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Community Management Today

The Role of Communities in the Management of Improved Water Supply Systems

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IRC INTERNATIONAL WATER AND SANITATION CENTRE

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The centre facilitate the availability and use of appropriate knowledge and information in the water, sanitation and related environment sector in developing countries.

Activities include capacity development for information management, exchange of available knowledge and information, and development and transfer of new knowledge on priority issues. All activities take place in partnership with organizations in developing countries, United Nations organizations, bilateral donors, development banks, and non-governmental organizations.

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The Role of Communities in the Management of Improved Water Supply Systems

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FOREWORD

Community management of water supply and sanitation systems is increasingly seen as a fundamental part of national programmes for sustainable development. Various international fora on water have called attention to this topic. "Community management of services, backed by measures to strengthen local institutions in implementing and sustaining water and sanitation programmes", was one of the guiding principles adopted in the New Delhi Consultation in 1990.

Other guiding principles adopted in New Delhi, following review of experience in the sector during the 1980s, also have bearing on community management. On institutional reforms, the New Delhi Statement promotes an integrated approach, including changes in procedures, attitudes and behaviour and the full participation of women at all levels in sector institutions. It urges too the adoption of sound financial practices, where community management can also play an important role.

The emphasis on community management was strengthened in the *Nordic Fresh Water Initiative*, which called for water management responsibility to be at the lowest possible level. The subject was further stressed in the *Dublin Statement on Water and Sustainable Development*. The 500 participants in that meeting agreed that water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels. They underlined that women play a central part in the provision, management and safeguarding of water, and suggested that in principle water should be recognized as an economic good.

All these guiding principles were integrated in *Agenda 21*, which was endorsed by world leaders at the UNCED "Earth Summit" in Rio de Janeiro in June 1992. All this makes community management an important asset for the water sector and this topic is likely to be given a high priority in sector development in the 1990s.

To consolidate desk research and field studies and to provide guidance on this subject, IRC in collaboration with UNDP, UNICEF, WHO and the UNDP/World Bank Water and Sanitation Program organized an international workshop in November 1992: *The Role of Communities in the Management of Improved Water Supply Systems*. In the workshop, up-to-date practical experience of community management from Cameroon, Guatemala, Honduras, Indonesia, Pakistan, Ugandan and Yemen was presented. This document brings together this experience and the results of the desk research; it also highlights the key issues involved.

Community management is needed for reliability, sustainability and replicability of water supply and sanitation projects, as is explained in the first chapter. The second chapter describes community management from the perspective of the partners involved, while the third presents some guidelines on putting community management into practice. Chapter four touches on key issues and actions which governments should take into account to create an enabling environment for community management. Issues treated are: political will, strategic planning, policy and legislation, decentralization, training and education, public education and social marketing, and monitoring and evaluation. The final chapter identifies a number of knowledge gaps which require further studies to harden the guidance on the most effective ways of implementing successful community management. Throughout the booklet experiences from field cases are presented in boxes to illustrate relevant points.

Disclaimer: The information contained in this document is the view of the authors and in no way reflects policies of the organizations who have supported the project.

Highlights from the Workshop findings

❏ Community Management of improved water supplies is new and different

Community management builds on long experience of community participation, but goes much further. It puts people in charge of their own water systems in a flexible partnership with supporting agencies. It means fresh challenges and fresh opportunities for both communities and agencies, and a new relationship between them.

❏ Community Management is an approach, not a formula

There is no fixed formula for community management. It is an approach seeking to make the best use of resources available within the community with support from government agencies, NGOs, the private sector, and other communities. Relationships among the partners may change and evolve as communities become better able to manage their own affairs. Some key characteristics are common to all forms of community management, but no single model can adequately encompass all the possible variations.

❏ Many communities are both willing and able to take on management roles

Under the right conditions, community management works very well. Workshop case studies from Asia, Africa and Latin America demonstrate the flexibility and widespread application of community management in regions with varying cultural and socio-economic conditions. In all cases, communities make substantial contributions towards the provision and upkeep of improved water supplies.

❏ Community Management can mean more people served

Community management means that communities take on more tasks and responsibilities, relieving agencies of routine management and maintenance duties. This releases agency resources which can then be used to reach more communities. For agency staff, the work is both more challenging and more satisfying. For communities, greater control means that services can be developed which more fully meet local needs.

❏ Benefits can extend beyond water

Successful community management builds community confidence and can stimulate wider development efforts. The workshop case studies provide evidence of community initiatives to follow up improved water projects with construction of latrines and changes in hygiene behaviour. There are also examples of income-generating activities inspired by initial success with community-managed water supplies.

❏ Government must play its part

Community management is most successful when there is strong government support. To look after their own water systems, communities need to operate in a legal and administrative framework which encourages rather than inhibits their operations. Government commitment needs to be backed by policy and legislation, and by a reallocation of resources to favour the community management approach.

❏ There is still much to learn

Community management of water supplies has a compelling logic. The workshop case studies show that under the right conditions it does work. While optimism is justified by the experience shared at the workshop, more still needs to be learned about the willingness and capacity of communities to take responsibility for their own water supplies, and about the capacity of support agencies to undertake new facilitating roles.

SUMMARY OF PRINCIPAL FINDINGS

In November, 1992, an international workshop was held at The Hague, The Netherlands, with the theme "The Role of Communities in the Management of Improved Water Supply Systems". Held at the IRC International Water and Sanitation Centre, the workshop received financial and other support from the United Nations Children's Fund (UNICEF)*, the United Nations Development Programme (UNDP)/World Bank Water and Sanitation Program, the World Health Organization (WHO), and the Directorate-General for International Cooperation (DGIS) of The Netherlands.

The aim was to consolidate experiences of community management approaches in different parts of the world, and provide guidance for agencies and governments considering its application in their own water supply programmes. The workshop brought together up-to-date experience of community management from seven developing countries: Cameroon, Guatemala, Honduras, Indonesia, Pakistan, Uganda and Yemen. Participants from these countries presented case studies of their own experience, and these were set alongside a broad background paper prepared by IRC and a review of experience from 122 completed water supply projects prepared by the UNDP/World Bank Water and Sanitation Program.

