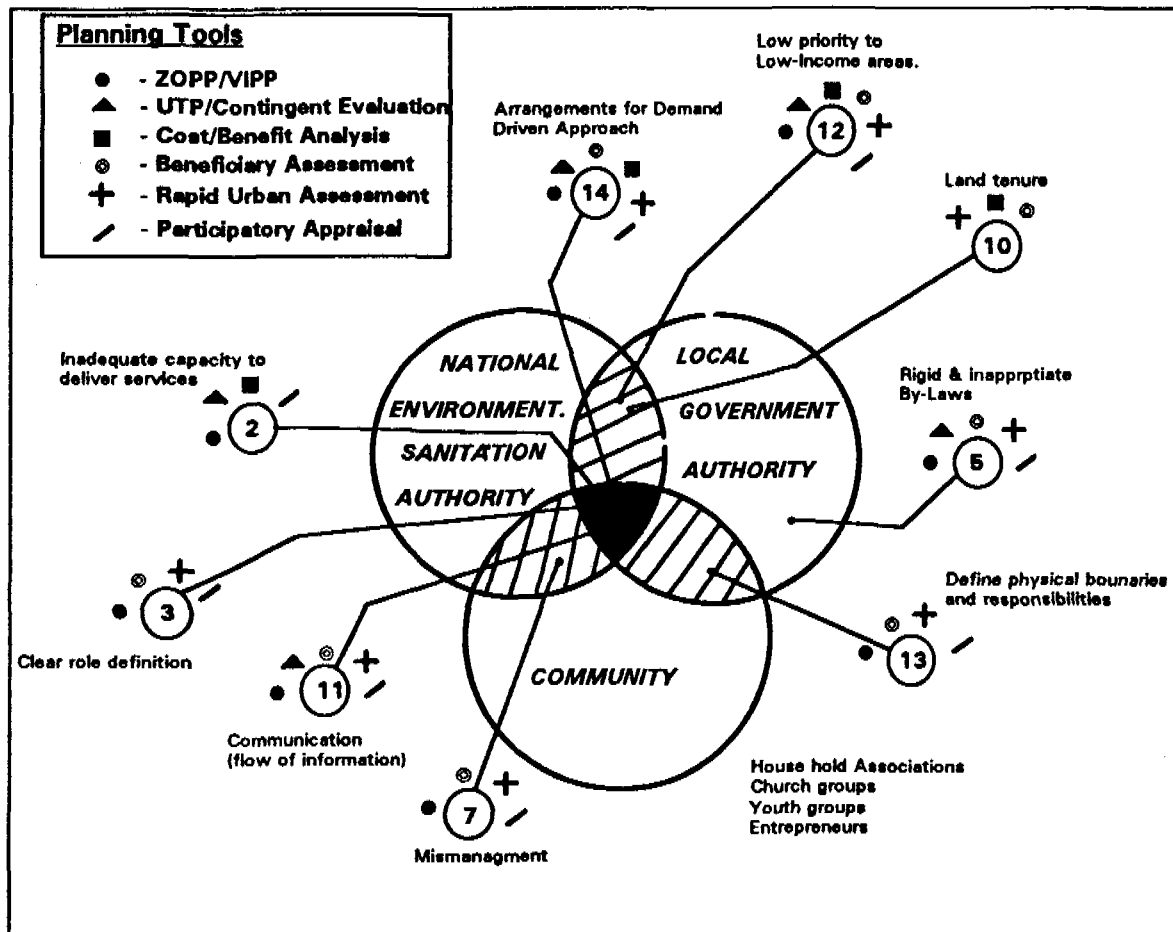


Fig G2. Institutional Arrangements; Hindering/Enabling Factors and the "location" and applicability of Planning Tools.

G2.2 Group B - Financing Arrangements

This group expanded on the issue of finance by looking at the Sources followed by identifying various Financial Arrangements and to these arrangements attach parameters such as Applicability, Constraints and Remedies for these constraints. The presentation was ended by commenting on Private Sector Funding and Government View on Low-cost Sanitation.

SOURCES

- External Support Agencies
- Non Governmental Organization
- Private sector
- Government - Central and Local Authorities
- Community contribution

FINANCIAL ARRANGEMENTS

- Direct Payment
- Subsidies
- Credit schemes
- Materials and goods give in kind
- Taxes and direct surcharges
- Grants
- Revolving funds

ARRANGEMENT	APPLICABILITY	CONSTRAINTS	REMEDIES
Direct Payment	Universal Application	Irregularity of payments Lack of Accountability	Proper Management Timing More Accountability
In Kind	Low Cost Schemes - Rural + Peri Urban	Limited to situations and areas	Design Application methods
Subsidies	Applicable	No sense of ownership Too high subsidies	People pay as much as possible minimize subsidies
Taxes and Surcharges	Applicable	Limited to rates of collection - organization management of system - Lack of accountability	1) Incentives for payment 2) Right level of tariff 3) Rates based on group or consumption
Loans	Applicable but analysis of people's practices	Capability Accountability (lack)	- Low interest rates - Appropriate credit systems - Accountability on both sides

Fig G.2 Types of Financial Arrangements; Applicability, Constraints and Remedies.

PRIVATE SECTOR FUNDING

- Important
- Capability to pay
- Should be viable to succeed (scale)
- No hard rules, case by case

GOVERNMENT VIEW ON LOW-COST SANITATION

- Committed, but not demonstrated in action;
- For large scale projects Government provides facilities;
- For small scale projects peri urban communities are left to do it and Government provides technical back up.

G2.3 Group C - Technology

This group, focusing on Technology, summarized its discussions under the heading **Factors Affecting Technology Choice** by looking at some of the **Unresolved Technical Problems**. I.e. this was a way of breaking down the technology issues to the "technical" and "non-technical" aspects of Technology.

