



UNDP-
World Bank
**Water and
Sanitation
Program –
South Asia**

**(In collaboration
with the
World Bank)**

Sustainability Monitoring: The VIP Way

A Ground-level Exercise

“With schemes commissioned in 30 batch-I villages in the Karnataka (India) Rural Water Supply and Environmental Sanitation Project (Cr 2483-IN), the November 1998 Bank supervision mission made a serious attempt at assessing results on the ground in terms of benefits to the users, village-level capacity building and prospects of long-term sustainability. In the process, the task team successfully initiated the process of mainstreaming the Village Immersion Program (VIP) in Bank operations in India.

This field note describes the methodology, process and findings of the joint government-Bank exercise in measuring sustainability of rural water and sanitation investments.”



Tapstand monitoring in progress

Project Components

- ◆ Drinking water supply and groundwater recharge
- ◆ Environmental sanitation (drainage and latrines)
- ◆ Developing replicable implementation model supportive of a demand-responsive approach
- ◆ Hygiene and sanitation awareness programs

Project Size

Number of villages: 1,200
Bank assistance (IDA): US \$92 million
Period: 1993–1999



The Problem

For most projects, the end of disbursements is just the beginning of scheme operations. How do we, however, assess the prospects of long-term sustainability of rural water supply and sanitation service delivery? How do we know that the physical and social infrastructure created in rural communities will continue to function effectively and efficiently over the entire design period? Such questions usually remain unanswered since no well-tried and tested tool exists for measuring sustainability of rural water and sanitation services.

Breaking New Ground In Karnataka

In an attempt to address these difficult questions, the Bank task team, with full participation of the project staff, consultants, NGOs and village communities, undertook the sustainability measuring exercise in 15 project villages in nine districts. The visiting teams stayed 24-hour cycles in the villages and assessed system performance in partnership with the user communities. The event was highly successful and a useful learning experience for all the stakeholders. The user communities strongly supported the exercise and keenly participated in an inward-looking self evaluation process. Apart from team building, the output is a tested sustainability monitoring tool for use by the project staff for schemes that are progressively being put into operation.

Objectives

The main objectives of the joint government-Bank exercise were:

- ◆ to develop and field test a methodology for measuring sustainability at the village level;
- ◆ to obtain a better appreciation of the ground realities through a 24-hour long Village Immersion Program;
- ◆ to bring together different project stakeholders in a grassroots-level team building exercise; and
- ◆ to identify key issues and problems affecting sustainability.

Conceptual Framework

The exercise was based on the broad conceptual framework provided by the PLA (participatory learning assessment) guide developed by the UNDP-World Bank Water and Sanitation Program. The framework was modified to suit project-specific needs. It was also decided to focus on measurement of sustainability indicators at the community level, leaving out factors external to the communities (such as implementing agency effectiveness and policy environment). The four key parameters (see box below) were further divided into 71 discrete indicators for recording in the field and subsequent analysis. Each indicator was assigned a score on a scale of 0 to 2 (in some cases, the scale range is wider).

The 71 indicators capture the key aspects of sustainability as follows:

Infrastructure functioning and use: Quantity, quality, reliability, equitable access and user perceptions

Institutional: Effectiveness of village-level institutions in service delivery and management

Financial: Adequacy of cost recovery for scheme operations and sustenance

Social: Participation in benefits and management by women and socially disadvantaged groups

Conceptual Framework Matrix

EFFECTIVE
FUNCTIONING &
USE OF SERVICES

DEMAND
RESPONSIVENESS
OF SERVICE

PARTICIPATION
IN SERVICE
MANAGEMENT (O&M)

PARTICIPATION
IN PLANNING,
ORGANIZATION AND
CONSTRUCTION

Weightage

30%

25%

25%

20%

INDICATORS

- Functioning System (25%)
- Effective Use (25%)
- Effective Management (25%)
- Effective Financing (25%)

INDICATORS

- Is demand of users being met (30%)
- Value attached to service by users (40%)
- Perception of cost effectiveness (30%)

INDICATORS

- Economic participation (25%)
- Management participation (25%)
- Participation in benefits (25%)
- Perception of ownership (15%)
- Perception of responsibility (10%)

INDICATORS

- Participation in initiating project (5%)
- Extent of informed choice (20%)
- Contribution in construction (20%)
- Community organization for managing services, formation, composition, roles, legal status, bank account status (15%)
- Accountability of implementers to community (20%)
- Whose capacity built for what, when, why and how (20%)

The Process: The village visit generated great enthusiasm amongst the village community as well as the team members. Unused to the idea of project staff staying for more than a few hours, the communities were touched at this display of sincerity in attempting to understand them better, and delighted to host the teams for a day and a night. In the process, a great deal of information and knowledge was shared by both sides. In most meetings, there was good participation from women and girls. Debates went on late into the evenings, and the degree of excitement and community involvement was so high that the event assumed a carnival-like atmosphere.

Many villages also arranged late night cultural programs and, in one case, a volleyball match also took place between visitors and the community. Needless to say, the community won! Such informal events helped in breaking the ice and improving communication between “outsiders” and the “insiders”. Apart from this, the village immersion and the night stay also served as a good bonding exercise amongst the team members themselves, most of whom did not know each other well prior to this VIP.

