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SUSTAINABLE ENVIRONMENTAL SANITATION AND WATER SERVICES

## Linking demand, gender and poverty for sustainability

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NEWAH BEGAN A gender mainstreaming process in January 1999 in its organisation and programme. At the programme level this involved establishing a Gender and Poverty (GAP) Unit comprising 6 operational teams of both technical and social staff, which successfully piloted a GAP approach in 5 communities in 5 regions of Nepal (three gravity flow and two groundwater projects).

Some initial results of the GAP pilot projects suggest that actions taken to target women and poorest community members have been effective in leading to greater inclusion of often excluded groups in making decisions throughout the service planning and implementation process of projects. Also that giving voice and choice to more community people – the poor, better off, women and men, boys and girls – and letting them influence (or control) the process of the service establishment is empowering them to potentially manage and sustain their services more effectively.

### Why the MPA?

NEWAH plans to systematically and thoroughly monitor and evaluate the five GAP pilot projects, as well as other projects, to highlight lessons learned and inform future GAP interventions; to assess impacts of its GAP approach in the longer term; to provide NEWAH with results for advocating in the water sector at the national and international levels. In early 2002 NEWAH trained its GAP Unit staff in a new participatory monitoring and evaluation tool called the Methodology for Participatory Assessment (MPA) which uses a set of sector-specific indicators to assess sustainability, demand, gender and poverty-sensitivity in water and sanitation.

NEWAH chose the MPA in order to enable its communities to:

- Assess the sustainability of services and take actions for improvement.
- Demonstrate how equitably poor households and women participate in, and benefit from the services, as compared to the better-off and men.
- Make visible the key factors for attaining success in community water-sanitation projects, while simultaneously allowing quantitative aggregation of village-level participatory monitoring data for use at programme and policy levels.
- Draw upon participatory approaches such as participatory rural appraisal (PRA) and SARAR tools and methods that have proven their effectiveness in involving

communities and for which NEWAH staff members have been trained and have applied in communities.

While PRA methods are known to be effective for communities to analyse strengths and weaknesses and plan and monitor improvements, they are often unpopular with programme managers because they cannot aggregate or compare large amounts of data and cannot easily assess the effectiveness of programme approaches. The MPA database can allow programme managers to analyse information statistically and to present it in graphical form to evaluate processes and results, monitor and improve existing services, and plan new projects. The MPA framework allows all stakeholders – from better off and poor men and women in communities to programme fieldworkers and managers in NEWAH, to use a single set of methods and data in order to compare progress across communities and projects and to identify key community and agency factors that have contributed to project success and also those which need further strengthening.

The Methodology for Participatory Assessments (MPA) was developed by a global team working on a Participatory Learning and Assessment (PLA) study on the sustainability of 88 water and sanitation projects worldwide (Gross, van Wijk and Mukherjee, 2001). The MPA focused on collecting village level information to evaluate the sustainability of the project and also the factors influencing sustainability. The two aggregate indicators for project sustainability are (1) Effectively Sustained Services (from the project) and (2) Effective Use (of project provided facilities), while the three aggregate indicators hypothesised to influence project sustainability are (3) demand responsiveness (of the project); (4) gender and poverty sensitivity (of the project) and (5) participation with empowerment (of villagers in the project). These aggregate indicators had several sub-indicators, which, in turn, had individual questions. PRA-type participatory tools were used to elicit responses from the community to these questions, and these answers were accorded ordinal scores corresponding to descriptive categories (categories describing the situation on the ground). The ordinal scores to individual questions were aggregated by taking the arithmetic mean of scores, and the correlations between the five aggregate indicators was explored.

After a two week training in the use of the MPA, NEWAH's GAP teams field tested the MPA in two rural communities, Rayale and Bihabar in the Central region of Nepal, both of which have eight year old gravity flow systems.

