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## IRC SYMPOSIUM : SANITATION FOR THE URBAN POOR PARTNERSHIPS AND GOVERNANCE

# Integrated Support for a Sustainable Urban Environment, Arusha, Tanzania

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## Executive summary

The Integrated Support for a Sustainable Urban Environment (ISSUE - 2) project is presently in the implementation stage in the unplanned settlements of Lemara, Sokoni I and Daraja 2 in Arusha Municipality referred as a "District" in Tanzania. The project focuses on human excreta and solid waste management. The target is to support practical implementation in an average of 5.000 households. The project is funded by WASTE of the Netherlands through the local partner, Environmental Engineering and Pollution Control Organization (EEPCO).

The project involves range of stakeholders, with focus on "providers" (stakeholders earning their livelihoods in sanitation) and "users or clients" (usually households, institutions, local government authorities). Another group includes local private operators, Non-Governmental Organizations, Community Based Organization and financial institutions, working directly with providers or users, or both.

The project is aiming to 'Empower', and 'Supporting' stakeholders. 'Empowering' refers to activities related to the processes of capacity and confidence building or creating conditions where the stakeholders can take the lead (the stakeholders themselves have to make the changes they identify). 'Supporting' means helping to mobilize the necessary resources, finance, knowledge, institutional structures/capacities, and the like, to make changes possible.

The project started in July 2007 by an inception phase in which the stakeholders were identified and a District Consortium (DICO) formed. The DICO has developed a Consortium Multi-annual Plan (CMAP) for a3-year implementation period (2008–2010). Other activities Inception Phase activities included; -Baseline survey, Financial arrangements, preparation of DICO's Memorandum of Understanding (with roles and responsibilities of each stakeholder), preparation of monitoring tool and sanitation options, and training to stakeholders. The stakeholders believe that partnership in urban sanitation can make significant contributions to sanitation improvements in urban environments.

This paper analyses the project from Inception to Implementation stage. It covers the formation of stakeholders' partnership, the innovations, its successes, challenges, conclusions, lessons learned and recommendations for proper implementation of human excreta and solid waste management for the urban poor.

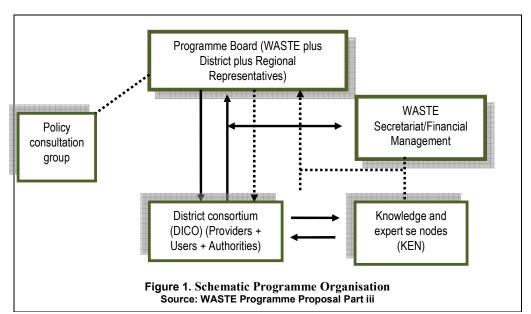
## Introduction

WASTE¹ in collaboration with its Tanzanian partner EEPCO<sup>ii</sup> is implementing an urban sanitation<sup>iii</sup> and solid waste management<sup>iv</sup> project in Tanzania. This project is in the Municipality of Arusha in three wards (Lemara, Sokoni 1 and Daraja 2). Details of project design have been discussed and documents have been shared with the sanitation stakeholders. This project started in June 2007 with the inception plan phase.

WASTE works in cooperation with EEPCO to support development and implementation of project activities to ensure that the integration of sanitation and solid waste management will bring maximum benefits to the participating stakeholders and communities.

For this project the primary unit for direct project action is the 'district', defined as an urban or periurban area and the areas connected to it. The project focuses on supporting practical implementation in an average of 5.000 households, or approx. 50.000 persons per 'district'.

The project involves a wide range of stakeholders, as would be expected considering the integrated human excreta and solid waste management framework. The project has a strong focus on the stakeholders who earn their livelihoods in waste and sanitation, referred to as "providers", the second stakeholder group includes the "users or clients," usually households, but also businesses, institutions and local government itself. The third group of stakeholders includes local, regional, and in some cases national authorities, civil society organizations, public utilities, and in general those involved in governance. The fourth stakeholder is a local partner (EEPCO) which convenes the district consortia and works directly with the different groups of providers or users, or both. The Consortium partners vary from direct implementers to policy, and financial institutions (figure 1).