The workshop took place over a seven day period, from 4 to 10 November. The 17 participants are listed in Annex 2. This report presents a synthesis of the workshop findings based on the workshop documents, working group findings, and plenary discussions. The workshop proved to be a rewarding experience and created much optimism among participants for the prospects of community management as a major approach to sustainable water supply development in the years to come. While recognizing that much still remains to be done in understanding more about the prospects and limitations of management by communities of improved water supply systems, the workshop identified a number of important lessons which can be learned from current experience.

Principal Findings

1. **Community Management goes beyond community participation, and equips communities to take charge of their own water supply improvements.**

Some critical features distinguish community management from community participation and are at the heart of successful community managed water systems:

❏   The community has legitimate authority and effective control over management of the water supply system and over the use of the water.

❏   The community commits people and raises money towards the construction and upkeep of the water system. The link between the scale of community contribution and the resulting sense of ownership is not yet well understood, but the need for a significant contribution is well established.

❏   Supporting agencies provide advice and technical support, but all key decisions are taken with the community. This means that real choices must be offered, backed by a full appraisal of all the resources needed for each.

❏   Development of people is a parallel goal with development of water. Community management is 'people-centred'. Its success depends on the user community and support agency staff acquiring new skills and confidence in applying them. Special capacity-building techniques are required.

A list of acronyms and abbreviations is included as Annex 1

❏ Local organizations for water management are in tune with existing community decision making structures and ensure that the views of all sections of the community are reflected in management decisions. Strong community leadership, or the continuous involvement of a charismatic individual, has been shown to be a major factor in the success of many community-managed water supplies. Women are known to be highly influential in community-managed water supplies, though the influence is not always apparent in organizational structures.

2. Community Management involves a long-term and changing partnership between communities and supporting agencies. It strengthens the capacity of each partner and enables their combined resources to be used more effectively.

A community's partners in the management of its water supply system may include government agencies, NGOs, the private sector, and, crucially, other communities. Relationships change as the community develops greater capacity to manage its own affairs, and to choose for itself where to acquire the support services it needs to keep its water system functioning reliably. Inter-community collaboration can add a new dimension, in terms of both resource sharing and replicability.

The case studies include a wide variety of community management applications, matched to particular cultural and socio-economic settings. In Guatemala, Pakistan and Indonesia, support from national and international NGOs enables communities to implement and sustain cost-effective water projects, and in some cases to replicate those projects through evolving community networks. In Yemen, Honduras, Uganda and Cameroon, government agencies successfully transfer control of water projects to communities, while enhancing their own performance and status.

3. Community management can mean more widespread implementation of sustainable water supply systems.

In the past, community management has often been seen as an approach which requires repeated time-consuming activities in one community at a time. The case studies provide important new evidence that successful community management encourages communities to help one another and in that way to achieve more rapid replication. Experiences in Guatemala, Indonesia and Pakistan illustrate the scope for community-led replication of successful approaches, with pooled resources providing dependable technical support. Community organizations can combine to form associations to share knowledge and experience, and build local capacities to manage.

4. Community management means a new role for support agencies as facilitators rather than providers, demanding new skills and offering greater opportunities.

There is a powerful logic to community management of water supplies. The resource is local, its use is local and its effects are local. Nevertheless, it has to be recognized that there are genuine fears among agency staff (and at higher levels of government) that empowerment of communities to manage their own systems may diminish the role of and respect for water agency staff, or conflict with national government priorities. In Cameroon, Yemen, Uganda and Honduras, such fears have proved unjustified. Support for community managed water supplies has brought more effectiveness and greater job satisfaction in the implementing agencies, while the community water management organizations have remained non-political.

Community management does not mean less work for agencies. It means a greater emphasis on the development of supporting and enabling skills and less on routine management and maintenance. This frees institutional, human and financial resources, to enable agencies to reach more communities. Government has a vital continuing role in establishing the policy and legislative framework to enable community management to work. It also retains the duty to protect water resources and the environment, and to maintain public health standards.

5. **Benefits of community management can extend beyond water into other development activities.**

The skills and knowledge acquired in building a community's capacity to manage its water system can become a stimulus for further community-led development. In Indonesia and Honduras, access to a convenient water supply plus awareness gained in project self-surveys led to the self-help construction of sanitary latrines and changes in hygiene behaviour. In Guatemala, successful water development was followed by income generation from coffee production which provided further support for the upkeep and extension of the water system. In Pakistan, there are examples of water development following from other community activities based on income generation, when the village organizing committee acquired the skills and the resources to implement programmes based on its own priorities.

6. **The scope for community management extends beyond rural water supplies**

Most current models for community management are based on rural experience. However, successful community management is also being achieved in peri-urban areas, with Honduras being a good example. Further study is needed to establish the criteria which make community management effective in peri-urban situations.

7. **Conventional progress indicators need to be adjusted to monitor and evaluate community management**

Mobilizing and equipping communities for water system management takes time. Indications are that this initial investment is paid back in greater cost effectiveness. Further work is needed to provide conclusive demonstration of the economic benefits in the long term. Conventional indicators are not an appropriate way to monitor progress in community management, in which capacity building is a major component. Alternative progress indicators are being developed and need to be tested, along with innovative participatory evaluation techniques.

WHY COMMUNITY MANAGEMENT?

At the Earth Summit[1] in Rio de Janeiro in June 1992, world leaders committed themselves to a comprehensive programme to provide sustainable water supply and sanitation services to the hundreds of millions of the world's population who currently lack them. At the summit all States and support agencies were urged to implement activities aiming for universal coverage outlined in **Agenda 21**, a strategy for sustainable development in the 21st Century.

A guiding principle in the achievement of Agenda 21 is: "Community management of services, backed by measures to strengthen local institutions in implementing and sustaining water and sanitation programmes." The activity list includes numerous measures to bring about effective community management (see panel).

Why is community management of water supply and sanitation systems seen as a fundamental part of national programmes for sustainable development in the future? What basis is there for assuming that community management will be any more successful in achieving widespread and sustainable coverage than the top-down approach with central agency control that has proved so difficult to sustain in the past?