FACTORS AFFECTING CHOICE OF TECHNOLOGY

- Satisfying people's need
- High water table/unsound environmental conditions
- Legislation/policy
- Soil conditions
- Lack of skilled manpower/private sector
- Lack of awareness
- Population density
- Financial constraints
- Land tenure
- Culture
- Emptying services
- Sewerage systems too far/non-existing/not accessible
- Unreliable/expensive water source
- Donor influence on the option(s)

UNRESOLVED TECHNICAL PROBLEMS

- High water table areas
- Upgrading of services (smooth transition)
- Appropriate drainage options
- Solid waste/collection, disposal, recycling etc.
- Waterborne systems (lack of information)

G2.4 Group D - Policy and Legislation

By addressing the two questions: "How does Government Policy Affect Sanitation?" and "How Can Technicians Influence Policy?" this group tried to further identify constraints and opportunities within the area of Policy and Legislation.

HOW DOES GOVERNMENT POLICY AFFECT SANITATION?

- Legislation stipulates standards
- Enforcement of laws, not achieved due to corruption, inefficiency, poverty
- Outdated legislation remains
- Double standards or contradictory laws
- Wrong policies e.g. overemphasis on rural development (lack of balance) or focusing on inappropriate technology
- Policy on institutional set up roles definitions, and changes of responsibility; e.g. Tanzania
- Interpretation of policy which affects implementation or application of policy.
- Policy formulation process usually does not involve community/grassroots - if it does, e.g. Tanzania - implementation will be different
- Prioritization/resource allocation low for sanitation
- Policy on inter-sectoral collaboration:
 - Ministry of Health;
 - Local government/municipalities;
 - Natural and Water Resources; - Water and Sewerage Authority and Department of Public Works.

HOW CAN TECHNICIANS INFLUENCE POLICY?

- By making proposals and write ups;
- By holding National workshops, meetings and consultations;
- Advocacy with policy makers (including drinking tea!);
- Organize visits to successful projects (study tours);
- Interpretation of policies;
 - Environmental policy - Land tenure
 - Land development - Credit/finance policy
 - Labor policy
 - Planning policy
 - Housing policy

ACTIONS

Legislation Matters

- Review and update, formulate appropriate legislation involving all sectors and stakeholders
- Establish and maintain ongoing review mechanism
- Capacity building for enforcement officers, e.g. training, provision of incentives
- Education, public awareness program for all affected populations - mass media etc.

Policy Formulation

- Ensure policy formulation is a consultative process utilizing information generated at all levels
- Ensure intersectoral collaboration
- Policy formulation should consider equity, sanitation coverage, resource allocation etc.
- Empower communities, especially the disadvantaged
- Policy should be fully gender sensitive and consider different cultures
- Allow a range of technologies

DISCUSSION

C: By-laws should be resolved with community along with land reform. Land tenure and sanitation cannot be separated. Traditional rights and institutions must be considered and recognized. Community must be consulted at all levels (Planning Tools and Institutional Arrangements).

C: Need to keep choice of technology open for longer and not offer e.g. 'a VIP or a VIP'. (Technology)

Q: Why wasn't 'gender' considered under the technology considerations? A: Gender affects design of technology not choice of technology (various other opinions on this point were given).

Q: Most of us are implementers. We are discussing what is formal/written down but 50% of our time is spent on "unwritten issues", instructions from superiors and other issues that have nothing to do with formal policy. A: A matter of transparency - i.e. an institutional matter, not necessarily a policy issue (Policy and Legislation).

C: Policy can be written by 'outsiders' (consultants) Country must take the lead. Sometimes it is convenient to say that policy is made 'above' - but often policy is written 'below' and only approved at the higher levels.

C: "User friendliness" the needs of children in latrine design are very important. They tend not to like darkness and it is more important that a VIP is kept clean, than kept dark (Technology).

C: Easy to blame 'bad policy' when we have an implementation problem, we need to do our best to influence policy. (Policy and Legislation)

G3 Group Work 3 - Country Group Work

Each country group considered the 'enabling and hindering factors' that were identified concerning the urban sanitation situation in their country and discussed what new ideas, strategies or lessons have been learnt from the workshop that could be used their country.

All the country groups presented new ideas, and strategies to implement these ideas, that could be applied in their country situations. The structure of the presentation varied from country to country.

G3.1 Kenya

Below follows a summary of the issues that were identified as the most urgent or, alternatively, feasible to be addressed in the Kenyan situation. Issues are listed under the key areas from Fig G1.1.

PLANNING TOOLS AND INSTITUTIONAL ARRANGEMENTS

Incorporate planning tools in sanitation planning e.g.

- Participatory appraisals
- Rapid urban assessment
- WTP/contingent valuation

EXPECTED RESULT: Match between financing arrangement, choice of technology and institutional arrangements.

FINANCING MECHANISMS

- Mobilization of individual resources and use of private sector
- Informal settlement should have a high priority in resource allocation

TECHNOLOGY

- All technological options have not been offered in all areas (pour-flush) extensively
- New design guidelines - simplified sewerage/experience of other countries

POLICY/LEGISLATION

- Review (By-laws/Laws are under review) related to sanitation
- Government recognizes the informal sector - upgrading e.g. Mathare, Nyahururu
- Land tenure - formalize land ownership in Government land

Mathare 4A Slum Up-Grading Project

In conjunction with the Kenyan presentation a short review of this Peri-Urban project was given by one of the Kenyan delegates.

Key Areas/issues	Description
1. Land Tenure	Transfer to project body
2. Financing Mechanisms	Grant for start-up Own capital formation for maintenance and further upgrading
3. Institutional Arrangements	NCC and Government have limited capacity; body corporate set-up with principles of non-profit making and pursuance of public interest
4. Technology Choice	Limited by site/existing conditions
5. Legislation	By-laws (existing) result in higher costs without higher level of service
6. Resource Allocation	Max. possible benefit to largest group Phased - slum upgrading to formal settlement

G3.2 Tanzania

The Tanzanian group elaborated a bit more on the area of Community Participation. These were the issues raised in the Tanzanian context:

COMMUNITY PARTICIPATION

- Develop more tools for community mobilization e.g. TOT, (Handcam), Community TV, SARAR method, MacMillian kit, local artists training, GOPP/ZOPP methodology

TECHNOLOGY

- Increase range of technologies considering use of more local materials in consultation with the community

POLICIES AND LEGISLATION

- Formation of Task Force to define clear roles/physical boundaries between the involved parties, e.g. MWEM, MOH, MoLG. Reactivate the inter-ministerial Task Force to review standards and enforcement.
- Conduct workshops and seminars

FINANCE

- Community experience exchange to stimulate self help and financing
- Ensure support for self help groups once they are formed.

