NEWAH: developing a poverty focused, demand responsive approach

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THIS PAPER IS the result of collaboration between WEDC and Nepal Water for Health (NEWAH). Both organisations are involved in a DFID funded research project investigating the role of engineers in meeting demand for water supply and sanitation (Deverill & Smout, 2000).

The paper describes how NEWAH is developing a demand responsive, *poverty sensitive* approach to water supply and sanitation in three of the poorest regions in Nepal. It reflects the point of view that demand responsive approaches are being advocated without taking into account their impact on the poorest members of society.

Background

According to recently published data, there are today about 1 billion people without an adequate water supply, and about 2.4 billion who lack adequate sanitation (JMP, 2000). International development targets are now being reset, possibly more realistically than before. The target is now to halve the proportion of people unable to reach or afford safe drinking water by 2015, and by the same year, halve those without access to sanitation.

It is increasingly being acknowledged that the supply driven methods which have dominated service delivery since the early 1980s often make incorrect assumptions about what people need or can afford. A series of evaluations has revealed that a significant proportion of the facilities being provided are not used or not sustained (for example, see White, 1997).

Reflecting this fact, a new generation of demand responsive approaches is being developed which emphasise the need to respond to user demand. In this context, demand could be defined as "an expression of desire for a good or service, measured by the contribution people are willing and able to make to receive and sustain this service" (Deverill et al, 2001).

Expressed in this way, the concept of user demand can be employed as a practical tool to guide the design of projects. Demand can be met by providing a choice of appropriate options and allowing potential users to match their desire for an improved service with their willingness to support it. External assumption is replaced by user perception.

There are however a number of concerns about demand responsive approaches. These mostly concern their likely impact on the poor:

- It may be difficult or impossible for some groups and individuals to express their demands in the manner required;
- Potential users have to be informed of the costs and benefits of different options. In practice, communicating with the poor can be especially difficult to achieve;
- By focusing on willingness to contribute it is assumed that potential users are able to choose how they allocate resources. When day to day survival is at stake, this may not be the case; and
- Wherever there is competition for resources, those with less influence could be marginalised by those able to express demands. In particular, this applies to demands for higher levels of service.

These concerns could significantly reduce the potential impact of a demand responsive project. It must be borne in mind that the 1 billion without safe water and the 2.4 billion without sanitation tend to be the poorest members of society. If global targets are realised a *poverty sensitive* demand responsive approach is needed. This important issue is being researched by WEDC in collaboration with several implementing organisations, including the NGO Nepal Water for Health (NEWAH).

Nepal

Despite its relatively small habitable area, and in Asian terms, a relatively small population of 22 million, the water supply and situation in Nepal is, in some important respects, representative of the developing world as a whole (see Box 1).

NEWAH was established in 1992 originally as WaterAid's major local partner. Since then it has grown to become a major implementing organisation, now with five regional offices, managing about 50 water supply and sanitation projects a year. Like other major NGOs in Nepal, NEWAH works with project partners, mostly smaller local NGOs better placed to respond to local demands.

In terms of being demand responsive, NEWAH has adopted a half-way position. In the foothills of the Himalaya, gravity water supplies are designed with local representation. Tap committees have the responsibility of deciding where a standpipe is to be located. Communities agree to participate in a project and by doing so, agree to contribute towards the costs of providing it (through contributions of materials and labour). They also pay into a maintenance fund, based on the number of taps provided.

However, for the moment at least, private connections are not being offered. In part, this reflects water resource limitations. It also reflects the communities' attitude to how water resources should be shared. Potentially, trickle feed technology may provide an acceptable intermediate level of service (Tipping & Scott, 2001).

Box 1: Nepal in a nutshell: water supply and sanitation

Water supply coverage in rural areas was estimated to be about 50%. This figure masks significant regional variations, and more significantly, variation within regions. In terms of absolute numbers, the hilly areas in the Eastern, Mid West and Far West Regions are considered to be the poorest off.
The government department responsible is severely constrained by the need to sustain about 650 water projects in which users have been unwilling to undertake these responsibilities. A significant proportion of these concern major rehabilitations.
By comparison, sanitation lags far behind. It has been estimated that only 12-15% of the rural population regularly use sanitation.
Evaluations point to the fact that relatively few people understand the link between sanitation, hygiene and disease, a fact complicated by a number of social and cultural factors.

Source: Whiteside and Shrestha, 2000

In terms of sanitation, a number of options are offered.

Broadly, these could be classified as temporary (built of local materials) or permanent. In practice, temporary latrines are vulnerable to rain damage and are frequently abandoned. Most prefer a permanent structure. In both cases, NEWAH offers a small subsidy amounting to 10-15% of the cost of the latrine.

Improving NEWAH's approach

Like many other organisations, NEWAH has a policy of periodically evaluating its impact and refining its approach. The recent creation of a poverty and gender group has focused attention on how to improve the organisation's poverty focus, whilst retaining its demand responsive approach. NEWAH is also implementing five pilot projects to test and develop new methods of work.

In this respect, the following measures are being assessed.

- **Prioritizing where NEWAH works**
  Most rural development work in Nepal is concentrated in and around district head quarters and in accessible locations.
  NEWAH is now focusing its efforts in three regions: the Mid West, Far West and Eastern Districts. These are associated with the lowest development indices. Previously, local demands for improved services could not be responded to because no one was there to hear them. Not many NGOs are present there.

