

# ADAPTATION OF EXISTING PARTICIPATORY PLANNING TOOLS FOR THE PERI-URBAN AND RURAL AREAS IN WESTERN AFRICA

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## Abstract

This paper describes a Conceptual Planning Approach for supporting decisions in the field of sustainable sanitation which is one of the outcomes of the EU-financed project NETSSAF. The proposed Planning Approach is geared towards improvement of decision-making in the planning process and in creating demand for sanitation through use of demonstration units and multi-criteria decision support approaches. It was detected that these issues were not emphasized sufficiently in existing planning tools. The paper describes the eight planning steps developed under work package 4 (WP4) of NETSSAF project.

Key words: Participatory, Sustainable Sanitation, decision tool, peri-urban, West Africa.

## Introduction

Sustainable sanitation is an alternative approach to conventional sanitation systems based on closing the nutrient loop between sanitation and agriculture by considering human excreta as a resource instead of as a residue. Although widespread implementation of sustainable sanitation concepts would generate proven improvements in health, environment and living conditions with special impact in developing countries, there are challenging constraints in ensuring the acceptance and sustainability of the systems. In this sense, international cooperation project assessments consistently report cultural barriers, behavioural change, prohibitive costs, lack of political and managerial support, or low community demand as reasons for low success rate of sanitation projects (World Bank, 2003). This wide array of constraints needs to be overcome if sanitation is to be brought to scale in a sustainable manner.

Overcoming these constraints starts with the planning phase. Participatory and holistic approaches to sanitation planning can increase the potential for a sustainable system through better management of the risk-factors and capacity development for successful operation and maintenance (O&M). In recognition of this, a wide number of organizations have developed planning frameworks for sanitation (Wood et al 1998; Kvarnström and af Petersens, 2004; Eawag, 2005; Kar, 2005; IWA, 2006). The existing Participatory Sanitation Planning Tools (PSPTs) were designed to work well in the urban

environment or traditional rural settlements. However, considered individually they are less able to tackle the key problems arising in rural and peri-urban settlements today.

## **Methods**

The Planning Approach presented in this paper is an outcome of the EU-financed project NETSSAF (contract number: SUSTDEV-2005-037099) which brought together European and West African partners in the sanitation field to develop locally based roadmaps for sustainable sanitation ([www.netssaf.net](http://www.netssaf.net)). The methodology presented is based primarily on existing tools such as Household-Centred Environmental Sanitation (HCES), Multi-Criteria Decision Support Systems (MCDSS), and Sanitation awareness raising tools such as Participatory Hygiene and Sanitation Transformation (PHAST). The NETSSAF Planning Approach highlights the necessity of sanitation demand creation and behaviour change stimulation as well as the use of demonstration units, once the preferences of the future users are identified. This tool has been adapted from existing frameworks in order to better fit the needs of peri-urban areas in West Africa; however, it is still a theoretical concept and has not been tested in the field.

## **Results and discussion**

In order to meet the needs of participatory planning tools for the widespread implementation of sustainable sanitation, NETSSAF consortium has proposed a framework that is designed to be generally applicable in rural and peri-urban settlements across West Africa. It follows the eight step approach described below:

**Step 1: Project start-up and launch of the planning process.** This phase will define the general problem and formulate the overall goal of the project. A consensus regarding the project goals and boundary conditions should be reached through a series of discussions with key stakeholders (municipal officials, health practitioners, engineers, planners, etc.) and drafted into official documents.

**Step 2: Creation of a demand for improved sanitation.** Sanitation requires intervention at both household and community levels, therefore raising the demand for such services from individuals becomes of paramount importance for the project success. Awareness raising activities must reach out to all members of the community, including diverse gender, ethnic and class groups, and be structured so as to provide a relevant message to each group. This is an on-going activity and will continue throughout the subsequent planning steps and beyond.

**Step 3: Assessment of existing sanitary situation and user priorities.** This step will collect the background information necessary to determine the terms of requirement for a sanitation system from both technical and user perspectives. This step is performed through a comprehensive, participatory assessment of the current level of services and user attitudes towards sanitation across the domains of the project area.