G3.3 Uganda

The Ugandan chose three of the Key Areas, under each one describing main features of the current situation followed by a list of steps necessary to reach a future ideal situation.

FINANCE

NOW • Government pays a high percentage of the cost for sewerage systems, but there is no input for low cost systems

FUTURE • Government shares the costs with the community.
• A large proportion to be paid by households

Steps to take:

1. Find out how much people can pay through studies information to be shared with the community.
2. System established for definition and collection of revenues. Decentralized system to community levels through resistance committees (RC's)
3. Policy established for collection of revenues. Ministry of Local Government responsible for deciding responsibilities for financial management and ask suitable donors for support.
4. Training for RCs in financial management and reporting system to local government.
5. Local government to monitor funds. Percentage to go back to local government. Percentage stays with communities for operations and maintenance and to subsidize very low income families.

TECHNOLOGY

NOW • Limited range of technologies mainly standardized on VIP - not allowing for cheaper or more expensive options.

FUTURE • Range of options - affordability, appropriate, gender acceptability

Steps to take:

1. Perform a survey to determine existing technologies. Find out preferences and present customs (water for anal cleaning etc.) share results with community (linked with affordability study).
2. Review availability of local materials and labor that can be provided by community
3. Review existing technologies in community and consult good experts. Select 3-4 suitable options for project. Develop appropriate standard designs.
4. Assess capacity of private sector and local entrepreneurs to construct latrines in selected areas. Train potential artisans from community.
5. Train overseers from local government in selected technical and local entrepreneurs. District staff to be trained in management of construction including monitoring of private sector

INSTITUTIONAL/POLICY ISSUES

NOW • Many agencies involved in service provision with no clear responsibilities

FUTURE • Improved planning process including clear responsibilities for all involved partners with good coordination and less duplication of efforts

Steps to take:

1. Ministry of Local Government to do an assessment of who is doing what and where, for the whole country.
2. Development of clear policy for urban sanitation with all involved through ZOPP/VIPP methods. To be shared with selected communities (men/women) for feedback. Approval from Ministry of Planning.
3. Generate donor support for new sector policy. Donors to have clear role. Encourage more than one.
4. Training for all involved agencies - central district level initially - down to project areas.
5. Coordination through establishment of national and district level committees. Regular meetings to be held to review policy and develop National Plan of Action.
6. Action to be decentralized to district levels. Central level to monitor.
7. Policy will be used in development of suitable legislation for urban sanitation to be approved by all involved parties and certified by Ministry of Justice.

G3.4 Malawi

As the Malawian delegation consisted of one person only it was natural that this presentation was more project oriented (Lilongwe On-Site Sanitation Project) than the other presentations. The issues were addressed under each Key Area and the main Target Group for Activity were identified. A Plan of Action for these activities as well as the Anticipated Support for these activities was also presented.

CONSTRAINTS Position in the implementing agency
OBJECTIVE To improve the operations of the Lilongwe On-site Sanitation Project

TECHNOLOGY

- Review and broaden the range of options
- Improve designs/specifications/materials used

FINANCE

- Review finance mechanism and subsidy levels

TARGET GROUP

- City Council
- Extension agents/community leaders
- Households (beneficiaries)

ACTIVITY

- Consultations
- Review of alternative financing sources and mechanisms (rates adjustment - cross subsidy beneficiary contribution)

INSTITUTIONAL

- Improve delivery of program by enhancing participation of private sector

TARGET GROUP

- Artisans
- Small scale contractors
- Concrete products
- Manufacturers

ACTIVITY

- Training (construction/promotion)
- Setting up financial support
- Quality control procedures

- Improve health and hygiene education delivery

TARGET GROUP

- Community Extension workers
- General public
- Health Inspectors, Community leaders

- Improve coordination among institutions

TARGET GROUP

- Malawi Housing Corporation, Engineering Department

ACTIVITY

- Team work
- Review by-laws
- Formal working arrangements

- Internal Capacity Building

TARGET

- Unit Manager and other staff

ACTIVITY

- Review of departmental operation prioritization, training etc.

PLAN OF ACTION

1. Prepare brief workshop report
2. Prepare proposal for actions to improve operations
3. Workshops/consultations with staff partners - engineers, MHC, staff meetings, expanded workshops
4. Marketing strategy for resource mobilization (City Council, donors)

ANTICIPATED SUPPORT

From UNDP-World Bank Program, Nairobi, UNICEF, HABITAT:

- Review proposal
- Workshop participation
- Linkages with donor

G3.5 Zimbabwe

The Zimbabwean group was unique in that they felt they had a situation where they had urban development more under control than was the case in the other countries. Still they felt there were useful ideas brought forward in the workshop which they would like to try out further in Zimbabwe.

LESSONS LEARN^{ed}T FROM THE WORKSHOP

- The need for broad consultation at all levels

NEW IDEAS

- New approaches where the above does not exist
- Demand Based Approaches
- Institutional Arrangements
- Appropriate Technology
- Consultations

HOW TO SUSTAIN OUR PRESENT APPROACH (Preliminary)

- Empower local authorities to have more responsibility
- Stimulate private ownership by having access to credit facilities
- Encourage private sector participation
- Strict enforcement of laws by having appropriate legislation and enough incentives

G3.6 Ethiopia

After sharing their main lessons from the workshop the Ethiopian delegation outlined a "Plan of Action" with activities that they are going to pursue in the area of urban sanitation in Ethiopia.