- **Establishing alternative delivery modes**
  To reach in the more remote locations, attention is switching to develop longer-term relations with the relatively capable organisations. These organisations , well versed in the local context are in best position to inform the community whereby they can express their demand. In some areas, alternative delivery modes are being considered by working more closely with local government structures. NEWAH is also investigating the need to open district offices to improve local communications.

- **Poverty ranking**
  In order to be poverty sensitive, it is necessary to identify who the poor actually are. This is being achieved by a participatory ranking exercise. A group of 10-13 persons is selected by the community to identify indicators of wealth according to local perceptions. The team includes representatives from each cluster of households as well as a teacher and political leader. Typically, the criteria include:
  - Land ownership;
  - Business ownership;
  - Employment;
  - Indebtedness and "*bandha*" or bonded labours;
  - Type of home; and
  - Food sufficiency (based on crop production).

  Each household is then ranked in one of six 'economic' groups, with Group VI being the least well off (for example, see Table 1).

Table 1. Example of poverty ranking

Group	Typical characteristics
V	Own home
	Own a small parcel of land
	Large family size
	Loan taken
	Some family members 'bandha'
VI	Own home
	No land
	Physically disabled

Often the lower caste households fill the lower groups, but not exclusively. The results of the ranking are then presented in a mass meeting, and debated until consensus is reached.

- **Equitable contributions**
  The results of the exercise are then used to determine, in overall terms, who contributes what. The impact is felt in three ways:
  - Maintenance contributions for a water supply are paid according to the ranking (Figure 1). Sanitation slabs are provided free of charge to those in Groups V & VI.
  - Those ranked in Groups IV and V are favoured when it comes to paid employment, for example, masons (trained to build tanks, break pressure tanks and tap stands) water caretakers (trained for pipe joint, operate and maintain a gravity water supply) and sanitation *mistries* or builders. In each respect, women are favoured.

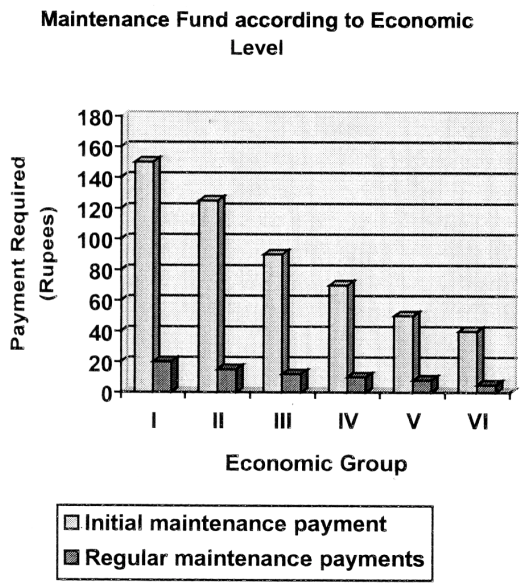

Figure 1. Maintenance contributions

Unlike other groups, vulnerable households are not expected to provide free, unskilled labour, but receive 50% of the standard labour rate. The input required for a typical water supply project is often substantial, frequently in excess of 50 person days per family. It must be remembered that those without land must work - and receive a wage - to survive.

- **Developing service options for sanitation**
  Different sanitation options can be developed to provide households with a meaningful choice of service levels. However, it is clear that almost all households aspire to have a permanent latrine. Anything less is perceived as *kutcha* - poor quality, and as such not worth maintaining. Options must be developed within that context, although the benefits must be balanced with the additional complexity and costs of managing such a system.
  In terms of the payment system for sanitation, it is possible to offer either an up front payment option, or people could make regular payments on instalment basis into the maintenance fund.

Potential problems

No approach is perfect, although the one described would seem to be highly effective and locally well supported. Inevitably, there are a number of drawbacks:

Field staff, both from NEWAH and its local partners, need to be better equipped in order to be poverty sensitive. Technical field staff are being trained to use the poverty ranking method described. They also need good facilitating skills and the ability not only to communicate, but in particular, to listen.

More time (typically 2-3 additional days) is needed on the ground to investigate the village context and conduct participatory ranking. This has cost implications.

There is little space for cross subsidy, economically, financially and even socially. Additional funding is required from NEWAH to subsidize the poorest households. For example, the labour subsidy referred to can add about 2.5% to the construction cost of a project.

Remote projects are intrinsically more costly, due to additional cost for transportation of non-local materials. For example, to carry 50kgs of cement to a location six days walk from a road head will cost three times the cost of the cement itself.

Conclusions

This paper identifies a number of important lessons.

Firstly, and most importantly, there is no such thing as a perfect approach. In this respect, it makes sense to conceptualise demand as a practical tool that can be used – in conjunction with others - to guide project design.

If NEWAH's aims are to be achieved, its limitations must be recognised and its use tempered with other tools that insure a sense of equity and social justice. Having said that, these can be complementary, not contradictory.

Secondly, to reach the poor, an organisation such as NEWAH has to be prepared to make fundamental changes, not only concerning how to work, but where to work. Approaches have to be researched, piloted and developed and organisations prepared to make these investments.

Finally, the limitations of the methods described must be recognised, and if possible, methods refined. However, it must also be recognised that approaches must be practical, not just in terms of the technical situation, the environment and local capacities, but also in terms of being compatible with Nepalese culture. Having said that, it is hoped that these points also strike a chord with others working in situations, cultures and continents.

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Further information on Designing Water Supply and Sanitation Projects to Meet Demand – The Engineer's Role, can be found at www.lboro.ac.uk/wedc/projects/d4d