Experience in many developing countries during and since the International Drinking Water Supply and Sanitation Decade (1981-1990) shows that even the best run water agencies cannot successfully implement, operate and maintain a network of widely dispersed water systems without the full involvement and commitment of the users. Despite the best endeavours of central agencies, staff, transport and budgets become overstretched, leading to broken down systems, dissatisfied consumers and demoralised agency personnel.

Agenda 21 activities linked to Community Management

- Encouragement of water development and management based on a participatory approach, involving users, planners and policy makers at all levels;

- Application of the principle that decisions are to be taken at the lowest appropriate level, with public consultation and involvement of users in the planning and implementation of water projects;

- Support and assistance to communities in managing their own systems on a sustainable basis;

- Encouragement of the local population, especially women, youth, indigenous people and local communities in water management;

- Linkages between national plans and community management of local waters;

- Integration of community management within the context of overall planning.

At the same time, evidence is accumulating that properly supported communities have both the ability and the willingness to manage their own water systems. Agency resources currently swallowed up in the provision and maintenance of inefficient services can thereby be diverted to a much more effective facilitating role, bringing greater cost-effectiveness and more widespread and sustainable benefits. Less demand for reconstruction or rehabilitation of broken down systems means more satisfying and more productive work on new schemes.

The seven case studies reviewed at the workshop, from Cameroon, Guatemala, Honduras, Indonesia, Pakistan, Uganda and Yemen, served to reinforce and extend the arguments for making community management a prime component of future water supply and sanitation strategies. Though each case had its unique characteristics, and its own strengths and weaknesses, the collective experience tabled at the

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1 The United Nations Conference on Environment and Development (UNCED), Rio de Janeiro, Brazil, June 1992

workshop added new strength to the case for community management. This was reinforced by supporting documents providing a broad review of developing country experience contained in the current literature, and an analysis of 122 completed water projects from around the world.

The major reasons why a community-management approach has been adopted on these and other projects can be grouped under three headings:

1. Reliability, Sustainability and Replicability;

2. Stimulus to Community Development; and

3. It works!

1. Reliability, Sustainability and Replicability

The pace of water supply development speeded up enormously during the 1980s, but was still not fast enough to bring coverage up to acceptable levels or match the rising needs of growing populations. Expanded efforts during the decade further underlined the limitations of centralized management, as more and more systems fell into disrepair and disuse. The day-to-day costs of running existing programmes are already too much for most water agencies. Sustainable development strategies for the future could not therefore be based on continuation of conventional approaches.

Community participation, a component of development strategies for many years, has demonstrated that communities have the resources and capabilities to fulfil many of the roles asked of them. But *participation* has often meant little more than the provision of local labour and materials, with limited community involvement in decision making, and with agencies retaining responsibility for and control over installed systems. The transformation to community *management* revealed a much greater range of alternatives to top-down water system control.

Community Associations prompt faster replication of "People's Water"

From its small beginnings 20 years ago, the national NGO *Agua del Pueblo* has become a thriving model of how application of community management principles can lead to, in turn, successful projects, increased community self-sufficiency, widespread replication, and a growing self esteem and job satisfaction for the agency staff.

Since being officially ratified by the Guatemalan Government in 1981, Agua del Pueblo has supported the development of some 125 water systems, benefiting more than 90,000 people in 150 rural communities. Seventy of those communities act cooperatively in 5 community associations. With shared technical support and pooled resources, the associations themselves are able to initiate new projects and build the capacity of communities to manage them.

Agua del Pueblo operates a cadre of 'rural aqueduct technicians' who provide on-the-spot support when needed. In addition, the agency employs social workers, economists and agronomists who are available to any community needing such support, and who are regularly involved in community mobilization and support.

If developing countries are to stand a chance of matching provision of water supply and sanitation services with the pace of demand, future strategies have to ensure that success is replicable and progress can be accelerated. An important characteristic of community management is that it takes maximum advantage of the resources available within the community and complements them with the necessary resources from outside (public or private). Government agencies are thereby spared from many activities and costs which in the past have proved difficult to sustain. Professional and technical resources can then be put to more effective use in replicating projects and expanding service coverage.

In addition to indicating how community management can assist agencies to accelerate output, a number of the workshop case studies also show how communities themselves can support the replication of community-managed water supplies. Inter-community collaboration, with pooled resources providing economic and dependable technical support, is proving to be an effective way of both sustaining existing services and extending into new communities (see panel).

2. Stimulus to Community Development

Access to water is a vital community need, which can only be met at the local level. This makes water a valuable entry point for stimulating a community's capability to organize and manage its own development priorities. The workshop case studies demonstrate that the value of community management in building of community confidence and organizational capacity is not just theoretical. In several cases, successful implementation of a community managed water system has been quickly followed by other community-driven development. Especially important in achieving optimum benefits from the improved water supply is the motivation to initiate improvements to sanitation and hygiene behaviour. In Indonesia, for example, sensitization of communities to hygiene issues was brought about through regular self-surveys conducted in partnership with the supporting agency. The result has been consistent follow-up activities in which communities undertake their own programmes to build latrines and encourage behavioural changes (see panel).

In Guatemala, as well as prompting health care improvements, successful community management of new water systems has led communities into income-generating projects. The extra revenue from activities such as coffee production further strengthens the communities' resource bases, to the benefit of water, sanitation, health, and other development activities.

For governments too, the strengthening of a community's decision making and organizational capability can be a significant benefit. Newly empowered communities are better equipped to determine their own priorities and to communicate these to appropriate government and other support agencies. Regionally and nationally, the feedback from community-centred development planning simplifies and gives added credibility to the formulation of development strategies. For external support agencies, this provides an internal validation process and a safeguard against potentially misguided programme support.