IDEAS LEARN^{ed}T

- Consider wider range of options
- willingness-to-pay
- Land tenure/government
- Community participation/mobilization
- Inter sectoral collaboration

ACTIVITIES

1. Establish a low cost, appropriate community based - owned and run latrine production center
2. Develop and integrate hygiene and environmental sanitation curricula into schools for child and adult education
3. Establish an intersectoral committee/task force/ to address sector-specific strategies and activities in support of the unified goal of coverage
4. Organize community teams to collect local materials, dig pits, transport slabs etc.
5. Hygiene education and social marketing/advertising for demand creation

DISCUSSION

Rather than interrupting the flow of country presentation, all questions and comments were left till the end of the presentation. The discussions following the presentations tended to focus on three main issues; "Scaling up", "Institutions" and "Technology". "Private Sector" and "Equity" were other issues raised in the discussions. A summary of these discussions follows below:

Private sector: Balance fear Vs opportunities of private sector involvement.
Achieve this through better information flow + targeted sensitization

"Definitions": Artisans + Entrepreneurs already in community (strengthen their capacity)?

Costing: Accurate costing of private sector operations

Horizons: Stretch "Horizon" for pay-back: need longer term commitment by private sector

EQUITABLE ACCESS to Sanitation and resource allocation 'Some for all, not all for some'

Scaling-up

- *Are pilots replicable? demonstration in the 'real' situation is needed. Which are most sustainable/cost-effective (alternatives to pilot project approach needed)*
- *Government to assume more facilitative role in scaling-up activities*
- *Sociologists AND Economics to develop alternative financing mechanisms in close consultation with communities and all key institutions to raise economic base.*
- *Must link scale-up strategies to macro-economic policy.*

Institutions

- *Retrenchment within sector should not undermine institutional capacities to raise revenues and enforce by-laws*
- *Conditions of service and professional status need to be boosted.*

Technology

- *Carefully guard against PRESCRIBING Techno-fixes*
- *Work from basic principles (Public Health, Engineering) to design locally-appropriate technical solutions within a "HOLISTIC" framework*
- *Aim to guide communities/householders to make informed choices about sanitation services*
- *Donors must adjust project time-frames in order to allow for more participatory approaches*

P13 Follow-up and Additional Issues

The plenary session discussed various follow-up activities that were felt to be needed from the workshop. The issues raised are listed below under the three main headings:

WORKSHOPS

- Follow-up workshop. This may address "demand-driven approaches" as one among key issues. Need more information on private sector in sanitation.
- National sanitation workshops are needed in each country to involve more people in the sector and go into more specific details.
- Workshops should be at places where there is 'something to show' of the ideas discussed. The Katwe field visit was excellent and provided motivation to "do something..." Would like to see Katwe again after the drainage is finished.
- UNICEF sponsored workshop on communications for hygiene + sanitation behavior change (Harare Oct. 26-30) will benefit from the outputs from this workshop and contribute to on-going experience in this neglected (?) sector
- Questionnaire should be circulated to participants in order to facilitate next workshop.

PUBLICATIONS & INFORMATION DISSEMINATION

- Exchange programs with municipalities where private sector involvement has been successful
- Exchange of documented success stories (formal/informal direct contacts to be encouraged)
- NETWAS + TCWU/IWSD could serve as a focal point for documentation of experiences
- UNICEF global sanitation evaluation findings should be made available together with case studies
- Hygiene education strategy/guidelines also to be made available
- "Waterfront" publication from UNICEF will be circulated to participants
- HABITAT will circulate "UMP" information and Preparatory Documents for HABITAT II Conference "THE CITIES SUMMIT" (1996)

OTHER

- Timely circulation of proceedings and documentation from this workshop is critical - maximum 2 months

Thursday 26th May 1994

P14 Participants Assessment

At the final session before the closing of the workshop the results of the questionnaires were presented and are summarized in the box below.

Participants Assessment

The workshop participants were asked to:

- i) List 2 things they liked about the workshop
- ii) List 2 things they didn't like
- iii) List 2 things they learnt at the workshop.

A brief summary of the key responses (i.e. those which represent more than one person's opinion):

- On the workshop content the case studies and the field trip were the most popular items.
- The organization of the workshop was said to be excellent by some, people liked the openness, discussion, experience sharing and informal discussion, group work and participatory methods used. The venue and facilitation was popular.
- Among the things people did not like were: the program being too tight and insufficient free time. Time keeping of the sessions was poor and some thought there should have been more time for group discussions. A few complained about the location, facilities and bedrooms.
- Among the things people learnt were: the new 'tools' and technologies that can be used; there are certain legal and policy issues that are common to everyone; more time is needed for community mobilization and sensitization; the demand driven approach; it is important to learn how others are doing things; the need to review institutional arrangements and to determine new factors and funding sources, while designing projects.

Mr. Ben Z. Dramadri
Permanent Secretary of the Ministry of Natural Resources

The Permanent Secretary warmly welcomed all the 'Sanitation Ambassadors' from Kenya, Tanzania, Ethiopia, Zimbabwe, Malawi and Uganda. He also thanked the various agencies, specifically the World Bank, UNDP, HABITAT and UNICEF for making the workshop possible.

He emphasized the importance of sanitation, without which improvements in water supply will have very little effect. He was pleased to see that the workshop was being convened to address sanitation issues, as so often workshops only discuss water supply. He mentioned the differences between urban and rural areas, noting that many peri-urban areas have more rural characteristics, and boundaries that are not clearly defined.

The Permanent Secretary went on to explain the institutional responsibilities in Uganda for sanitation. He added that 50% of the population in urban areas in Uganda are still dependant on on-site systems and that it is not surprising that diseases such as diarrhoea are common.

Mr Dramadri further mentioned a few of the projects in Uganda that have been addressing the sanitation situation in the urban areas. These included the Small Towns Water and Sanitation program, the First Urban Project, the proposed Peri Urban Water project and the Katwe Urban Pilot Project.

In conclusion, the Permanent Secretary said he was looking forward to seeing the outcome of the workshop and in particular how this could be beneficial to projects in Uganda. He wished to remind everyone of the essential role played by women in the delivery of sanitation services and the improvement of sanitation and health in the home.

He wished everyone fruitful deliberations and declared the workshop open.

Mrs Catherine Cravero
UNICEF Resident Representative in Uganda

Mrs Cravero expressed the pleasure of UNICEF in being associated with the workshop.

