Scaling up findings from the WHiRL project

Do you recognise these problems in rural India?

- **Deteriorating groundwater supplies due to unchecked abstraction for irrigation**
- **Increasing costs of bringing domestic water by tankers to problem villages**
- **Increasing conflicts in villages when women go to agricultural bore wells to collect domestic water when normal water supplies are not available**
- **Rising cost of drilling new water sources given their increasing scarcity**
- **Relative neglect of traditional water bodies like community tanks in rural areas**
- **Increasing number of check dams, which may significantly reduce inflows to community tanks**
- **Increasing impact of agricultural bore wells drilled close to existing domestic water supplies**

This note considers the lessons and challenges in scaling up findings from the Water, Households and Rural Livelihoods (WHiRL) research project which has focused on these issues in Anantapur District of Andhra Pradesh working with the NGO Accion Fraterna.

How does the WHiRL project findings help to address these problems?

Findings show that it is possible and necessary to use and manage local water resources: Through pilot village projects in Andhra Pradesh, the WHiRL project has implemented several water augmentation and management options identified in the Andhra Pradesh Rural Livelihoods Programme Water Resources Audit (Rama Mohan Rao *et al*., 2003). These demonstrate that, even when large piped water supply projects are being planned, funded and implemented by government and other agencies, it is vital – and possible - for communities to start managing local water supplies.

Findings demonstrate how projects can address process issues successfully: The WHIRL project experience has several lessons for future implementation of rural water supply projects, including the following:

- *Community involvement and ownership*: Once ownership is developed and the villagers take control of the process, project benefits will be sustained. A crucial part of handing over control of the project process is to let the community decide the rate of project progress from the selection of options to implementation to monitoring and evaluation.
- *Continuous awareness raising:* A critical step towards developing community ownership is repeated awareness generation, using a variety of media, including informal discussions, street meetings, panchayat and community-level meetings, and discussions with Self-Help Groups.
- *Flexibility in project processes:* Initial community-level decisions are often changed over a period of time as better solutions emerge, as possible negative tradeoffs are recognised and people (and NGO staff) become more aware of potential options. Projects need to accommodate such change.
- *Support and facilitation:* Sensitive facilitation is necessary throughout this process, and support is required even after the implementation is carried out.

WHiRL has developed tools and methodologies for integrated water resource management: The Water Resources Audit (WRA), the Stock, Infrastructure, Demand and Entitlement (SIDE) framework, a simple EXCEL-based runoff model, the Quantitative Participatory Assessment (QPA) and district and village-level planning frameworks are tools used or developed in the WHIRL pilot projects, for local-level water resources planning and management.

Scaling up what?

In this particular case, however, scaling up is defined as incorporating WHiRL lessons, tools and methodologies in activities concerning water resource planning and management by:

- *NGOs* in Anantapur district and elsewhere in AP
- *District administrations* in Anantapur district (especially the District Water Management Agency) and other districts in AP
- *DFID India*, in existing and proposed projects in its 4 focus states of AP, MP, Orissa and West Bengal
- *Other donor agencies* working in India
- *Government of India*, especially the Ministries of Rural Development (Departments of Drinking Water Supply & Land Resources), Water Resources and Environment and Forests.

What changes are to be scaled up?

WHIRL project lessons have implications for both watershed development and water supply projects.

Watershed Development Projects: Those responsible for planning and implementing watershed development projects can do much more to explicitly address sustainability of domestic and productive water sources. A few suggestions in this direction are to:

- *Integrate water supply and watershed development programmes:* Do a Swajaldhara project in every Hariyali watershed village, as mentioned in the Hariyali Guidelines
- *Make micro planning flexible:* Repeat the PRA exercise done at the beginning of micro planning; give people the time to alter micro plans.
- *Explicitly address water conservation*: Make conservation measures like roof water harvesting and channelling of wastewater, and kitchen gardens a part of watershed development micro plans
- *Protect drinking water sources:* Make domestic water supply source protection a mandatory part of watershed development.

Water Supply Projects: Staff in charge of planning and implementing rural water supply projects can also do much more to assist the community with local water conservation, including the following:

- *Integrate watershed development and water supply programmes:* Change Swajaldhara guidelines as per Hariyali guidelines, so that domestic water supply is addressed in every watershed village
- *Carry out participatory village-level water resource planning:* Do a PRA exercise to assess water problems in the village; Offer villagers a list of water conservation options; Make a participatory water conservation plan, with villagers' suggestions, giving people time to alter their plans; Include participatory water supply source protection in watershed activities
- *Improve government participation in water resource management:* Turn VWSCs into Joint Water Management (JWM) committees, as in Joint Forest Management, with a government representative on village water and sanitation committees.

Supporting scaling up

In addition to specific changes in central government schemes for watershed development and water supply, several measures are required at the district and state government levels to support scaling up.

District administration can play a positive, facilitative role in water management by providing overall guidance and restrictions on sub-optimal water use. In general, change is needed towards:

- *Developing strong and informed people's institutions* at the village level
- *Providing institutional space* in line department annual action plans for people's preferences
- *Coordinating planning and implementation activities* across line departments, according to a water resources planning framework, by district administration.

State Governments can support improvement of local water resource use and management by:

- *Planning for integrated water resource use and management* with Departments of Rural Water Supply, Rural Development and Panchayati Raj
- *Planning beyond domestic water supply*, to small-scale productive water use at village level
- *Restricting sub-optimal water use* through the enforcement of pioneering legislation like the AP Water Land and Trees Act
- *Supporting coordinated implementation* of Swajaldhara and Hariyali at district level
- *Providing budgetary and staff support* for district-level capacity for integrated water resource planning and use
- *Ensuring institutional space* for people's perceptions in local water resource management.

Donor agencies can assist national, state and district governments by supporting the:

- *Thorough identification of changes needed* in rural water supply and watershed development programmes being funded and implemented by state and central governments
- *Generation of awareness on water-related issues* within district, state and central government
- *Piloting of the water resources planning methodology* at the village and district level
- *Provision of decision-support and monitoring software and manuals* for district, state and national levels
- *Building of capacity to use these tools and methodologies* at district, state and national levels

Resistance to change

Change invariably encounters resistance, and more so when change is forced on people. Nevertheless, people may be more positive, and indeed supportive, towards change when they perceive its benefits and advantages, both personal and general. Introducing changes in national watershed and water supply guidelines, as well as in the manner in which state and district administrations plan and use water resources, can be expected to encounter resistance; more so in the case of field staff who have become set in their ways of working.

Generating awareness of the rationale behind the changes suggested and discussing the advantages of change is therefore vitally important to the outcome of the process of change. Equally, however, genuine problems and constraints in implementing these changes have to be considered seriously and dealt with as best as possible, at every appropriate level. Pilot projects, like WHiRL, can play a vital role in identifying workable solutions and showing the way for larger government policy initiatives.

References

Rama Mohan Rao, M.S., C.H. Batchelor, A.J. James, R. Nagaraja, J. Seeley and J.A. Butterworth (eds.) 2003. *Andhra Pradesh Rural Livelihoods Programme Water Resources Audit: Phase I Report*. APRLP, Hyderabad.

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Research outputs

The WHiRL team produces papers, guidelines, and training and advocacy materials to improve integration of rural water supply issues within programmes incorporating IWRM principles. All our outputs are available through the WHiRL website: http://www.nri.org/whirl