## TOOL FOR PLANNING, PREDICTING & EVALUATING SUSTAINABILITY (TOPPES)

ToPPES was developed by Water and Sanitation for Africa (WSA), a pan-African organisation, as a decision support system to analyse and predict service delivery sustainability for WSA project managers, although results would be relevant to local government officials. The model was developed in Ghana from a data set created with the help of the national water ministry and the agency responsible for rural and small town water supplies. Although ToPPES has been field tested and modified it has not been fully applied. Data were collected from 4,670 households, 441 water committees, and 1,509 water points in 570 communities in 13 districts spread across three regions. The data were analysed to identify those indicators that correlated to system functionality and from this analysis the ToPPES framework was established. WSA hopes to adapt the framework for use in its other countries, however neither the costs of contextualisation nor the cost of full scale execution are known.

## GENERAL DESCRIPTION

Target: Project managers.

**Objective**: To predict service delivery sustainability for WSA projects.

**Areas**: Socio-economic context, service delivery, water resources/quality/and environmental needs, technical, financial, O&M and institutional.

**Indicators**: Each factor has a number of indicators, totalling 23, which are scored by answering 92 yes/no sub-indicator questions. Scores are then weighted according to perceptions of importance that resulted from the field test.

**Methodology**: ToPPES uses a case study approach with judgement sampling; a comprehensive list of communities with interventions is used to identify communities where data will be collected. Data is collected through focus group meetings with water committees, physical inspections, and in some cases information from district level is incorporated. Data collection



is done by third party contractors or project staff and the responses are field coded. The user interface is designed for real-time analysis.

**Outputs**: Numeric output indicating the likelihood of sustainability (i.e., scores of sustainable, moderately sustainable, or not sustainable) for the water supply system in question and for each sustainability factor.

**Tool format and language**: Word document; English.

Resource link: <a href="http://wsafrica.org/">http://wsafrica.org/</a>

## IMPACT AND FINDINGS

Since ToPPES has not yet been fully applied it is unclear what the impact of the model will be. In addition to post implementation evaluation, according to WSA, the ToPPES model can be used as a checklist at the project planning stage to ensure that critical factors are included. Currently ToPPES is only designed to evaluate water supply systems in rural areas, but WSA plans to adapt the tool to other contexts and technologies in addition to improving the usability of the tool with the ultimate goal of having a web-based open source application.

Strengths	Limitations
Comprehensive scope of sustainability factors	Limited field testing
Developed in close partnership with Government of Ghana	Focus is on conditions in the community
Can be used in pre-implementation phase	Does not account for national level enabling environment factors
Potential for adaptability to other sub-sectors (urban)	Limited to water supply without inclusion of sanitation