She said the approaches being advocated by the workshop to the problems of peri urban sanitation were a logical follow up to several major summits and conferences of the past few years. These events, like the International Drinking Water and Sanitation Decade, Water, Sanitation and Environmental Conferences held in New Delhi (1990); Dublin (1991) and Rio (1992), have lead to an approach that includes:

- a suitable mix of technologies
- the need for sustainable behavior change
- increasing the role of women in decision making, management and maintenance.
- increased emphasis on cost effectiveness, although over 80% of all resources in the sector are still spent on higher level technologies for higher income populations.
- the need to reallocate resources to low income rural and urban areas.

Mrs Cravero went on to explain the importance of the peri-urban focus, the appropriate venue, East Africa, and the expectations UNICEF had from the workshop. She reminded everyone of the World Summit Goals of Water and Sanitation for all by year 2000.

She concluded by mentioning the non-glamorous nature of sanitation, the need for improvements not only at the household level but in the whole environment/community and that there were no easy gimmicks to be applied - only hard work.

**Mr. David Kithakye
Urban Settlements Advisor - HABITAT**

Mr. Kithakye started by mentioning the critical importance of all types of environmental infrastructure, noting that the role they play in improving health, quality of life, and increasing productivity, especially for the urban and rural poor, is recognized throughout the donor community and the UN system.

Experience from the International Water and Sanitation Decade (IDWSSD) shows that achieving this goal will not be easy due to high population growth and many will remain without water supplies and sanitation. He said urgent attention is required to strengthen the local authorities for management of water supply and sanitation in an integrated and sustainable manner. Agenda 21 of the United Nations "Earth Summit" outlines the "integrated approach". This approach helps to set priorities, mobilize commitment and resources of all stake-holders, and maximizes the value of all investments by focusing on improved efficiency in the provision, maintenance and management of environmental infrastructure and services.

He explained that as the United Nation's focal point for human settlements, HABITAT is assisting local governments, NGOs and the private sector. The activities of HABITAT are implemented through a number of complementary programs, e.g. UMP, MDP etc. HABITAT is also involved in the implementation of country programs/projects in water and sanitation. These are carried out in collaboration with the governments, UN agencies, international donors and development communities.

Mr. Kithakye explained that the workshop is relevant to the work program of HABITAT. At the regional level HABITAT place importance on the need to share experiences, on good practices, implementation mechanisms and mobilization of resources and. He hoped that the workshop would result in creating networks of practitioners and policy makers involved at all levels in the critical area of water and sanitation.

**Mr. G. Tschannerl
Task Manager - The World Bank**

Mr. Tschannerl started by reminding everyone of the non-glamorous nature of sanitation, represented by a spade and rubber boots and always tagging along behind water supply. He mentioned the problems of low demand for sanitation, of the fragmented institutional services, the need for more overall attention and the problems that low income communities have in making long term investments while fighting for daily survival. He went on to mention that significant improvements in water supply had not yielded equivalent improvements in health and that there were many other factors that influence health besides poor sanitation, such as nutrition, rural-urban movements, living conditions etc. that are difficult to separate from other indicators.

Mr. Tschannerl then briefly outlined the early involvement of the World Bank in low cost sanitation improvements through the Technical Advisory Group (TAG) using the technical 'information exchange' approach (e.g. 'Sanmen' who were mainly involved in promoting VIP's). He noted that there is a general stagnation and lack of progress in the sanitation sector, and there is a need for a new approach and ideas including a need for application of broader range of technologies.

World Bank loans which are often inappropriate for community mobilization based projects, tend to be used for conventional schemes. The Bank is therefore working with other agencies to include the low-cost or community based components in World Bank projects.

He then pointed out that the key objective of the workshop was to facilitate the exchange of experience between participants and with the World Bank. He concluded by mentioning the need for continued enthusiasm despite the non-glamorous nature of the work and to sharing the experiences of the participants.

**Mrs. Mukami Kariuki on behalf of Mr. Tore Lium, Manager,
UNDP/World Bank Regional Water and Sanitation Group (RWSG-EA)**

Mrs. Kariuki explained that the UNDP/World Bank Water and Sanitation Program is aimed at continuing the work toward meeting the objectives which were established for the IDSSWD. The Program focuses on improved access to water supply and sanitation (WSS) services for the poorer population groups; as they benefited least from the major sector development efforts during the Decade. She then read the following message from the manager of the RWSG-EA:

“ Historically the Program, and its UNDP/World Bank fore-runners, concentrated much on the rural issues in Africa and elsewhere. This focus mirrored the donors' concern for the rural poor and the idea that better services in rural areas would help stem rural to urban migration.

It has since become evident, that population growth, increasing poverty and the deteriorating environment in urban areas will pose a major challenge for the WSS sector during the next few decades. While a good knowledge in relation to rural development, there is still much to learn and to resolve before the urban water and, in particular, sanitation problems can be effectively addressed.

Governments of most countries in the region have, together with their sector development partners, recognized the need to address the urban sanitation issues. This has made it possible to pay increasing attention to this emerging priority. With the limited resources at our disposal, and considering the objectives of the Program, we have decided to concentrate RWSG-EA's efforts on informal and other low income group settlements.

RWSG-EA is already engaged in a number of initiatives; e.g. Katwe Urban Pilot Project in Kampala, but we need to initiate a more systematic approach to collaboration with our partner countries throughout the region. This workshop at Mukono is a first, important step in that direction. As can be seen from the agenda it is primarily the policy and strategy issues - including a look at the various technical options which users may wish to implement - that the workshop is going to address. We need to identify and put in place the prerequisite cornerstones, and as soon as possible start discussing how we can deal with the real issue: improving environmental sanitation in urban low income areas.

It has become evident to RWSG that there are some fundamental issues - hindering factors - of a non-technical nature which we need to identify and address. From the vast pool of competence, experience and commitment present at this workshop, we are confident that a "spring board" will be developed, from which the "next steps" and subsequent initiatives can be designed.