> **Puppet shows promote the sanitation cause in Indonesian villages**
>
> Hygiene and sanitation education is a key component of the *Community Self Financing of Water and Sanitation Systems* (CSFW) programme in Indonesia. CARE trains community volunteers as health messengers, with emphasis placed on six basic messages:
>
> * keep the home and surrounding area clean;
> * keep the public bathing areas clean;
> * bathe regularly;
> * wash hands regularly;
> * store water in a clean container; and
> * build and use latrines
>
> In some villages, health messages have been communicated using traditional Javanese hand puppets. This approach has been remarkably effective: villages using the puppet shows report that more than 80% of households have subsequently built and regularly use improved latrines.

3. It Works

Community management of basic water supplies has a compelling logic. Community management makes use of local resources to meet local needs. At the end of the day, only the community can reasonably decide its own needs, and only the community can judge whether the system is meeting those needs adequately. It follows that community management should be the best way of assuring that water supplies are allocated and paid for in the most equitable way, and effectively operated and maintained.

Perhaps, when decision makers ask the question "Why Community Management?" the most obvious answer is "Why anything else?". There is much evidence that, when properly organized and supported, community management can and does work.

UNDERSTANDING COMMUNITY MANAGEMENT

Community management of water supplies is a simple and attractive concept. Communities and external agencies work in partnership, so that the resources each can provide are used in the most effective way to develop dependable and sustainable water supply systems. Local resources are under local control, while central agencies focus on those activities which benefit most from broader collective efforts.

Unlike its forerunner – community participation – community management firmly places control over the development and upkeep of the water system with the community itself. Before that can be achieved, the community has to be equipped and empowered to take on its changed role. At the same time, the roles of the water agency and central government, and those of non-governmental and private sector organizations, need to be adapted so that they can provide timely and cost-effective supporting skills and resources as needed.

All this means that community management is very much a people-centred approach to development. While the end goal is successful and sustainable water systems, essential parallel objectives are to strengthen the capabilities of communities to determine and promote their own priorities, and to equip outside agencies to facilitate and support an expanding programme of community-driven activities.

It takes time to build the required decision-making and management capacity, and there may be a need for awareness raising and motivation to enable communities to evaluate for themselves whether they wish to take on new responsibilities. These factors mean that community managed projects may take longer to build up than conventional agency-led projects. They also need to be evaluated differently, using performance indicators which account for capacity-building and other qualitative aspects of community management and their effects on project sustainability. The more usual measurements of total investments made and number of pumps, pipes and taps installed are inadequate for this task, as they do not give sufficient recognition to the broader support work undertaken to enable communities to manage systems.

Long road to success

A successful community management approach can take many years to evolve. In Cameroon, attempts to improve the village water supply in Mutengene went on for more than 10 years (1967-77) before an adequate scheme and form of local organization was established. Since then a community committee has successfully maintained the system, with users paying the full costs of operation and maintenance.

Variations on the theme

The seven workshop case studies presented a wide range of approaches and partnership arrangements which can be described as partial or full community management of water supply systems. In the cases from Guatemala, Indonesia, and Pakistan, for example, the communities' principle partners are non-governmental organizations (NGOs), while in the cases from Yemen, Honduras and Uganda it is government agencies which provide the stimulus and support for community management. In the Cameroon case, an international NGO provided support for an evolving partnership between the government agency and a community with a wide range of ethnic variations. The objectives and the results of the projects described in the case studies vary significantly, and each agency recognizes shortcomings and limitations in the approaches used.

From the collective experience of the workshop participants, supplemented by earlier analyses documented in the UNDP/World Bank and WASH publication *Community Management of Rural Water Supply and Sanitation Services* (McCommon, Warner & Yohalem, 1990) and other recent publications, conclusions can be drawn about the common ingredients of successful community management projects. Not all the conclusions are easy to explain – an indication that community management is still an evolving process. They have however enabled the workshop participants to postulate some guiding principles for successful community management, and the implications of those principles on future agency approaches.

Partners in Community Management

Community management puts water users in charge of their own water system. It does not mean that the users do everything themselves. The most effective community management is an evolving partnership, in which a community-centred organization – typically a water committee – draws on resources from within the community, from other communities, and from a variety of other outside agencies. Potential partners include:

The Community

The most important partner is the community itself. Defined as the group of people using the same water supply system, the community invariably consists of many different parts. Divisions may be ethnic, socio-economic, religious, or gender-based. Communities at different stages of development differ significantly in their desire and capacity to manage improved water supplies. The case studies confirm, however, that if the need is great enough even the poorest communities are willing and able to contribute substantial resources towards the provision and upkeep of water supply improvements.

Other Communities

A new and exciting aspect emerging from the workshop case studies is the evidence of community-driven replication and sharing of successful community management approaches. Not only can success in one community stimulate neighbouring communities to follow suit, but the sharing of knowledge and pooling of resources can bring faster and more cost-effective implementation and play a vital role in long-term sustainability. The potential for inter-community networking is seen as a powerful advantage of community management over centrally managed water programmes. Further work is needed to assess the best ways of promoting and facilitating inter-community partnerships.

The Water Agency

The most common partner for the community will be the government water agency. Accustomed to a patron/ client relationship, and staffed accordingly, the water agency has to undergo significant attitudinal and organizational changes to make community management work. The changes affect all aspects from staffing and training to planning, implementation and financing. These should be taken as an opportunity for achieving greater success and a higher respect from both communities and government, rather than, as is sometimes the case, being regarded as a threat to job security and a diminution of power. Agencies need a balance of technical staff and experienced community workers, and must see their role as raising community awareness, providing backstopping support, and responding to community needs.

NGOs

Non-governmental organizations (NGOs) often have a strong capacity for facilitating community-centred development, and make natural partners in community management activities. As long as conflicting interests do not create an adversarial relationship, they can help to increase the outreach capacity of governments and donors.

In the majority of the workshop case studies (Guatemala, Indonesia, Pakistan, Cameroon), an NGO is the principal partner of the community (in Cameroon alongside the Government's Community Development Department). In both Guatemala (Agua del Pueblo) and Pakistan (Aga Khan Rural Support Programme), the NGO operates in direct partnership with communities, without a water agency partner. The Agua del Pueblo case is special, in that AdP has itself become the umbrella agency providing backup support and resource management for the network of regional community water associations. In Indonesia, CARE works with the government in each stage of its project dialogue with communities, but provides the initial technical support from its own resources.

