

# INFRASTRUCTURE NOTES

INFRASTRUCTURE AND URBAN DEVELOPMENT DEPARTMENT, PRS

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## STRATEGIC SANITATION PLANNING

Albert M. Wright

*Strategic Sanitation Planning is designed to be a responsive and iterative planning process for meeting the overall sanitation service needs of urban communities in developing countries. It involves consideration of technologies beyond conventional sewerage; it is flexible and highly responsive to effective demand and to feedback from a staged implementation process. Conditions favoring its use appear to prevail in most urban areas in developing countries. It should therefore find wide application in the foreseeable future.*

### BACKGROUND

One of the lessons of the International Drinking Water Supply and Sanitation Decade has been the futility of relying exclusively on the master planning approach or on high cost conventional sewerage alone for meeting the sanitation service needs of all segments of urban communities, particularly the poor. The development of an alternative planning approach appropriate for meeting the immediate needs of the poor and the rich alike has been made possible by a number of significant developments. The first is the availability of a wider range of workable technological options, including intermediate technologies (like solids-free sewerage and simplified sewerage) and on-site sanitation systems (like the ventilated improved pit and the pour flush latrines); the second is the increasing recognition that users must pay for the services they receive; and the third is the unprecedented pace of urbanization and the uncertainty that it creates for long-term predictions of future conditions, thereby necessitating the use of shorter planning horizons than had been used in the past.

The modification of existing planning methods to reflect these developments has resulted in an alternative planning approach which is defined

here as Strategic Sanitation Planning (SSP). It is a flexible bottom-up approach to urban sanitation project planning with an inherent capacity for learning by doing and institutional strengthening. As shown in Figure 1, it is based on the Bank's project cycle, with feedback loops from the evaluation stage to the implementation, the feasibility, and the pre-feasibility stages.

### SALIENT FEATURES

*The strategic plan* itself is prepared at the pre-feasibility stage. Driven by willingness to pay and other technical factors, it involves consideration of a mixed set of technical solutions to meet the short to medium term overall sanitation service needs of the entire urban community, including the middle and low income communities.

*Project preparation* takes place at the feasibility stage; it aims at demonstrating the overall feasibility of the project to ensure that it will stand up to critical appraisal. Technical solutions are made responsive to immediate imperatives, while allowing for technological upgrade as circumstances change. The SSP approach should, as a rule, lead to overall urban sanitation solutions with multiple technologies. Where conventional sewerage components occur, they

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would be planned as free-standing sewerage projects, with detailed designs prepared after appraisal. Where on-site or certain intermediate technologies occur in the overall plan, the project preparation would proceed incrementally and iteratively in response to inputs from the strategic plan and feedback from the implementation experience. In such cases, the first phase would be designed in detail during the feasibility stage to ensure a rapid start in implementation once funding is approved. Subsequent phases would not be prepared to the same level of detail, but the framework and basis for their preparation would be clearly defined for purposes of appraisal.

*Appraisal and negotiations* should lead to commitment to the project in its entirety. This commitment would probably be made on the basis of the fact that funding standards are met both by the first phase of the project (which would have been prepared in detail) and by the framework and/or the criteria for preparing the details of the subsequent phases.

*Implementation* is staged. It starts small and expands incrementally; this allows initial stages to be used for staff training and institutional capacity building as well as for information development and refinement of the methodology.

*Supervision and evaluation* constitute a key sub-process in SSP. There is frequent feedback from the evaluation to the implementation process; less frequent feedback from it to the project preparation stage, and much less frequent feedback from it to the point where the strategic plan itself is defined.

## DEVELOPMENT OF METHODOLOGY

The process has evolved over a long period through the work of the UNDP-World Bank Water and Sanitation Program. Earlier versions have been tried in Bangladesh, Indonesia, and Senegal; and the present version is being applied in a UNDP-World Bank demonstration project in Kumasi, Ghana. Through our own Program activities and some Bank work, efforts are underway elsewhere for further development of the process.

## APPLICABILITY

SSP is applicable where there are uncertainties in long-term future conditions, where the level of economic development precludes the exclusive use of conventional sewerage for an entire urban community, and where there is a need for responsive planning. Given the prevailing conditions and trends in urban areas in developing countries, it would appear that where poverty alleviation is a project objective, urban sanitation projects should not be confined to conventional sewerage, but should always start with the SSP approach.

### TO LEARN MORE

The INUWS is preparing a handbook on the SSP. For further information, contact the author (ext. 32705), Mr. Mike Garn (ext. 37515), or Mr. Alexander Bakalian (ext. 38427).