The main objective of ISSUE 2 is to support key stakeholders to modernize their systems for management of human excreta and solid waste, leading to increased living standards and stable lively hoods of disadvantaged people and communities in the district. The project has six specific objectives as outlined below:-

- To support local consortia to work with key stakeholders to plan, implement, and mainstream models
  of smart urban environmental management.
- To stimulate local stakeholders to build their own capacities and to make resources available to them for that purpose.
- To create an enabling institutional environment supportive for participatory, transparent and accountable decision-making.
- To institutionalise structural access to financing for modernised urban environmental activities that is available to women and men active in the private, public and civil society sectors
- To strengthen coherent policy and programme implementation of urban environmental systems through local, national and international policy and programme engagement to trigger sustainable upscaling.
- To put project management into the hands of capable partner organisations and their district consortia
  so that they and stakeholders take full responsibility and ownership for the formulation, planning
  execution, evaluation and continuation of the process.

## Methodology

Historical efforts to improve Solid waste management and sanitation conditions in Arusha sought to address needs through technical and hardware programs. Examples of this approach include the construction of latrines, wells and community water systems.

ISSUE-2 programme is unique, designed locally with the specific needs conditions, and resources of the community in mind. The programme emphasizes on increasing the communities' capacity to respond to their needs rather than constructing the waste facilities, latrines and other hardware structures.

The programme intends to work with wide range of stakeholders in the district who formed a district consortium and developed Consortium Mult Annual Plan to implement project activities in the district. New approach will be introduced for integration of solid waste management and sanitation which can be termed "modernized mixtures". 'Modernized mixtures' represents a new paradigm for solid waste management and sanitation, and the integration of both (WASTE 2006). Where the old models of large systems are impossible to implement in the distinct due to various factors including overpopulation, affordability etc, and the new paradigm is based on integrating and combining many smaller, previously existing activities, managing and monitoring them as one single system, and financing all elements together, rather than splitting them off. The new paradigm urban management relies on household management, separation at source and in the collection process; and has as its goal optimizing the recovery of materials and excreta based on their specific material characteristics and the way they are generated in daily life.

In the new paradigm one single mixed system may include many different types of providers operating at a wide variety of scales and with a broad range of technical and institutional tools. The individual components may work alone or depend on other components.

## **Monitoring and Evaluation**

Monitoring and evaluation of project targets against achievements is important aspect in this project execution. To institute monitoring and evaluation protocol the following will be put into consideration: the project objectives, outputs, outcomes and targets per objective, and indicators. In addition some factors should be considered, such as sustainability, risk factors and added values of the project. District Monitoring Protocol has been prepared as a template check list to be used by monitoring team on what to look for in progress reports and observe from project stakeholders, facilities and systems build.

## Analysis and discussion

## Formation of 'district' consortia (DICO)

Sector Stakeholders in peri-urban Arusha have been identified to forming the consortium responsible to implement sustainable improved sanitation and waste management for an average of 5,000 households per 'district'. The members prepared a Memorandum of Understanding (MoU) to be signed by the members as their commitment in the project. Dialogue on the MoU is still going on for finalization and signing by participating partners – photograph 1) Major topics of discussion are: - partners to be involved, roles and responsibilities partner, understanding of ISSUE 2 programme and its approach, new technical options (ecological sanitation) and budget allocation as per district consortium partners.

A question who should be invited to form the consortium were analysed, and it was found that the project should involve committed partners from the following groups: - providers, users or clients, local, authorities, civil society organizations, public utilities, and in general those involved in governance and the local partner (EEPCO). Some partners were identified and roles and responsibilities of each member are clearly pointed out in the MoU document as depicted in the table 1 below. However, other more partners will be identified during project implementation period.