Karnataka Rural Water Supply and Sanitation Project

Sustainability Monitoring Questionnaire

Questionnaire	Title
Questionnaire 1	Village Socio-economic Profile
Questionnaire 2	Technical: Water Supply (Asset Condition and Profile)
Questionnaire 3	Technical: Sanitation (Drainage, Soak-Pits And Dust-Bins)
Questionnaire 4	Technical: Sanitation (Household Latrines)
Questionnaire 5	Financial (Costs, Tariff, Billing and Collections)
Questionnaire 6	Institutional (VWSC Composition, Functions, Effectiveness)
Questionnaire 7	Household Questionnaire (Facts and Perception of Demand Met)
Questionnaire 8	Social (Participation by Women and Poor)
Questionnaire 9	Tapstand Monitoring

Methodology

Pre-field: A total of 15 villages were visited; an average of three villages by each of the five teams set up for the exercise. Every team stayed a full 24-hour cycle in each village and consisted of project staff, partner consultants and NGOs. One Bank mission member participated in each team and mainly acted as a facilitator. A one-day preparatory workshop was held for the teams to brainstorm about the concept and the methodology as well as to thoroughly understand (and modify wherever necessary) the questionnaires



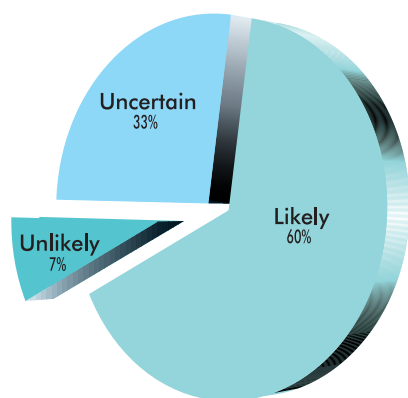
Wrap-up meeting with VWSC

specially designed for the field visit. A set of nine questionnaires were used for this purpose (see box). A variety of survey instruments (field observations, general meetings, focus group discussions, household surveys and public tapstand monitoring) were used for the exercise. The data from the filled in questionnaires was to be analyzed and converted into points, on the basis of which an overall sustainability index would be derived for each village.

Field: In the field, the teams first had a general meeting with the Village Water and Sanitation Committees (VWSCs), where they finalized the 24-hour schedule of activities and formed task teams, each with community representatives. The different task teams obtained information simultaneously from their respective target audiences such as women’s groups and households. The technical task team systematically visited and studied each of the water and sanitation system installations (tubewells, pumphouses, overhead tanks, water supply pipes and taps, drains and household latrines). The event in which there was maximum community participation, however, was the tapstand monitoring exercise. The exercise, which was preceded by a training session, involved a team of about 20 persons, including community members, each setting out at the same time during water supply hours to monitor quantity, quality, reliability and equitable access, by observation as well as by talking to the villagers collecting water from the tapstands. The environmental conditions around the tapstands, the number of men, women and children fetching water and the number of pots of water collected were also studied. After all the sub-teams had completed their tasks and surveys, a final ‘wrap-up’ meeting was held with the VWSCs. Here, each of the 71 parameters were awarded a score (on the predetermined scale for each) by a voice vote from all those present, both outsiders and VWSC members.

Analysis

Post-field: On return from the field, all the data collected through the field questionnaires and scores of the 71 indicators were converted into a sustainability index for each village. The analysis revealed that nine out of the 15 villages visited fell into the “likely to be sustainable” category (score of above 0.65), five into the “uncertain” category (between 0.50 and 0.64) and one in the “unlikely” category (below 0.50).



Project Sustainability Index

Name of village	Overall index	Assessment of sustainability
Sridharagadda	0.7	L
Holalu	0.67	L
Kinnala	0.66	L
B. Hatna	0.67	L
DMG Halli	0.65	L
Udigala	0.65	L
Gabbur	0.65	L
Belekera	0.71	L
Markunda	0.65	L
Sovena Halli	0.64	UNC
Shantigram	0.62	UNC
Garl Gunji	0.55	UNC
Bailur	0.62	UNC
Kambalu	0.62	UNC
Adki	0.49	UNL

L: Likely UNC: Uncertain UNL: Unlikely

Issues Affecting Sustainability

This intensive village-based sustainability monitoring exercise led to identification, by both the communities as well as by outsiders, of a range of issues which could adversely affect the sustainability of water and sanitation services. The issues common to most villages were:

Technical: Unstable electrical supply affecting pump operations and reliability of water service

Institutional: VWSCs yet to take full charge of scheme management and the need to clarify legal provisions empowering VWSCs vis-a-vis gram panchayats

Financial: Full cost of O&M not yet being recovered from users

Social: Women and socially disadvantaged groups yet to be fully empowered

Looking Forward

Institutionalizing ‘wrap-up’ with VWSC: The business-like final wrap-up meeting with the VWSC, stipulating actions to be taken and by whom, increased their sense of responsibility and determination to overcome the shortcomings discovered during the exercise. The task team felt that this should become a standard feature of supervision by the project staff.

Repeat exercise: The sustainability monitoring exercise needs to be repeated in the same village to confirm that the issues identified in the earlier exercise have been satisfactorily resolved.

Scoring system: The range of values assigned to the 71 primary indicators and relative weightage given while aggregating scores for each of the four main parameters need to be revisited and, if necessary, modified to better correlate them to ground realities.

Measuring water quantity: Quantifying the water received at the user end was found the most difficult to estimate. The methodology used (number of pots, size of storage vessels and tanks) for estimating the amount of water received by private connections and public tapstands was not very accurate and needs to be improved.

Mainstreaming sustainability monitoring: Inspired by this pilot venture, the Karnataka project staff have now started independently undertaking the exercise as a part of regular implementation supervision. The additional spin-off is that this exercise is also being undertaken in the other Bank-assisted project in India (Uttar Pradesh Rural Water Supply and Sanitation Project).

Bank operations and VIP: The exercise demonstrated the benefits of using VIP as means of achieving greater development impact. It could also be a useful tool in seeking participation of the communities in designing projects which more accurately reflect their needs and aspirations.

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