

PEOPLE-CENTRED APPROACHES TO WATER AND ENVIRONMENTAL SANITATION

QIS: A New Participatory Management Tool to Assess and Act on Field Reality

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One of the main problems to assess the achievement of the MDGs is the paucity of reliable data and statistics that reflect field reality, especially of the poor. With successive waves of decentralisation, district authorities have been made responsible for poverty and gender specific information on coverage, use and sustainability of water and sanitation services, at community level and district levels. Participatory methods are essential to give all members of village communities the opportunity to influence scores, and also to make informed choices during planning, and control quality of implementation. However, such methods are time consuming and often generate qualitative information that is difficult to compare and analyse at district or national levels. To address these problems, IRC developed, together with the Water and Sanitation Program (WSP), the Methodology for Assessment (MPA) to assess sustainability of services and to generate gender and poverty specific data. (Mukherjee and van Wijk, 2003). Based on the methodology, IRC along with AJ James has now developed Qualitative Information System (QIS), which is a flexible system to store and analyse qualitative data for monitoring progress and adaptive management at both project and community levels. Although QIS has the potential to contribute to a more effective use of qualitative information, the challenges of preserving quality when using participatory methods as well as the reliability of the data collected remain concerns to be addressed. The paper presents a number of key concerns and introduces a set of criteria to ensure quality of both the participatory processes and the data collected.

Quantification of qualitative information

MPA was originally developed as research tool to identify factors of sustainability in community managed water services. It used participatory tools to elicit information from community assessments and translated this information into numbers using an ordinal scoring system. The methodology built on the advantages of PLA approaches, but allowed quantification of participatory data by linking qualitative outcomes to ordinal scales based on descriptions of ‘mini-scenarios’. The attendance of women and their influence is assessed, for example, using a set of scoring options (Box 1) and reason for the score is noted.

Developing the methodology

Developed as a research tool, MPA has mostly been used in one-off studies and evaluations. Preliminary experiences showed however that, when adapted to suit local situations

and needs, the methodology has the potential to become a programme tool for planning new services and making existing services more sustainable and equitable.

The methodology was adjusted as a programme management tool over a series of applications by AJ James in India, and renamed Quantified Participatory Assessment (QPA). The adjustment made it possible to use the methodology in various rural livelihood sectors (not just water and sanitation), generalised the focus from system sustainability to a wider range of issues of importance to project management or community, e.g. transparency, impact of awareness generation and quality of facilitation), and added features like benchmarks (at 50) and recording of qualitative reasons to explain each score.

In Nepal, an NGO called Nepal Water and Health (NEWAH) developed the NEWAH Participatory Assessment (NPA) working with A J James. They adapted the methodology to rural Nepal and added a focus on hygiene and sanitation. A similar process took place in Flores, Indonesia, in which WSP, the Indonesian NGO Pradipta Paramitha and IRC worked together. In India, QPAs done till 2003 were more than community assessments and included several rounds of stakeholder meetings and detailed action planning reports. In 2003, collaboration between IRC and AJ James resulted in a conceptual clean up that distinguished between QPA as a community level assessment methodology and the Qualitative Information Appraisal (QIA), comprising QPA at community level, individual and multiple stakeholder meetings at programme level, and an action planning report.

Box 1. Attendance of women to meetings		
Options	Scores	Score given
Women do not come to meetings	0	
Women come, but do not speak	25	
Benchmark: Women influenced one decision	50	
Women influenced several decisions	75	
Ideal: Women influenced all decisions	100	
Reason for score		

QIA thus consists of:

- **Quantified Participatory Assessment (QPA)**, using participatory methods with different community groups to generate people's perceptions, and converting this information into numbers using indexes of change, cardinal measurement and ordinal scoring
- **Stakeholder meetings (SHM)**, individual and multiple, with actors at programme levels, using the findings from QPA to probe factors underlying the performance reflected in the community scores, and to suggest action points for both programme management and communities.
- **Action Planning Reports (APR)** to present findings of QPA and suggestions from stakeholder meetings in a manner most suitable for action planning by project management and project communities.

The use of participatory tools

QIA uses participatory methods to assess, the quality of programme work, for example, to achieve better sanitation, water and hygiene practices and efficient and equitable management of local water supplies and sanitation and hygiene programmes. At community level, separate groups of women and men from better and worse off sections assess to what extent local water supplies are reliable and sufficient to meet everyone's primary needs, the nature and quality of the local water management, and the changes in key hygienic and sanitation practices. They also assess process indicators such as the level of gender and poverty sensitivity of planning, implementation and follow up processes and selection of those attending the training courses, and analyse the cost and benefits of improved water supply and sanitation services.

At agency level, QIA has shifted from self-scoring of agency approaches (for correlations with community results) to discussing the outcomes of community assessments (QPAs) and identifying and addressing issues that hamper programme results.