Table 1. Stakeholders and Responsibilities		
Stakeholder Members	Responsibilities	
Arusha Municipal     Council (AMC)	<ul> <li>Leading role in the implementation of the ISSUE 2 project, especially in mobilizing the local support and resources</li> <li>Assist participating wards to implement on the ground the appropriate Sanitation Services and solid waste management projects. It will provide economic, political, information, and backstopping support to participating Wards and encourage them to prioritize sanitation and waste management activities</li> <li>Directly involved in initiating local sanitation projects, promoting ecological sanitation, providing loan security to households that have no collaterals and disseminating information to potential users.</li> <li>Formulation of by laws that will create an enabling environment making it possible to install and use ecological sanitation systems to their full potential.</li> </ul>	
2. Resource Oriented Sanitation Concepts in peri-urban areas in Africa (ROSA)	<ul> <li>Provide research results regarding the research that is carried out in the project areas. The results can then be disseminated and used for information, advocacy and influence among the different stakeholders.</li> <li>Support and share information on researched viable sustainable sanitation options relevant in the intervention zone of ISSUE 2 project;</li> <li>Support project partners in coming up with various ecological sanitation options and designs for recommendation to the clients of ISUE 2 project;</li> <li>Collaborate with EEPCO in promoting ecological sanitation options to the community e.g. demonstrating various options at different levels</li> <li>Support in training users on operation and management of ecological sanitation facilities. Backstopping on all technical issues on ecological sanitation approaches within the targeted peri-urban zone;</li> <li>Lead in demonstrating (piloting) ecological sanitation options at household level for uptake and scaling up by community members.</li> </ul>	
3. Participating Ward Authorities	Implementation of the ISSUE 2 project, especially in mobilizing the household members so as to get their support and resources to achieve the target of 5,000 households with improved sanitation and solid waste management services and facilities.	
4. Environmental Engineering and Pollution Control Organization (EEPCO)	Main coordinator and facilitator of all DICO activities. Guide the DICO members accomplish the targets, outputs and outcomes set for Urban Environmental Management; capacity building; sustainable finance; good governance; coherence;     Facilitate all ISSUE 2 major activities; do internal monitoring and evaluation; and, make all the necessary progress, annual and financial reports.	
Private Sectors/Service providers	PSP will assist in drawing the needed resources (financial and human) hopefully to reach the needy.	

6. Financial Institutions National Microfinance Bank (NMB) and Community Rural Development Bank (CRDB)	The role of the banks is to give soft loans for sanitation and Solid Waste Management activities and investments (services and facilities installation). These financial institutions are expected (dialog still going on) to carry on with management of waste venture loan.
7. WASTE	To "Empower and support" By The WASTE's role is facilitative with core belief that the stakeholders themselves have to make the changes they identify

ISSUE 2 programme and its approach was issue of discussion. Some partners expect some subsidy to build sanitation and waste management facilities in the project area. The questions raised were directed to financial support to communities and stakeholders to make changes towards improving sanitation and waste management in the district. However after discussion the partners understood that the project is aiming to empowering, and supporting stakeholders to make changes possible. In addition, several six periodic DICO meetings have been conducted from July 2007 to May 2008 to enable the members deeply understand ISSUE 2 programme. Some DICO members were involved in some inception phase plan activities such us Baseline survey, preparation of CMAP, preparation of monitoring tool, and sanitation promotion training.

ISSUE 2 programme focusing ecological sanitation as sanitation alternative in the district was a question for discussion. Some partners believed that reuse of human excreta are a difficult practice to be accepted in the district. Others believed that any form of onsite sanitation can not suit urban settings and they recommend promoting sewerage systems instead. Other recommends that the communities to be provided with wide range of options for them to choose the options they like and can afford.

Budget allocation as per district consortium partners was another issue of discussion. A budget prepared by EEPCO and approved by ISSUE 2 programme board were reviewed by the partners. Reallocations were made in the budget as per district consortium partners, and the changes were included in the CMAP document.

## Lessons Learned From consortium formation meetings: -

- Some partners believe that sanitation and solid waste management need subsidy, outside the district.
- Individual partners though informal, have their own networks of local partners and they want them to be included in the district consortium. This in one way was advantage (easy the task to identify partners), but in another side the list of stakeholders become too long and hard to shortlist.
- The partners are interested in new information and innovations but as highly qualified experts in their areas, they want to decide what specific results and forms of institutional and financial support and technical approaches are relevant. This was also noted during Sanitation Promotion Training conducted in the district.
- Initially partners were claiming allowances to attend consortium meetings. However, we learnt that Frequent partners meetings (discussing issues and understanding the programme), transparency (especially on budget allocation), information sharing, recording and feedback were fundamental to fade away partners reservations, and make the meetings successfully.