## Initial results from the MPA

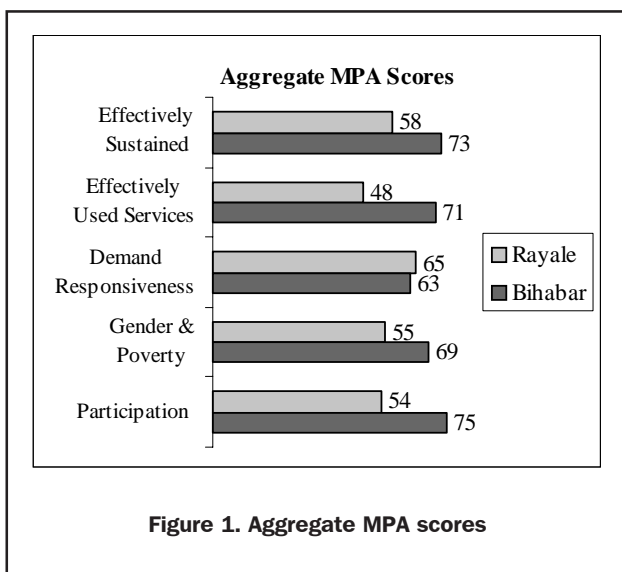
MPA indicators for *effectively sustained services* include system quality, effective functioning, effective financing and effective management, all of which are assessed by using participatory tools with better off, medium poor and poorest community men and women. In Rayale the assessment of better off, medium poor and poorest revealed that the system had technical problems and flaws in design from the very beginning. The diameter of GI pipe (galvanised iron pipe) was too small to allow sufficient flow for the water needs of the community. This led to illegal pipe connections by the richer/higher caste households residing at the head of the water system, which severely affected access to drinking water by the poorer/lower caste households at the tail end of the system. Since the poorest and medium poor groups did not have access to and control over services, there was conflict in the village, due to which all households stopped paying monthly user fees. Further, the bulk of the operation and maintenance (O&M) fund has been loaned among the richer/higher caste men, and financial records are not transparent. However, the interest from these loans pays for the caretaker, and minor repairs are carried out promptly.

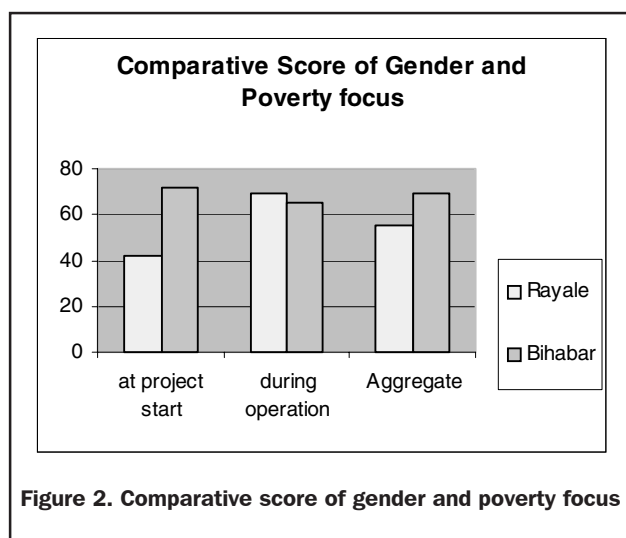
The higher score for effectively sustained services in Bihar reflects a situation in which almost all households have access to safe water throughout the year. Five poor households have less access due to the distance of the tapstand from the houses and hence these houses also have to use an alternative source. Technically there were no flaws in design at time of establishment, although eight years later repairs are now needed to the sedimentation tank. Regular user fees are collected and the Water User Committee is able to effectively arrange for minor repairs. Financial records are up to date and transparent and like Rayale, minor repairs to the system are carried out promptly.

*Effectively used services* is measured primarily by assessing the percentage of houses by socio-economic group who have proper access to water for drinking and cooking purposes throughout the year. In Rayale up to 50% better off and medium poor households have proper access, although the poorest households at the tail of the system do not have proper access and currently only have water for as little as one hour a day, which is not sufficient for their domestic needs. The richer households with illegal connections have a regular supply of water which allows them to feed cattle and water kitchen gardens, after satisfying their domestic water needs. In Bihar however, over 90% in all socio-economic groups have proper access to adequate water. In terms of access to safe excreta disposal up to 50% better off and medium poor households in Rayale use a latrine. In Bihar about 25% (mainly better off households) use a latrine which reflects the low weight given to sanitation by the funding NGO that had been newly established at the time of project implementation. Only simple but less sustainable 'pit with slab' latrines were constructed at the time and the community would now like to construct permanent latrines.

*Demand and demand responsiveness:* Rayale's aggregate score reflects high initial user demand but comparatively low project responsiveness to demand, particularly in terms of user voice and choice in planning by poor men and women. The assessment revealed that Rayale was dominated by male community leaders from the start in terms of decisions over financing and level of service delivery and composition of management committee. Key positions in the committee were and continue to be occupied by richer/higher caste men who also decided location of facilities. In contrast Bihar has a higher aggregate score for demand responsiveness, which reflects the fact that male and female community leaders were involved in decisions and that all in the community were involved in location of facilities. Of the four key positions in the committee in Bihar, one is a woman. Further, women from all socio-economic groups are vocal in community meetings, whereas in Rayale the poorest women remain silent in meetings.