Without resources these next steps may only be a report on our shelves. However, considering the attention now being paid to the urban sanitation, resources for good projects and programs are likely to become available, particularly if priority is demonstrated by authorities and users alike. The basis for such good projects and programs can be laid during this workshop. Again, considering the potential represented by yourselves as participants, there are reasons to expect a positive outcome.”

Mrs. Kariuki then outlined the key workshop objectives that came through in previous presentation:

- 1. Identification of Key Issues and Problems in improved Urban Sanitation services;**
- 2. Presentation and Discussions on Options as regards: Technology, Financing Mechanisms, Institutional Arrangements and Planning Tools/Methodologies; and**
- 3. Sharing of Experiences in the field of Urban Sanitation among workshop participants.**

Finally Mrs. Kariuki expressed her gratitude for the participation, patience and collaborative efforts from UNICEF, World Bank and HABITAT in preparing the workshop.

AGENDA

Regional Urban Low-Cost Sanitation Workshop
Mukono, Uganda, 23-26th May 1994

Time MONDAY 23/5

- 8.30 Introduction/Welcome (See separate Opening Program)
-Opening Speech, Permanent Secretary, Min. of Natural Resources: Mr. B.Z. Dramadri
-Opening Remarks: World Bank/UNICEF/HABITAT/RWGS-EA
- 9.25 The Workshop
Objectives, Agenda, Outputs/Follow-up (RWGS-EA).
- 10.15 Coffee
- 10.30 Approaches to Sanitation Interventions: Planning Methodologies and Institutional Arrangements. Panel (Wright/Obeng/Brown), Plenary/Discussions.
- 12.30 Lunch
- 14.00 Country Sanitation Notes
Presentation of 3 Country Sanitation Notes (15 + 5 min/paper) Presentation + Questions
- 15.00 Coffee
- 15.15 Country Sanitation Notes
Presentation of 3 Country Sanitation Notes (15 + 5 min/paper). Presentation + Questions
- 16.15 Group Work No 1 - Enabling and Hindering Factors
-Explanation of purpose of Group Work and formation of Groups (Mukami/Letitia)
- 16.30 Identification of common Enabling and Hindering factors.
- 17.45 End
- 18.15 Reception/Cocktail 19.00 Dinner

TUESDAY 24/5

- 8.30 Group Work No 1, Presentation/Plenary
Plenary on Group Work; "Enabling and Hindering Factors" (10 min/group + Discussions)
- 9.45 Technology Choices
Presentation by a panel + discussions (Gadek + Wright)
- 11.00 Coffee
- 11.15 Policy Framework - HABITAT/UNICEF
Constraints and policy frameworks for urban environmental sanitation improvements. (D Kithyake), including 15 min. question time.
- 12.15 Field Trip Brief Background and Description of Katwe Urban Pilot Project, KUPP (M Ochwo)

- 12.30 Lunch
13.30 Field Trip - Katwe
17.00 Return to Colline Hotel 18.30 Dinner

WEDNESDAY 25/5 (Revised Tuesday evening, i.e. discussion time)

- 8.30 Summary of Institutional Arrangements
(+ comments on Finance)
9.00 Comments and Discussions on Institutional Arrangements and Finance.
9.30 Presentation of Case Studies from Ghana, Tanzania and Lesotho
(Sanitation Improvements in Kumasi, Dar and Maseru; addressing Key Areas/Summary Sheet)
10.45 Coffee
10.15 Discussions on Presented Case Studies
12.00 Lunch
13.30 Group Work No 2: Key Areas; Finance, Technology, Institutional Arrangements,
Government/Legislation, Community Participation.
15.30 Coffee
15.45 Presentation of Group Work
17.00 Discussions on Group Work Presentations
18.00 End

THURSDAY 26/5

- 8.30 Group Work No 3 - Country Conclusions
-Introduction/Formation of groups (Mukami/Letitia)
-Previous session's issues/ideas/strategies applied in/by countries.
10.15 Coffee
10.30 Group Work No 4 - Presentations/Plenary
(6 groups* 15 min)
11.45 Discussions/Plenary - Country Conclusions
Plenary and discussions on previous presentations.
12.30 Lunch
14.00 Follow-Up
*Future areas of assistance/activities
*Subjects needing further work or research?
*Other areas of interest
*Possible assistance from RWSG-EA/UNICEF/Habitat?
15.15 Coffee 15.30 Participatory Assessment
16.30 Closing (Government of Uganda /Central Government Representative)