Whatever the partnership arrangement may be, partner NGOs need official government backing for their activities.

The Private Sector

Local management of water systems can be a powerful stimulus for private enterprise. Communities may hire contractors to help construct the water system; hiring local mechanics can be a cost-effective way of ensuring timely maintenance, particularly where their services are shared among several communities; materials suppliers can sometimes be a useful source of credit for community water supply improvements; and there are examples of commercial establishments and the mass media raising funds for community-based water and sanitation initiatives.

The Government

Though its role is less direct than that of the water agency, government has a vital part to play in the promotion and implementation of community management, through its control over policy and national resources. Agenda 21 is a global commitment which depends on the support of individual governments, including official support for community management. Its promise of more effective use of resources and enhanced sustainability and replicability is attractive both for internal strategic planning and for potential donor support, and in many cases may make it the only viable alternative.

The important role for governments is a facilitating one. In creating an "enabling environment" of supporting policies and legislation, government must retain the vital role of protecting public health and ensuring compliance with national norms and standards. At the same time, national training courses and education curricula may need to be modified, and new courses developed, to provide the right skills base to support community management. Governments will also need to integrate community management of rural and peri-urban water supplies into overall water resources management strategies. Most important of all, communities must be given the legitimate authority and encouragement to take care of their own water systems.

The right to manage

When it began the UNICEF supported Tegucigalpa project in the urban fringe of the capital of Honduras was operating in a very grey area of the national law and early risks were taken in seeing how far community ownership and management rights could be pushed. In time, clearer legal agreements have evolved between the national water authority (SANAA) and its agency for marginal urban areas (UEBM), UNICEF, and the communities themselves, and a sound legal framework for community management has gradually been developed. This has considerably strengthened confidence, within both UEBM and the communities. The only major constraint remaining is that UEBM can only serve communities with legal titles to land, and thus is as yet unable to offer a service to squatter settlements until their legal position is formalized.

Donor Agencies

Community management is an attractive proposition for donor support. Specifically aimed at providing sustainable services in a sector where sustainability has proved difficult to achieve in the past, it has the additional appeal of promoting community self reliance and the potential for the achievement of broader development goals.

Community management programmes often depend on external support for capital investment elements, and for early capacity building. For external support to be effective, it is important that donors recognize the changes required just as much as the other partners. Demands for rapid, demonstrable effects, may create obstacles to success. Donors must be prepared to accept longer time frames in putting community management approaches into place, and broaden progress indicators to account for "process" factors such as capacity building in measuring the return on their investment and assessing needs for further support.

Characteristics of successful Community Management

While community management is clearly about putting the community in charge of its own development, workshop participants could not agree on a concise definition which would adequately encapsulate the concept itself. Too rigid a definition might prove to be too constraining, and would not reflect the flexibility of the approach. Instead, participants identified a set of characteristics seen as essential components of successful community management, reasoning that these should be features in any national community management strategy.

The common characteristics of successful Community Management include:

❑ Community decision making

❑ Community responsibility, backed by legitimate authority and effective control

❑ Community mobilization of resources

❑ Community access to external support (public or private), to supplement local management capacity.

❑ Agency acting as facilitator and supporter and helping to build community self sufficiency.

With those components in place, communities, supported by the implementing agency, are involved in decisions on all major aspects, including:

❑ the need for water supply and other improvements;

❑ the selection of water sources and siting of water supply facilities;

❑ the technology to be used and level of service;

❑ the local organizational structure needed to manage the system, including, where appropriate, the establishment of a water committee and the appointment of caretakers/mechanics;

❑ rules of access, protection and use;

❑ the resources which are to be mobilized and the means by which costs are to be covered.

Though the agency will often have a leading technical role in the implementation phase, all decisions are taken in partnership with the community, and on the basis of its consent. During this phase too, training and other knowledge transfer techniques help to equip the community to handle the future running and upkeep of the system and its financial management. The community then takes responsibility for operation and

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Managing the system and the resource

Community management in Guatemala goes beyond simple care of water supply systems and addresses basic problems of water source and environmental protection. Agua del Pueblo advisers not only offer training to communities in local management and technical skills to undertake basic care and maintenance of water systems, and promote good environmental sanitation around water points, but also offer advice on watershed protection through things such as tree planting. This helps to build broader capacities within communities to conserve basic resources as well as to manage new technologies.

Village planning improves system design

Village water committees play a significant role in the detailed design of gravity schemes in northern Pakistan, with assistance from engineers from the Aga Khan Rural Support Programme (AKRSP). In the village of Gulkin, the water committee opted for a gravity scheme, with a yard tap for all 102 households. As well as deciding on the service level, the water committee also prepared plans showing the desired routes for pipelines.

The water committee and AKRSP engineers prepared a detailed design, and submitted a joint project proposal to the Canadian High Commission and secured grant assistance to build the scheme. Construction of the scheme was undertaken almost entirely by the community, with local plumbers hired by the water committee. AKRSP made periodic site inspection visits to check on the quality of the work.

The project was completed in a year. The new system replaced a poorly built scheme installed with donor assistance several years ago which did not provide a full service. The old scheme had broken down because the pipe trenches were too shallow and the pipes had frozen and cracked. The technical advice offered by the AKRSP enabled the villagers to build their own supply to a much higher standard, and achieve a service level which matched community needs.

maintenance of the system, undertakes its own monitoring and evaluation, in combination with that of the agency, and commits itself to finance both its own operations and any payments agreed as due to the agency for loan repayments, continuing support services, or charges for water consumed.

Community financing is at the heart of community management, and provides the key to the sense of ownership needed to keep the system functioning reliably. Whether community ownership is legally constituted or not is less important than whether the community fully accepts responsibility for the care of the system.