How MPA influenced policy makers

In 2004, the World Bank published the report *Influential Evaluations*. It contains eight examples of evaluations that had a significant impact on policy and planning. One of them is *Assessing the Effectiveness of Water and Sanitation Interventions in Flores, Indonesia* (van Wijk et al.). This evaluation used the MPA in a stratified and geographically representative random sample of 63 sites from a total of 260 sites which had been covered by the project. Within communities, the MPA sample included marginalized groups such as women and the poor who may not otherwise be consulted. Gender-balanced teams of Indonesian researchers, trained by an experienced Indonesian NGO (Pradipta Paramithi) helped the groups measure changes in water supply, sanitation and hygiene conditions and practices. Institutional, poverty and gender aspects of project outcomes were studied and their links with service sustainability were investigated. The evaluation costs were \$45,000 for international consultants

and \$105,000 for the national inputs, and all work was completed in one year.

The study found that 87 per cent of villages completed the schemes. Incompletion was mainly due to inter-village conflicts which had been overlooked in local planning and management. Most of the installed systems were still working 3-8 years after construction. Under influence of the project policy on source selection and water allocation, half the sites had a serious drop in service levels and 22 per cent of facilities lacked water for a quarter of each year. The project design provided only communal water facilities, but many wealthy families also installed house connections. Project-promoted rules forbidding bathing and washing of babies at communal facilities, which discouraged better hygiene practices by the poor. Statistically significant better results were found where local planning and management had been more equitable for gender and poverty. Mostly, however, decision-making was monopolized by wealthier groups. The poor had more limited access to toilets and many continued to use open air, but the toilets installed were still functional. Users paid fees, but these did not cover recurrent costs or even operational costs. Moreover, due to flat rate payments the poor paid the same amount for less water and less convenient water than the wealthy.

The findings made policy-makers aware of the challenges of translating policies into practice at the community level. They reinforced the new national policy by its quantitative evidence that focusing on gender and poverty improves sustainability and effective use of services. Key evaluation findings were incorporated into the government's new policy document. In the stakeholder analysis, both the national planning agency and the donor confirmed the contribution of the study, particularly in identifying gaps between previous policy statements and implementation on the ground. (Bamberger and Ooi, 2004).

Qualitative Information System

QIA is designed for use as one-time assessments for baseline, mid-term and overall project impact assessments. In addition to QIA, IRC together with AJ James developed QIS, a flexible system to capture, store and manage qualitative information over time and space on computer databases, and to link assessment with action planning and adaptive management. It can be tailored to suit local conditions and needs, yet generate uniform and comparable qualitative information.

QIS collects information at regular intervals (e.g., annually) using the QIA, starting from the baseline through mid-term appraisal to end-line appraisal. This information is stored on a computer database to facilitate analysis of comparative annual progress in different project areas, and can be used to produce pre-designed reports as well as to answer specific queries on any specific area or component of implementation.

Putting social, economic and institutional information on the same computerised platform enables simultaneous viewing of physical, financial, social, economic and insti-

tutional information, in contrast to the current practice of having a computer database for only physical and financial information while all other project information is stored haphazardly and used infrequently.

Further, such information processing allows shorter and larger information feedback loops to quickly bring problems for speedy resolution by the appropriate decision-making level. Thus, QIS ensures that communities also are able to use the same information for decision-making and adaptive management. It also consolidates all quantified and qualitative information in one web-based location.

Thus, QIS is a powerful monitoring tool not only to provide perceptions of community men and women on project implementation at different timescales (e.g., quarterly, half-yearly, annual) for effective correction, but also to provide a continuous view of project progress (in contrast to disjointed and separate baseline, mid-term and end line surveys). QIS can give district level staff a simple, yet comparable and gender-and-poverty-sensitive database for customised upward reporting, not only on how well-sustained and well-used their completed systems are but also on the nature of planning and training processes.

It can also help local communities plan and manage their local services in a participatory way, and also generate useful and readily accessible data for situation analysis and problem solving.

Key concerns for quality

Quantifying qualitative information makes participatory methods more attractive to large development programmes, but there are several possible negative development implications. While such quantification facilitates comparison and trend analysis in programmes, and helps to monitor and act on strengths and weaknesses at all levels, it has the following risks:

- **Extractive use and an increased focus in obtaining only quantified data:** Extractive use shows disrespect for, and prevents empowerment of, community groups to manage their own development.
- **Poor implementation due to lack of understanding of the methodology:** Using such methods without the necessary methodological precautions to ensure the collection of valid and reliable gender and poverty sensitive data can defeat its very purpose;
- **Poor implementation due to lack of skills:** Adequate skills of facilitation, analysis and management are key to gathering reliable gender and poverty sensitive data and the representation of all in action planning, decision making and adaptive management.
- **Deliberate generation of invalid information:** Collected information has to be checked, through self-scoring or peer review of scores generated by assessment teams, to ensure that scores are not influenced deliberately, for reasons ranging from pressure to give a rosier presentation than reality to get additional project funds to a desire to cover up mismanagement.

- **Deliberate misuse of information:** Especially at national and district levels, the person who controls the database and analyses the data wields power over how the information is used. Data can easily be (mis)used to cover the failures of projects rather than to improve sustainability and access to water for the poor.