## **Baseline survey**

The consortium members and local staffs were properly given orientation and training on the baseline Assessment. Getting involved was not difficult in the data gathering and subsequent field work activities. The personnel also had full support of the local authorities in the performance of the tasks assigned to them. Hence, local ownership of the baseline Assessment including the results was achieved. The consortium members and Local Government staff gained deeper and broader awareness and understanding of the existing sanitation and solid waste management practices in the intervention zone. The survey examined existing institutional arrangements for sanitation and solid waste

management in the district and current barriers for sanitation and solid waste management in the district. The findings are outlined below.

## Institutional set up for Sanitation and Solid Waste Management

Arusha Urban Water and Sewerage Authority (AUWSA) is an entity in charge with the overall operation and management of water supply and sewerage services in the district. These core functions are carried out by its Technical Services Department, which has five section namely sewerage, water network production, planning and construction, and maintenance and repair. AUWSA is not responsible for on-site sanitation system within the municipality. However, it owns one sludge pond receiving wastewater from cesspit/septic emptier.

Arusha Municipality Council (AMC) through its health department is responsible for coordinating sanitation activities within the municipality. The role of Solid waste management in Arusha Municipality council is the responsibility of the Health Department and direct under the cleansing Section. By 2003, Public Private Partnership was adopted as the new approach to Solid waste Management. At present the council have contracted four private companies and one company to carry out solid waste management and for pit latrines and cesspit emptying respectively in different wards of the municipality.

The survey revealed that, some potential stakeholders in the district are not involved in the existing institutional set up; also the few who are involved do no meet and/or do not participate in planning. The most important group left is the private operators/providers. To close the ever-increasing sanitation gap, private sector participation (PSP) is very important (Shayo A. J, Chaggu E.J 2004). Private Sector Participation will assist in drawing the needed resources (financial and human) hopefully to reach the needy. In the ISSU 2, the sector will comprise diverse groups of private stakeholders including planners, consultants, equipment producers and suppliers, local construction companies, local artisans, private waste companies, latrine builders, latrine emptier, academic institutions, Non Governmental Organizations and Community Based Organizations, religious institutions, companies involved in waste collection, transport, recycling, treatment and marketing. Service providers carry their tasks and get paid.

## **Barriers for Sanitation and Solid Waste Management**

The survey revealed some barriers (listed in order of most to least reported by communities) for sanitation and solid waste management as follows: - Poverty and lack of funds; Lack of, or inadequate sanitation and solid waste facilities and structures; overpopulation (interpreted to mean too few facilities to serve the community); lack of education on health and hygiene practices, and awareness related to latrines (lack of education about proper latrine use, lack of awareness of the value of functioning latrines and cultural beliefs regarding latrine use); lack of protective regulations, (government policy and monitoring, related primarily to land use and property rights); Lack of municipal or government planning (lack of town plans ); Natural environmental factors comprised of poor soil quality.

## **Financial Arrangement**

The financing of the hardware component of the ISSUE 2 will primarily be covered locally through the participation of the DICO members, Local Government Aauthorities, implementing partners, communities/households of the participating wards (represented in the district consortium by their local government leaders) and, when needed or given the opportunity, the government, private financing institutions and other support agencies. When opportunities arise, financing will be sourced internationally, such as through the International Financing Institutions such as World Bank, African Development Bank, International Banks, Water Fund Facility etc.

For sustainable financing on sanitation issues, the project is expecting that every household will pay for their own toilets while the project role will bear the cost for awareness creation, mobilizing people and construction of demonstration for solid waste management and sanitation facilities.