LIST OF PARTICIPANTS

NAME	INSTITUTION	ADDRESS
1. Mr John G Kariuki, Snr Public Health Officer	Min. of Health, Division of Environmental Health	P. O. Box 30016, Nairobi, Kenya Tel: 717077 Ext. 45069
2. Mr Henry K. Changwony, Chief Public Health Officer	City Council of Nairobi	P O Box 30108 Nairobi, Kenya Tel: 254 2 214326 OR P O Box 1567 Eldoret, Kenya
3. Mr Lawrence W Mwangi, Engineer	W&S Dept, Nairobi City Council	P O Box 30108 Nairobi, Kenya
4. Mr Stephen Muthua, Deputy Manager	Mathare Slum Upgrading Project	P O Box 32102, Nairobi, Kenya
5. Mr William Uronu, Assistant Commissioner, Sewerage & Drainage	Ministry of Water, Energy and Minerals	P O Box 35066 or 2000, Dar-Es-Salaam, Tanzania Tel:255 51 48247 Fax:255 51 48247 Tel:255 51 28607 Fax:255 51 37138-9
6. Ms Mercy M.K.Kinenekejo	Urban Low Cost Sanitation Project, Tanga	P O Box 5429, Tanga, Tanzania Tel: 255 53 43706 Fax: 255 53 43848
7. Mr Ambroce A.M. Kessy	Urban Low Cost Sanitation Project, Tanga	P O Box 5429, Tanga, Tanzania Tel: 255 53 43706 Fax: 255 53 43848
8. Ms Anna-Stella Kaijage	Ministry of Water, Energy and Minerals, Low Cost Sanitation Unit	P O Box 9153 or 2000 Dar-es-Salaam, Tanzania Tel: 48247 Fax: 48247
9. Ms Joyce Ndesamburo	Sustainable Dar-es-Salaam Project	P O Box 61261 Dar-es-Salaam, Tanzania Tel: 44462
10. Mr Sottie M. Bomukama, Commissioner, Urban and Inst. Water Development	Directorate of Water Development	P O Box 20026 Kampala, Uganda Tel: 041-221678/220740 Fax: 041-221678
11. Mr Efraim Kisembo, Snr. Engineer	Directorate of Water Development	P O Box 20026, Kampala, Uganda Tel: 041-220397 Fax: 041-220397
12. Mr DWO Ongwen, Acting Chief Health Inspector	Environmental Health Division, Min of Health	P O Box 8, Entebbe, Uganda Tel: 20059/20217
13. Mr EA Mugizi Rwandume	Projects Unit, Town Clerk's Dept, Kampala City Council	P O Box 7010, Kampala, Uganda OR P O Box 3825 Kampala
14. Mr Bill Wandera, Chief Engineer, Planning and Development	National Water and Sewerage Corporation	P O Box 7053, Kampala Tel: 258299/245531 256761/3 Fax: 258299
15. Ms Marcella T. Ochwo, Community Management Adviser	Katwe Urban Pilot Project	P O Box 46 or 30980, Kampala, Uganda Tel: 241049/243700 Fax: 230092
16. Mr Josy M.R. Kiiza, National Project Coordinator	Katwe Urban Pilot Project	P O Box 46 or 700 Kampala, Uganda Tel: 241049/242434/242324/243700 Fax: 230092
17. Mr Robert Bakibinga, Water Sanitation and Waste Disposal Adviser	Katwe Urban Pilot Project	P O Box 46, Kampala Tel: 241049/243700 Fax: 230092

NAME	INSTITUTION	ADDRESS
18. Mr Seyoum Abebe, Zonal Environmental Health Service Coordinator	Region 14 Health Bureau Zone 2	c/o UNICEF, P.O. Box 1169 Africa Hall, Addis Ababa Tel:251 1 445266 Fax: 251 1 511628
19. Mr Mesfin Tesfay, Health Inspector	Region 14 Health Bureau, Zone 2 Health	c/o UNICEF P O Box 1169, Africa Hall, Addis Ababa Tel:251 1 445266 Fax:251 1 511628
20. Mr Tongai Mahachi, Director of Works	City of Harare, Dept of Works	P O Box 1583, Harare Tel: 726021/726021 Fax: 750403
21. Mr Blessing B. Mashaa, Civil Engineer	Ministry of Public Construction & National Housing	CY 441, Causeway, Harare, Zimbabwe Tel: 704561
22. Mr S. Musingarabwi, Acting Commissioner	Ministry of Health	P O Box CY 1122, Causeway, Harare, Zimbabwe Tel: 730011
23. Mr Joseph D. Kasonje, Public Health Inspector	Lilongwe City Council, Kawale SanPlat Centre,	P O Box 30396, Lilongwe, Malawi Tel: 783144
24. Mr Gerhard Tschannerl, Task Manager	World Bank, AF2EI	1818 H St. NW Washington D.C. 20433, USA
25. Ms Letitia Obeng, Snr Water and Sanitation Specialist	World Bank, AFTES	1818 H St. NW Washington D.C. 20015, USA Tel:202 473 4551
26. Mr Joe Gadek, Sanitary Engineer	World Bank, AFTES Room J3-116	1818 H St. NW, Washington D.C. 20433 USA Tel:202 473 4547 Fax:202 473 7916
27. Mr Albert Wright, Sanitation Specialist	World Bank, TWUWU	1818 H St. NW, Washington D.C. 22043 OR 8718 Arley Dr Springfield, VA 22153 USA Tel: 202 473 2705
28. Mrs Mukami Kariuki, Urban Planner	World Bank, RWSG-EA	P O Box 30577, Nairobi, Kenya Tel: 228766 Fax: 213925/6/7
29. Mr Lars Kallren, Water & Sanitation Engineer	World Bank, RWSG-EA	P O Box 30577, Nairobi, Kenya Tel: 228766 Fax: 213925/6/7
30. Mr Ato Brown, Water & Sanitation Engineer	World Bank/UNDP, RWSG-WA	Banque Mondiale 01 BP 1850 Abidjan 01, Cote D'Ivoire Tel: 225 442227 Fax: 225 441687
31. Mr Ken Maskall, Regional WES Advisor	UNICEF Eastern & Southern Africa Reg Office (ESARO)	P O Box 44145, Nairobi, Kenya Tel: 254 2 622227 Fax: 254 2 521913 OR UNICEF, Dar-es-Salaam, Tanzania (after 31/8/94)
32. Mr David Williams, Chief WES	UNICEF	P O Box 1169, Africa Hall, Addis Ababa, Ethiopia Tel: 251 1 513304 Fax:251 1 511628
33. Ms Vanessa Tobin, Sr Project Officer	UNICEF	3 UN Plaza DH40B, New York, NY 10017, USA Tel:212-702-7270 Fax:212-702-7150 OR 16SE 32nd St. Apt 4G Tel:212-447-1724
34. Mr David Kithyake, Human Settlements Advisor	UNCHS (Habitat)	P O Box 30030, Nairobi, Kenya Tel:254-2-623220 Fax:254-2-624264
35. Ms Isabel Blackett	Rural/Peri-Urban Sanitation Consultant	12, Collins St, Box Hill, VIC 3128, Australia Tel: 613 899 8534 n Fax: 613 899 1455
36. Ms Njeri Gicheru	World Bank, RWSG-EA	P O. Box 30577, Nairobi, Kenya Tel: 228477 Fax: 213925/6/7