**Step 4: Construction of demonstration units.** Demonstration units shall introduce sustainable sanitation schemes before the final planning stages for large-scale intervention in order to give potential users and political authorities valid reference points that will assist in their decision making.

**Step 5: Identification of Feasible Sanitation Concepts and Service Systems.** The objective of this step is to reach a decision about the most suitable sanitation system based on the baseline information gathered in step 3, an assessment of the enabling environment, information on users priorities (from steps 3-4), and any additional knowledge that was gained from the demonstration units.

**Step 6: Consolidation and Finalization of Implementation Plans for Sustainable Sanitation.** This step will develop an action plan for the implementation of the sanitation structures, as well as the corresponding management system. It will clarify financing methods, and roles and responsibilities in construction, operation, and maintenance of the chosen system.

**Step 7: Implementation.** Implementation is a process within itself, and requires an adaptive and flexible project management approach with continuous feed-back via monitoring and evaluation systems. This step is designed to govern the process and key conditions necessary for successful implementation and service delivery.

**Step 8: Participatory Monitoring and Evaluation.** Participatory monitoring and evaluation (PM&E) methods are used throughout the project as a feedback system to increase the consensus on appropriateness of goals, objectives and activities. It provides timely, reliable, and valid information for coordinating and managing the other planning and decision making steps.

The time sequence for the described process is shown in figure 1:

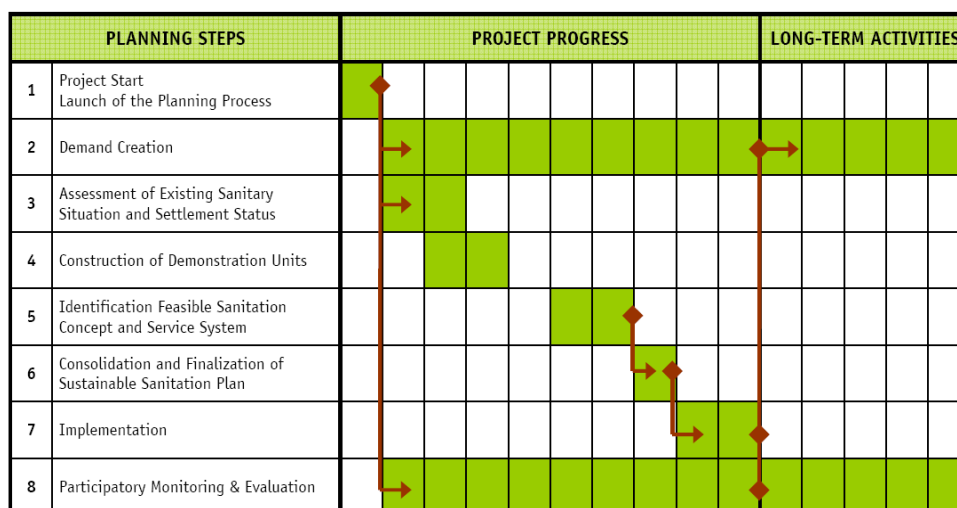


Figure 1. Sequence of planning steps in the course of a large-scale sanitation project

## Conclusions

The NETSSAF Participatory Planning Approach is an attempt to integrate the best existing theory on sanitation planning and practice, and it highlights key features for achieving sustainable sanitation in rural and peri-urban areas across West Africa. When planning for sanitation in non-served peri-urban areas, with low sanitation demand, it is also necessary to promote awareness-raising, behavioural change and demand creation activities throughout the process. The introduction of previously unknown sanitation solutions will be facilitated if demonstration units are constructed as part of the planning process, followed by facilitated discussion of options using MCDSS tools. It is the hope of the NETSSAF network that future sanitation projects will pick up this tool, improve it, and benefit from its approach. The outcomes of NETSSAF WP4 are still theoretical and require refinement and validation through field testing the process in the planning of a large-scale sanitation project.

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