Full cost recovery is not a prerequisite for effective community management, but some contribution from users is needed to establish commitment. As a minimum, as much of the recurrent costs as possible should be borne by the community, or sustainability can not be guaranteed. In all of the cases reviewed at the workshop, communities make substantial, regular contributions to the running of their water systems, and many pay full or part costs of the development of the system itself (see Table 1). Transparency of financial management is another key issue. The whole structure of community management can founder rapidly if there is a suspicion that community funds collected for water supply services are being mismanaged or misappropriated. Adequate book-keeping and regular review of accounts are prime requirements.

Community commitments are balanced by agency commitments to provide agreed backstopping support, to safeguard the quantity and quality of water, if appropriate, and to recognize and legitimize the community's authority to manage the system.

Factors contributing to effective Community Management

In addition to the *essential components* listed in the last section, the Workshop found a number of common factors which are seen as *desirable*, if community management is to be most effective:

Strong leadership

The case studies and review of other experiences make clear that the quality of management in water agencies and the strength of leadership in community organizations are important ingredients. Strong community leadership, or the continuous involvement of a charismatic individual, helps to maintain community interest and commitment through the implementation phase and in the longer term problem-solving processes necessary to keep systems in good working order. Where there is no such leadership, or where recognized leaders are frequently absent, interest may wane. The importance of local leadership is underestimated in many projects, with insufficient attention paid to identifying and involving key individuals.

Table 1: Summary of Community Contributions to Capital and Recurrent Costs in Workshop Case Studies

LOCATION AND TYPE OF SCHEME	CAPITAL COSTS	RECURRENT COSTS
CAMEROUN Gravity-fed piped scheme from protected spring	Capital and labour contribution equal to 20% of total capital cost Trench and pit digging Carrying local materials (sand and stones) Cash contributions: CFA 500 per man and CFA 200 per woman	All recurrent costs paid by community, in accordance with service level: CFA 500 per taxpayer per year for standpost; CFA 5000 per year per house connection; CFA 100,000 per year per institution. Community contributions cover full costs of village plumber, spare parts and operating costs, at less than cost of service from state water corporation.
GUATEMALA Piped schemes with gravity feed or hydraulic ram, handpump schemes, and rainwater harvesting	Cash contributions for initial downpayment Repayment of community loan supplemented by agency donation Trench and pit digging Carrying local materials (sand and stones)	Users make monthly payments which cover all operation and maintenance costs, including employment of a local plumber. Community water boards form local associations to provide mutual assistance in solving problems of operation and maintenance, and local management.
HONDURAS Borehole wells, communal tank networks, independent communal tanks served by tankers	Payment of a cash contribution (30% of development costs) Repayment of a loan into a revolving fund for remainder (70%) Provision of unskilled and semi-skilled labour for construction Provision and carrying of local materials Funding of paid unskilled labour as substitute for own labour	Payment of a monthly fee in accordance with service level: US$1.75 for use of a standpost; US$3.00 for a yardtap. Monthly payments include costs of water board staff and hiring of a plumber.
INDONESIA Piped schemes and rainwater harvesting, public bathing facilities	Full cost met by most communities in most cases Combination of cash and in-kind payments + loans and credit Individuals contribute according to socio-economic status Poorest members often exempt from payments Grant assistance may be arranged if communities have difficulties Provision of local materials + skilled and unskilled labour	Full costs met through user fees, depending on service level and system costs: range from US$5.00 to US$50.00 per household per year. Funds also raised through local revolving funds, lotteries, credit systems, entertainments, etc.
PAKISTAN Gravity-fed piped scheme from protected spring, with yardtaps	Villagers contribute to a common fund to support the work of the Village Organization (VO) as a precondition for support Aga Khan Rural Support Programme secures loans or grants Provision of local materials and labour Additional funds raised by fining those who don't meet communal labour obligations Village funds hire local plumbers to help in scheme construction	Users meet costs of operation and maintenance through continuing contributions to the village fund. Additional funds raised through the imposition of fines for improper use or wastage of drinking water. Village funds used to hire local plumber for repairs as necessary Individuals are personally responsible for maintaining pipes and taps for their own yard connections.
UGANDA Borehole wells with handpumps, protected springs, gravity-fed piped schemes	Community contribution based on negotiation with no set formula Cash contributions usually cover only a small part of costs Provision of local materials and labour Funds may come from cash collections, donations from prominent individuals, auctions, lotteries, raffles, or local taxes	Users pay fees to cover costs of spares and payment of pump mechanic. Volunteer caretakers "paid" by being exempted from communal labour obligations. Additional funds raised through the imposition of fines.
YEMEN Piped schemes based on boreholes with motorized pumps	Communities must have a reliable water source, usually a borehole, before the project begins. This is secured either by the community's own efforts or by requesting assistance from the government or a donor Communities meet about 30% of scheme development costs through labour and other in-kind contributions	Users pay a monthly metered charge, which is enough to cover the costs of fuel, oil, spare parts, and the salaries of scheme operators. When a major breakdown occurs, special collections are made to pay for the repairs.

A programmatic approach

The traditional project cycle approach is not appropriate for programmes aiming for community management, in which a key ingredient is community decision making. In committing themselves to the community management approach, agencies, governments and donors must be prepared to adjust their objectives and their timetables. A programmatic approach means that targets are related to overall achievements over a period of time, rather than to project-related inputs and outputs. This is not a scaling down of targets – indeed the chief benefit of a switch to community management is that long-term implementation of sustainable water systems should be improved. Rather, it is a change of focus, to reflect the "process" nature of community management, and its flexibility in matching the pace of development with community aspirations and capabilities and the building of capacities and confidence.

Realistic appraisal of resources

While support may be available for initial capital investments and for capacity building within the community, sustainability depends on full recovery of recurrent costs. Communities must be helped to make a realistic assessment of the resources needed to keep the water system functioning, and to compare investment in water with other options for use of the same limited resources. Agencies also have a duty to ensure that the resources required for future support to communities are available on a sustainable basis.

Over-promotion of water supply improvements may encourage communities to distort their true priorities. Projects initiated at the expense of other highly desirable activities (education, child care, income generation, etc.) may well be short lived, unless the promised benefits are real and substantive.