BIBLIOGRAPHY

1. **NGO Support to Informal Settlements; Mukami Mwiraria, Julia Kunguru, Regional Water and Sanitation Group-EA**
2. **Overview on Population, Environment and Development; I. Husain, AFD; World Bank**
3. **Simplified Sewerage: Design Guidelines; A. Bakalin, A. Wright, R. Otis and J.d A Netto, World Bank**
4. **Urban Financial Management; James McMaster, EDI/HABITAT**
5. **Community Mobilization in Sanitation Projects; M. Kariuki, C. Kinuthia and J. Kunguru, Regional Water and Sanitation Group-EA**
6. **Helping to Manage the Future of our Cities. Urban Management Program. UNDP-World Bank and HABITAT**
7. **Guidelines for Conducting Willingness-to-Pay Studies for Improved Water Services; WASH**
8. **Simple Computer Imaging and Mapping; M. Pazner, N. Thies and R. Chavez**
9. **Planning for Health and Socio-economic Benefits from Water and Environmental Sanitation Programs; UNICEF**
10. **Private Sector Participation in Municipal Solid Waste Services in Developing Countries. Sandra Cointreau-Levine UMP13**
11. **Decentralization and its implications for Urban Service Delivery. William Dillinger UMP16**
12. **Rapid Urban Environmental Assessment: Lessons from Cities in the Developing World; Josef Leitmann, Urban Management Program**
13. **Lessons Learned (13 Years of Experience), WASH**
14. **Effects of Improved Water Supply and Sanitation on Ascaris; Esrey, Potash, Roberts & Shift**
15. **Willingness-to-Pay for Improved Sanitation in Ouagadougou, Burkina Faso; M.A. Altaf & J.A. Huges**
16. **Beneficiary Assessment. An Approach Described; L.F. Salmen**
18. **Low Cost Urban Sanitation in Lesotho, UNDP-World Bank**
19. **Urban Management Program Reports**

SANITATION PLANNING TOOLS

There are a range of participatory techniques/methodologies (such as the SARAR methodology which the Katwe project staff will describe and demonstrate) associated with community mobilization, community participation and community management of projects.

There are various techniques for "listening", and "consultation" and data collection as an aid for planning, mobilization, feasibility studies, design, monitoring and implementation of programs and projects. These techniques of client consultation are generally described as participatory (research, self analysis or data collection by a beneficiary or client) or extractive (research or data collection by an outsider). The techniques may also be described as being quantitative (requiring detailed statistical analysis) or qualitative (comprising mainly descriptive information). Each technique has value for a given situation.

Examples of these techniques are:

WTP/Contingent valuation	{extractive/quantitative}
Beneficiary assessment	{extractive/qualitative}
Rapid rural appraisal	{extractive/qualitative}
Participatory appraisal	{participatory qualitative}

These techniques can be used by appropriately trained local staff. Listed below are the descriptions of four techniques/tools utilized in the sanitation sector to gain better information about the potential community to be served.

a) Beneficiary Assessment

What is beneficiary assessment? - A qualitative tool or approach for gathering information to help improve the development operations. It can help with project design, monitoring to improve project or program activities or help with policy definition. It helps to determine how the work to be done or under implementation is valued by the client/beneficiary.

Why is beneficiary assessment needed? - Too often, the clients or beneficiaries (and particularly their special interest groups) do not have a say or are not listened to. Managers, planners, decision makers need to get an understanding of values and behavior.

How are beneficiary assessments conducted? - Direct observation (noting behavior patterns, expressions etc.); Conversational interviews (with individuals or small groups representing key interests or situations) in which various themes, ideas or perceptions are discussed; participant observation (in which a period of time (several weeks) is spent in a neighborhood observing how specific issues are affected and addressed in day to day life.

b) Willingness to pay (WTP)/Contingent Valuation or Willingness to do (WTD)

The WTP module (or survey) is a broad planning tool which can be used: to help with assessing demand in recommending technology choice/service levels; to determine possible subsidy requirements/cost recovery levels; as a means of monitoring progress with project implementation/or success (has WTP increased or decreased?).

Demand or willingness to pay for a good or service is not the same as affordability. The former is related to the value that a respondent puts on the good or service and the latter is based on the respondents income. Affordability can however be used to corroborate the WTP.

For example, a householder may be offered an improvement (sewerage) to her/his current septic tank system at home. A series of carefully structured questions will help find out how much she/he is willing to pay for sewerage. She/he might put a low value on switching to sewerage even though she/he can afford to pay for it, because she/he is already happy with the performance of the septic tank.

Willingness to pay or demand for technologies or improved services can be measured by several means. One statistical method is known as contingent valuation. Contingent valuation is used to get information from individuals or households about a good or service. A series of structured questions (for example a bidding game) are asked about how much the respondents value a hypothetical good or service. It is called "contingent" because the good or service is not necessarily going to be provided. In addition, questions would be asked to obtain the reasons behind the answers and to estimate likely changes in future demand.

Willingness to do can be determined through methods such as Beneficiary Assessment.

c) Sanitation Survey

A sanitation survey (questionnaire) can be used as a tool for planning at the beginning of a project or for monitoring purposes. It can include a willingness to pay module and can be used to statistically collect information/data on the following major key areas:

- social and demographic information (age, house type, sex, education, religion etc.)
- existing services, arrangements and expenditures (both water and sanitation services, expenditures, age of facilities, access etc.)
- WTP module (usually included before the economic information section of the survey in order to avoid possible bias in the responses of the person being interviewed)
- attitudes (preferred providers of services, credit, etc.), perceptions and economic information (income, general expenditures, occupation, housing tenure etc.)

There are several examples of such surveys: Kumasi, Ouagadougou and Guinea surveys include WTP modules.

d) Rapid Urban Environmental Assessment

This assessment is participatory in nature and requires participation of all key actors. It comprises three steps: a questionnaire to obtain information about a range of environmental issues, focusing on their cross-sectoral interactions; an urban environmental profile which analyses the trends and factors affecting the environment in cities and; a consultation process to initiate public dialogue on priorities and options.

All this can be incorporated into the formulation of an integrated environmental management strategy, development of issues oriented action plans and consolidation and implementation of the action plans. (the single sector strategic sanitation plan can be described as a component of the environmental strategy).

(Example case study from Tanzania)

****There are various publications describing the above techniques in detail. Please include requests for information about any of these in the list of country requests for publications on technologies.****