Addressing WATSAN needs in watershed development projects

By John Butterworth, YV Malla Reddy and Charles Batchelor

The focus of watershed (catchment) development projects in India has been on improving agricultural production from poor and degraded lands. Water management has generally been limited to making better use of ‘green’ water (soil moisture for crops and trees) rather than ‘blue’ water (rivers, tanks or aquifers). Water and sanitation (WATSAN) is rarely given specific consideration – even where it is the main problem faced by rural communities and the key to improving livelihoods. This article considers how watershed (catchment) development projects might be modified to explicitly address WATSAN needs or challenges.

A major issue facing agencies who fund and implement watershed (catchment) development (WSD) programmes in the drought-prone areas of India is how to tackle the severe drinking water-supply problems in many villages. Since a lack of safe domestic water, especially during the summer season and droughts, is often the major concern of the rural poor and in particular women, WSD projects are being increasingly challenged to facilitate improved supplies. But should these problems not be left to the programmes and line departments responsible for rural water supply? Is it the place of WSD programmes to consider assisting?

While there are risks of overburdening already complex projects, the problems of providing a safe water supply cannot be ignored if projects aim to adopt ‘livelihoods’ approaches and to impact upon poverty. Safe water supplies are essential for improving health, freeing time for productive activities and providing water for micro-enterprises (IRC, 2001). And where water-supply problems are related to the reliability of local groundwater sources, a common problem is competition between farmers irrigating crops and domestic water users. Existing projects may sometimes even make matters worse by stimulating and increased in irrigation which results in more groundwater being consumed than is generated by natural recharge – inducing bunds and check dams (Butterworth et al., 2001). Therefore WSD should have a crucial role to play in both augmenting the sources, and helping users to manage these improved resources.

Promising approaches

But how might WSD projects help to address WATSAN needs? There are a few success stories, and promising approaches have emerged including:

- **Entry-point and ‘extra’ activities:** In a few cases, rural water supply has been an entry point activity (a small proportion of project funds spent on an initial activity to promote community involvement and participation with rapid results) through the installation of a new borehole or handpump. Elsewhere, training from extra funds has improved handpump maintenance. However, these remain isolated examples and do not address the problem of competition for scarce water resources. Non-Governmental Organizations (NGOs) are often able to be the most flexible in responding to communities’ needs, and are sometimes able to get additional funds to address WATSAN problems.

- **Convergence:** Projects like the Andhra Pradesh Rural Livelihoods Project (APRLP) are promoting convergence as a way to address important issues outside their immediate control, such as rural water supply. In some cases, the presence of external agencies and development of community organizations through WSD has improved the ability of communities to gain support from rural water-supply departments.

- **Moving towards water management:** It is increasingly recognized that WSD projects must develop towards water-
shed (catchment) management (Batchelor et al., 2000). In order to build upon the positive effects on rural water supply and to avoid or mitigate the negative effects, WSD projects need to tackle water resources management issues at the local level. Some isolated projects promote better management of water by restricting irrigated development. For example, rules have been imposed to prohibit the cultivation of certain water-demanding crops such as sugar cane and rice. Such rules need to be supported by communities and backed up by enforcement and sanctions.

WSD and rural water-supply programmes rarely work together in spite of their similarities in activities, participatory approach and community management. This results in missed opportunities. WSD projects could provide a starting point for successful local water management, which would address the competition between farmers and domestic consumers. This could include developing effective local institutions and resource-management rules. In some WSD projects such as the Karnataka Watershed Development Project (discussed in this issue of Waterlines) resource management issues and opportunities at a macro-watershed scale have been addressed. Project leaders have also tried to build decisions upon detailed water-resources audits and offer some solutions in this direction towards better management (Batchelor et al., 2000b).

Of course there are enormous challenges in promoting the effective integration or coordination of rural water supply within WSD projects. Foremost, are the institutional constraints arising from the existing separation of rural water supply, watershed (catchment) development, groundwater and irrigation within government structures. There is a need to move beyond supply augmentation measures to address demand management and water-allocation issues. Such matters are challenging and controversial. Win-win solutions are unlikely to be found in most cases and improving rural water supplies will mean a reduction in irrigation water use by some farmers. On paper it is often government policy to give priority to domestic water needs, and WSD projects can potentially play an important role in making this happen.

The authors believe that where access to water is one of the crucial factors in the livelihoods of poor people which affects their health and productive activities, WSD projects cannot be expected to tackle poverty significantly without contributing to improvements in rural water supply.

Acknowledgements
This paper draws upon research by the Water, Households and Rural Livelihoods (WHiRL) project supported by the UK Department for International Development (DFID). See http://www.nri.org/WSS-IWRM/ for more details.

References
IRC, (2001), Transforming water into money: An assessment of gender specific impacts from improved water supply in Banaskantha District, Gujarat, India. IRC, Delft.