Appropriate local organization

The commonest organizational structure for community-managed water systems is the water committee. These exist in a wide variety of forms and with correspondingly variable achievements. It is through the water committee that each section of the community will seek an equitable share of project costs and benefits. The

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Building community cohesion

Community cohesion is an important factor in the success of community management. Where this is lacking, it may be necessary to take explicit steps either to strengthen community solidarity, or openly to recognize and account for divisions within the community in local organization.

The large village of Mutengene in Cameroon has a population of more than 12,000 people, with 20 distinct ethnic groups. The local leadership consists of a traditional Chief, supported by a Village Traditional Council (VTC) composed of elders of the original inhabitants, the Bwinga Bakweri. The settlement is divided along ethnic lines into 20 different quarters, each with a Quarter Head. Each ethnic group is represented in proportion to its size in an elected Village Development Council (VDC), made up of 70 councillors. The Executive Committee of the VDC meets once a month, with the General Assembly of the entire VDC meeting at least twice a year.

After a number of failed attempts to improve the Mutengene water supply, progress was finally made when a village water committee was established which properly represented the various ethnic groups, following much the same principles used in the establishment of the VDC. The underlying risk of tensions between the different ethnic groups was openly recognized and addressed in the constitution of the committee, which was made up of the heads of the ethnic groups, the branch presidents of the national political party, and the chairman of the VTC.

Tradition was also maintained in the use of the "village crier" system as an important channel of communication to inform community members of breakdowns and suspensions of the water supply.

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performance of the committee, and particularly its financial probity and transparency, has a marked influence on community commitment to the water system, and hence on users' willingness to contribute to its upkeep.

There is a danger that the water committee may conflict with other decision-making structures inside or outside of the community, or that it may involve only the elite of the village and so antagonise the rest. Only the community can eventually decide what structures it will use to undertake its management tasks, but there will be opportunities for guidelines to be brought to the attention of the representatives. Among those guidelines should be the need for adequate representation of all groupings and sources of influence within the water management structure.

Because they handle funds and commonly deal with banks or other financial agencies, water committees need to have legal legitimacy externally, as well as the confidence and support of the community itself.

The establishment of a community water committee is the most commonplace approach to the institutionalizing of community management, but it is by no means the only approach. There are also many possible variations in the organization of a water committee itself. The workshop case studies show a wide variety of possibilities, from the single-handed management by traditional leaders (as is sometimes the case in Yemen), to large community committees attempting to reflect the full complexities of multi-ethnic settlements (as in Cameroon), to small community water boards with paid staff (as in Honduras).

Whichever option is selected, the most important considerations are that the form of local organization should be recognized as being legitimate in the eyes of the community, that it should be able to carry out the task of maintaining the water supply, and that it should not be in conflict with other forms of local organization. In some cases, it may be necessary to ensure that local organizations are linked in with broader political or representational structures, as in Uganda.

Women's involvement

The review paper tabled at the workshop analyzing experience from 122 completed water projects from around the world added further strength to the claim that higher levels of women's participation in decision making increase the effectiveness of community management projects. Although in some cases, for religious or cultural reasons, women's

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Water committees and the wider world

Making links with wider representative structures in the community and beyond has been an important factor in establishing effective water and sanitation committees (WSCs) in Uganda. In the South West Integrated Programme, supported by UNICEF, all WSCs are formally linked to the structure of Resistance Councils (RCs) which form the institutional focus for grassroots democracy in the country. RCs are established at cell or village level, and work upwards to the National Resistance Council (NRC) through RCs at parish, sub-county, county, and district levels. Formally attaching WSCs to RCs gives them official recognition and legitimacy, without unduly affecting their day-to-day running. Without this legitimacy and recognition it would be virtually impossible for them to do their job.

Planning as partners

Once a community becomes involved in the Community Self Financing of Water and Sanitation Systems (CSFW) programme in Indonesia, all major decisions are made in close consultation between the community itself, CARE, and the government. CARE advises the community on how to set up a water committee, but the final decisions on the committee structure and membership are left to the community itself. A list of appropriate technology options is made and costed, and the final choice made by the community. CARE then works with the water committee to develop a resource mobilization and construction plan. Local financing is worked out within the community and a wide variety of solutions found. A sub-committee of the main water committee is trained in hygiene and health issues and briefed on how to conduct a community survey as a basis for planning a local education campaign. Once the water system is installed, and operation and maintenance sub-committee takes over responsibility for the day-to-day running and care of the water supply. The reality of local decision-making in Indonesia is proven by the wide variety of solutions found.

Women earn the right to be heard

Women in Indonesia have proved to be skilled fund raisers and committed supporters of water and sanitation improvements, building on their traditional responsibility for managing household finances. In the village of Wonoanti, women established a number of fund-raising groups and made cash contributions each time the groups met. Once enough money had been raised a lottery was held and the winning group was given the money to build water-seal latrines. This system was continued until all groups were able to benefit. In the village of Kedompol, CARE assisted the community to build 60 rainwater catchment tanks, serving 190 households. The local women were sufficiently impressed to organize fund-raising meetings and succeeded in raising enough money to serve a further 250 households, entirely by their own efforts. Women's success in fund-raising has increased their influence over decision-making. More and more women are now occupying key positions on water and sanitation committees and are being consulted on important community decisions.

involvement is not overt or apparent in organizational structures, women often play a highly influential and beneficial role in the community management of water supplies. Women in Indonesia have proved to be particularly resourceful in raising funds for water and sanitation improvements, and have strengthened their position as decision-makers as a result.

The adequate representation of women in community managed water programmes can not be taken for granted, and the advancement of women remains a development goal. The growing numbers of women-headed households in developing countries give added urgency to this issue.

Inhibiting factors are still proving hard to overcome, but innovative ideas are being developed for encouraging enhanced involvement of women in water programmes. The panel below lists ten steps which can be taken by water and sanitation agencies to ensure that women play as full a part as possible in their programmes.