Key principles to ensure quality

Principles of good practice for those involved in collecting, storing and analysing the data can enhance the effectiveness of tools like QIA and QIS and contribute to local development. From experience, the following could address most of the quality concerns listed above:

- **Using local assessment teams:** Those familiar with local cultures better interpret nuances of local expressions when forming judgements of field reality
- **Re-training in participatory methods:** Even field staff who have used participatory methods will benefit from hands-on training on using participatory methods
- **Involving assessment teams in planning and designing field surveys:** When local assessment teams are fully involved in the exercise, including the generation of scoring options, they have a much clearer idea of the objective and context of the assessment. Making field teams responsible for eliciting accurate information also builds ownership for the information collected.
- **Careful sample selection for representativeness:** Care needs to be taken to ensure that the sample of villages selected covers the major factors for differential performance
- **Giving community groups opportunities to contribute** In addition to soliciting community responses to assessment-specific issues, adequate space must be provided during the assessment for concerns and suggestions from community men and women.
- **Recording supplementary qualitative information:** Apart from reasons for scores, comments and observations of field team members, and short field observation notes of noteworthy experiences, are vital to creating a balanced picture of field reality.
- **Sharing information with community men and women:** During and especially at the end of the assessment, field teams need to give feedback to the community about the information they have gathered, not only for triangulation, but also to keep them informed about and involved in the process of assessment. Community assessments are not external data collection events, but link into community action programmes.
- **Respecting local constraints:** Apart from standard good practice common to all PRA exercises, special care needs to be taken to ensure that the assessment process does not create future problems for community members who come forward with sensitive information. Particular care needs to be taken not to exacerbate pre-existing tensions and divisions.

- **Covering all sections of the community:** Making arrangements with poor women and men for focus group discussions at convenient times and places and gate keeping, to avoid that outsiders with their own agendas interfere at meetings make a large difference to the quality of participation and validity of the findings. Taking into account not only the local festivals, functions or harvest or sowing seasons, but also of the daily routine of women and poor people is vital.
- **Leaving behind useful information:** Assessment teams need to share aspects of their assessment (e.g., of school sanitation facilities) with the community, in the form of special scoring sheets or bullet points of 'good examples' and 'challenges', as a guide to the community to improve future performance.
- **Making assessment teams note details of participation:** Asking implementers for evidence that focus groups represent different physical and socio-economic and cultural regions, sex, class, caste, religion and nationality/ethnic identity, and insisting on accounts of problems faced and measures adopted to deal with them (e.g., domination by some participants) is essential to ensuring the quality of the data collected.
- **Commitment of all stakeholders, especially project management and funding agencies, to effective follow-up:** A well-planned assessment is backed by commitment to effective follow-up by the project or programme, (e.g., timing ensures that findings can influence programme plans and budgets) is a powerful tool for improving implementation performance.

Getting agreement on such a quality code of conduct *before* initiating QIA or QIS is crucial to quality.

Potential of QIS to contribute to the achievement of the MDGs

Few developing countries have reliable participatory monitoring and evaluation systems to assess the impact of development programmes at national, intermediate and community level, disaggregated by gender and socio-economic group (e.g., the poor). QIS, with its potential to combine with computer based tools such as GIS and MIS can be a powerful means to monitor and analyse processes and results contributing to the achievement of the MDG's, and to plan for improvements.

The key factor is that QPA, QIA and QIS, enable everyone (including the poorest) to be included in the assessment of outputs and processes, as well as in planning corrective action. This allows those responsible for project and resource

management to not only to listen to the voices of all those involved, but also to enter into a purposeful dialogue for effective project management which can contribute towards the achievement of the MDG's and increased sustainability. (James, Postma, and Otte, 2003).

However, adequate quality safeguards are necessary to ensure the quality of information collection storage and use. Given this, QIS can ensure that every voice counts and that decisions are based on information that reflects ground reality, especially of the poor.

References

- Bamberger, Michael and Elaine Ooi, 2004. *Influential Evaluations: Evaluations that Improved Performance and Impacts of Development Programs - case studies and lessons learned*. Washington D.C.: World Bank: Operations Evaluation Department.
- James, AJ, Postma, LM and Otte, C, (2003). 'Qualitative Information Appraisal: Using People's Perceptions in Large Development Projects'. Unpublished.
- Mukherjee, Nilanjana and van Wijk, Christine (eds) (2003). *Methodology for Participatory Assessments: Helping Communities Achieve More Sustainable and Equitable Services*. Jakarta Water and Sanitation Program-East Asia and the Pacific.
- Postma, LM, Van Wijk, C and Otte, C (2003), "Participatory quantification in the water and sanitation sector", in *PLA Notes*, 47, August.
- van Wijk, Christine, Kumala Sari and the Pradipta Paramitha team, Nina Shatifan, Ruth Walujan, Ishani Mukherjee and Richard Hopkins, 2002. *Flores Revisited*. Jakarta, WSP-EAP.
- Van Wijk-Sijbesma, C (2001) *The best of two worlds? Methodology for participatory assessment of community water services*. Delft: IRC International Water and Sanitation Centre.

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