DICO visualizes assisting the implementing wards to develop sustainable local channels to generate funds for waste projects by organizing different local financial sources/institutions. During inception phase plan only few institutions (National Microfinance Bank (NMB) and Community Rural Development Bank (CRDB)) were consulted, and has shown interest to establish micro-credit schemes trough Savings and Credit Cooperative Societies (SACCOS) department in their banks with minimum interest rate (8%). Through this approach, the Local Government Authorities will be able to develop their capacity to borrow from government financial institutions, as well as private financial institutions.

Other potential stakeholders who will contribute in one way or another to the sustainable financing for the sustainability of the project have been identified by district consortium and have been categorized and their roles are outlined in the table 2 below

Table 2. Financial Mobilization at different levels		
Stakeholder	Roles	
1. National government through Arusha Municipal Council (AMC)	<ul> <li>Allocate funds for solid waste management, sanitation and hygiene education,</li> <li>Lobby external support agencies for discretionary terms for financing solid waste management, hygiene promotion and sanitation,</li> <li>Provide financial incentives to local governments which can deliver efficient and effective sanitation and hygiene promotion programmes,</li> <li>Develop and finance micro-credit schemes managed by Non-Governmental organization (e.g. SACOSS) or the private sector to target households and work with private sector leaders and product manufacturers to create programmes for extending credit to members of the most vulnerable communities.</li> <li>Provide loan security to households that have no collaterals</li> </ul>	
2. Local governments (participating wards)	<ul> <li>Review the effectiveness of sanitation and hygiene promotion programmes and ensure that funds are not used to finance high-cost, low-impact investments,</li> <li>Make subsidy programmes clear and transparent;</li> <li>Create incentives to develop new technologies to reduce cost;</li> <li>Create micro-credit and credit guarantee programmes to target households and provide incentives for local manufacturers to extend credit to the poorest households</li> </ul>	
3. Communities and Civil Societies	<ul> <li>Scrutinize public accounts and check on reported spending on sanitation and hygiene promotion to help increase accountability and reduce wastage;</li> <li>Propose alternative institutional and technical approaches that could reduce costs and ensure that these are well-known and well publicized,</li> <li>Develop micro-credit schemes to fund household sanitation improvements and create mechanisms for generating user fees for funding continuing operation and maintenance of facilities.</li> </ul>	
4. Households	<ul> <li>Participate in community schemes and/or micro-credit schemes,</li> <li>Pay back loans to loan providers</li> <li>Contribute maintenance fee to user groups.</li> </ul>	
5. Entrepreneurs	Offer poor households with low-interest credit to purchase their products (e.g. vacuum, trucks, bins etc)     Work with local governments, No–governmental organization and/or banks to develop micro-credit schemes     Develop cost-effective products and services for poor communities and households.	

6. Financial Institutions	Give soft loans for sanitation and Solid Waste Management activities and investments (services and facilities installation).
7. International organizations and external funding agencies	<ul> <li>Allocate sufficient resources to the sector</li> <li>Mobilize other development partners to contribute funds.</li> <li>Compile and disseminate information on a variety of cost effective sanitation and solid waste management alternatives and effective behaviour change strategies</li> <li>Compile and disseminate information on effective programmes for mobilizing financial resources, including micro-credit schemes, targeted subsidies etc.</li> </ul>

## Development of Consortium Multi Annual Plan (CMAP)

The Consortium Multi Annual Plan (CMAP) was formulated in January until March 2008. The DICO partners' participation and support ensured that the CMAP focuses in solving problems of the sanitation and solid waste prevailing in the District. Guided discussions were held to prepare a district programme logical framework, DICO mult annual Budget and DICO allocation of Budget per DICO partners. A district programme logical framework was successfully prepared purposely to achieve the six specific objectives and expected results. The log frame is a result based with detailed activities for three years (2008 – 2010), responsible key stakeholders and activity indicators are clearly indicated in the log frame. As pointed out in the preceding section (formation of DICO) the budget prepared by EEPCO were jointly reviewed and reallocation done and final budget (DICO Mult annual budget and DICO allocation of budget per partners) are included in the Consortium Mult annual Plan and approved by ISSUE 2 programme board.

## Lesson Learned From consortium mult annual planning: -

Like in the DICO formation we learnt that transparency, information sharing contributed to the successfully planning.