*Gender and poverty sensitivity:* At the start of the project in Rayale only a few paid jobs were given which went to better off men. But in Bihar both men and women of all socio-economic groups had paid jobs. Also cost sharing/contributions between households for the construction was more in Bihar than Rayale. In both projects the improved water supply has led to a net reduction in working hours for women in all socio-economic groups, though women still work more hours than men. The committee in Bihar gave themselves low scores during project operation due to the fact that women, though on the committee, did not attend meetings regularly. Interestingly however, members of Rayale's management committee gave themselves high scores because their committee has women members (though not in executive positions) who attend meetings and can influence decisions. But subse-





quent revelations point otherwise. A woman committee member who was very vocal about the community's water problems was visited by the Chairman and told not to voice her opinions. The next day the woman was a passive participant. This perhaps illustrates the limits in reality to women's participation and influence in Rayale.

The comparative results are illustrated in the gender and poverty focus bar chart. MPA indicators for gender and poverty focus at the start of a project include the nature of community payments in the establishment of the service (degree of equity in the system of payment, by men and women, rich and poor) and the cost sharing/contributions sharing between and within households at the time of service establishment, by men and women, rich and poor. Indicators during project operation include division of skilled/unskilled and paid/unpaid labour between men and women, rich and poor in operation and maintenance and division of functions and decision-making between men and women, rich and poor.

*Participation:* The degree of equity in community management determines the level of participation in service establishment and operations. In both projects users themselves are responsible for maintenance, management and repair of their system, although they can call on an outside agency if needed. Participation with empowerment is assessed by looking at the degree of community monitoring and control in construction schedules, quality of works and community contributions by men and women. In Rayale there was no system of monitoring of household contributions, labour and material during service establishment. In Bihabar, while contributions were monitored, no action was taken on defaulters. In Rayale neither the committee or individual users had control over design and construction quality; it was all done by the outside agency.

In Bihabar some male community leaders had control. Community committee meetings in Rayale were held only once or occasionally but decision-making has not been effective. In Bihabar meetings are held regularly, decision-making is effective but could be better and only a few

members attend. Both committees have rules established but in Rayale these are not recognised or followed. In Bihabar only some rules are followed.

### Lessons learnt

Piloting of the MPA community assessment revealed that while the MPA was a useful methodology for assessing sustainability linked to demand, gender and poverty, staff found the process too time-consuming for them and for communities. Each assessment requires around 5-6 days in the community with representatives from the management committee and men and women from each socio-economic group. Staff felt the amount of time required of the community to participate in the MPA unfairly penalises the poor since they have to give up daily labour wages or working in their own fields in order to participate in assessment exercises. It was also difficult to facilitate participation by community members for such a long duration, due to the same reason. The assessments also created high expectations, especially in Rayale where there was conflict and a need for extensive rehabilitation of the water system and community management support. However, staff felt the results of the assessment reflected the situation in each project on the whole and can provide valuable information to plan corrective action through community analysis using the MPA. NEWAH staff who conducted the MPA have been extensively trained to be gender and poverty-sensitive, which is a definite requirement in conducting the MPA. Strong facilitation and analysis skills are also needed to ensure the MPA is conducted properly.

MPA database training followed the two community assessments. The purpose of the training was to guide NEWAH staff in how to enter data into the database and to analyse it using basic spreadsheet techniques. About 20 members of NEWAH's GAP staff from the 5 regional offices as well as from Headquarters participated in the training. During the training all participants felt that the MPA had to be simplified and streamlined for ease of application in the field, analysis of data, and interpretation of results.

### Follow Up

As a result of the MPA training and field testing, NEWAH is in the process of revising and condensing the MPA which will include tools to enable NEWAH to also assess specific GAP interventions, processes and impacts. The new assessment will be derived from the MPA, but will be a more rapid assessment of 2-3 days duration and more cost effective for both NEWAH's programme and more importantly for communities. It will also be Nepal specific and translated into Nepali. This revised assessment will be used in evaluating NEWAH's GAP pilot projects and non-GAP projects (control group) in 2002/3. This will inform future gender and poverty interventions as part of integration of NEWAH's GAP approach throughout NEWAH. NEWAH plans to use the assessment in all its projects in the future, for

monitoring and evaluation and for facilitating corrective action with communities and supporting rehabilitation where necessary in the longer term.

Should you be interested in obtaining more information, please do not hesitate to contact NEWAH at: tarnewah@mos.com.np or at NEWAH, POBox 4231, Kathmandu, Nepal.

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