## **Conclusions**

- Poor sanitation and solid waste create serious problems when human beings live close together in
  large groups in unplanned urban location. The locations are mostly inhabited by poor people,
  which make the problems even more difficult to solve. However, the solution to the problems lies
  in attitude and behaviour change and willingness to contribute local available resources (human
  and finance). Partnership in sanitation is important for optimum utilization of the resources and
  capacities, for making significant and sustainable sanitation improvements in urban environments.
- Strong partnership is the one giving freedom to the partners to decide on what they want, to
  choose, who they want to affiliate with for a project and decide on the nature of that affiliation.
  Putting pressure on the partners to work together with organizations they do not know or did not
  choose as their preferred partners will not work.
- Partners are interested in new information and innovations, but they need freedom to decide what
  specific results and forms of institutional and financial support and technical approaches are
  applicable. According to WASTE (2006), When Ecological Sanitation was introduced in ISSUE,
  the partners accepted it as an addition to their local focus and competencies, but would not accept
  it as a substitute for their deep sector knowledge, experience, and constituencies.
- The partners value consistency and generally welcome arrangement, templates, etc, making it
  possible to plan for consistency of project evaluation that ties to measurable results across all
  district efforts.

Some partners had expected grants from international partners instead of mobilizing local funds
to solve identified problems of sanitation and solid waste management. This was a big challenge
encountered. However, during series of consortium meetings, this idea faded away and it is now
believed by the district partners that local resources can make significant improvements in urban
environments.

## Recommendations

To enhance partnership in pro-poor urban sanitation and so to provide sustainable sanitation services to the urban poor the following are recommended.

- Identification and invitation of stakeholders to form partnership in the project area is important, should be done early (in the promotion or planning stage) and should be consistency in such a way that no one will feel disregarded.
- Partners should form a platform or consortium and sign a commitment letter or Memorandum of Understanding (prepared by the members/consortium in participatory manner). The document must clearly indicate roles and responsibilities of each partner.
- The partners should participatory prepare action plan (project plan and/or sub-project plans) with clear indication of roles and responsibilities of each partner, resources allocation and time frame.
- Transparency amongst the partners is an important aspect for sustainability. For this, information sharing about resources inputs and allocation, available opportunities for development, available technical options etc, are highly recommended.
- Partners should be informed and/or trained by fellow partners and/or external experts on innovations or new technical options but they should be free to choose options which they think more appropriate to their local conditions.
- Partners should meet regularly. It is recommended that, a consortium should include in the annual plan, the consortium meetings because the meetings are very vital for cooperation and eventual sustainability. We can not have strong partnership without meetings/discussions. Partners in participatory manner are therefore recommended to decide on when, how, where, they should meet.

## Photograph 1. District Consortium meeting in Arusha

Source: Author

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#### Note/s

The paper intends to address a Question "How to form partnerships for sanitation for the urban poor?"

#### **Keywords**

Urban Sanitation, Solid Waste, financing, multi-stakeholder approach, modernized mixtures

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<sup>&</sup>lt;sup>i</sup> WASTE; is a Dutch subtitle. For clarification they use "advisers on urban environment and development".

ii EEPCO = Environmental Engineering and Pollution Control Organization

<sup>&</sup>quot;Sanitation" here refers mainly to the facilities and hygiene principles and practices related to the safe collection, reuse and/or disposal of solid waste, human excreta, animal excreta and domestic wastewater. In general, the sanitation activities of WASTE and its partners in this programme fall under the umbrella of "ecological sanitation" or "new paradigm" sanitation, at micro, small, and medium-scale.

<sup>&</sup>lt;sup>iv</sup> "Solid waste management" refers to a range of activities in solid waste collection, transport, processing, and disposal, as well as activities of households in managing waste materials (backyard burning, repair, reuse, feeding waste to animals, source separation etc).

<sup>&</sup>lt;sup>v</sup> "District" in this programme refers a specific area defined by the consortium, consisting of (an) interdependent urban centre(s) and surrounding per -urban and rural communities and is not the same as the administrative district used in Tanzania.