Ten key steps to enhance the involvement of women in water supply and sanitation programmes

The following steps can be taken by water agencies as a means of advancing women's involvement:

* Orient male management and staff in how women's involvement helps to realize project objectives;

* Work with women field workers, both from the agency itself and from other services, and/or with local intermediaries;

* Discuss with local leaders and authorities why women should be involved in the planning and management of water services, and how this can best be achieved;

* Inform women about project and programme meetings, using a variety of different channels, and encourage their participation;

* Organize meetings at times and places suitable for women to attend;

* Make it easy for women to hear and to be heard at meetings, by sitting them together in the main gathering, not at the back, and by conducting meetings in the vernacular or arranging translation;

* Stimulate dialogue by presentation techniques, inviting comments/questions/criticism, inserting discussion breaks, and involving respected and representative spokeswomen;

* If the participation of women in general, or poor women in particular, is difficult, organize separate meetings at more convenient times and places;

* Explain the tasks and the authority involved in system maintenance, management, hygiene education, and system finance before choosing local candidates; discuss which roles are best performed by women and who are the most suitable candidates;

* Give training adapted to women's conditions and roles, and include follow-up visits for monitoring and support.

Source: C van Wijk, 1989. Community management and sustainable water supply in developing countries. Mimeo, IRC, The Hague.

PUTTING COMMUNITY MANAGEMENT INTO PRACTICE

There is great scope for community management of water supply systems, once communities are made aware of the possibilities and prepared for the responsibilities. At the same time, water agencies must adjust to new roles in preparing, advising and supporting communities rather than undertaking all management activities themselves.

Changes at Agency Level

Preparations for community management require changes within the responsible water agencies in making the transition from being a provider of services to a facilitator.

This transition is not an overnight process. Nor need it be a threatening one. While it calls for a new orientation on the part of professional staff, meaning that new recruits will need to have a different blend of technical and social skills and experience, it does not mean that existing more conventionally trained staff are either unsuitable or any less effective, once they have adapted to the new approach.

Some of the more important points raised at the workshop which need to be taken into consideration by agencies in adapting to a community management approach are:

❑ Motivating communities and identifying and mobilizing community resources takes time, and this must be allowed for in community management programme schedules.

❑ Learning is a two-way process. Staff assisting communities to develop awareness and management skills will themselves acquire new knowledge and find it necessary to adjust their advice and support accordingly. Confidence and mutual trust are key aspects of successful community management.

❑ Locally recruited staff conversant with local language and culture will generally have more success in building trust and confidence and communicating new ideas.

❑ Even the best trained staff cannot function properly without adequate resources (transport, materials, etc).

❑ Women's involvement is an important element of community management. Including women among management and field staff will considerably improve the prospects for success.

❑ Preparing for community management of an improved water supply is also an opportunity for communicating health and hygiene messages. Agency staff need the appropriate knowledge and skills to take advantage of this.

❑ Building and maintaining an improved water supply is not the only potential use of scarce community resources. Staff must be aware of the danger of 'overselling' water and distorting community priorities. To make the right decisions, communities need to be aware of all the resource commitments they are being asked to make, and to be given adequate and sustainable agency commitments in return.

❑ The switch from providers to facilitators needs a new and broader set of performance indicators and monitoring tools, so that staff achievements in the 'process' aspects of their work can be recognized and rewarded. Guidance on appropriate types of goals, indicators and evaluation methodologies can be found in a recent UNDP/World Bank Water and Sanitation Program publication[2].

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2. *Workshop on Goals and Indicators for Monitoring and Evaluation for Water Supply and Sanitation, Report of a Workshop in Geneva in June 1990. UNDP/World Bank Water and Sanitation Program, Washington DC.*

> ### Teamwork makes time for capacity building
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> The development of a team approach based on close inter-ministerial collaboration has been found to be an important factor leading to success in the UNICEF supported South West Integrated Programme (SWIP) in Uganda. The formation of teams including community development and health workers as well as technical staff has helped to restrain the technicians desire to "get on with it" and ensure that the necessary time is taken to properly prepare communities for their future role as managers.

Sometimes it may be convenient for the new community-based approach to be achieved through an inter-agency partnership. The water agency may combine its technical skills with the social and communication skills of a sister agency already regularly involved in dialogues with communities. Alternatively, agency technical staff may team up with motivators and community workers from a NGO sharing a common interest in improving community water supplies. This is already happening in Cameroon, Guatemala, and Indonesia, where NGOs are working hand-in-hand with government agencies to pass on their experience of working in close collaboration with communities.

Reorientation courses and new forms of training for agency staff need to be accompanied by clear messages about the enhanced role that the new skills will bring – allaying fears that earlier training and experience is no longer relevant. It is important that any new concentration on developing social skills should not be at the expense of technical expertise. Community management creates a significant demand for technical support. Even the best possible social preparation will have disastrous results if the ensuing water supply improvements fail to perform reliably through lack of adequate engineering advice. While new skills are required, existing skills must be further strengthened to ensure that agencies are able to deliver the best possible service to communities. This is essential to build the necessary confidence in communities that the water systems they will manage are well built and reliable.

> ### VLOM pumps pave the way for success
>
> In 1980 UNICEF funded a national inventory of boreholes in Uganda and found that, out of a national stock of 5,089, only 25% were working. An extensive rehabilitation programme was undertaken, but three years later the percentage of working pumps had only increased to 32.2%. The failure of a centralized maintenance system made the need for community management very clear.
>
> A precondition for this was the use of a village level operation and maintenance (VLOM) handpump. The India Mark II was identified as a suitable choice and a national policy decision taken to make this the technology of choice throughout the country.
>
> Pilot projects were developed, working closely with communities through inter-ministerial teams of extension workers. In the UNICEF assisted South West Integrated Programme (SWIP) community maintenance has cut breakdown rates by more than half, with more than 70% of handpumps now in operation at any time. When gravity systems and spring protection systems are included, community managed schemes have been found to be 80% operational, with down times due to major breakdowns averaging between seven and 10 days.

Preparations within the Community

Community management puts users in charge of their own water systems. Before this can happen, the users need to be motivated and equipped to take on this new responsibility. Not all communities will wish to do so. In some cases, as a recent UNDP/ World Bank publication has shown[3], communities may prefer that management should remain with an external agency, accepting the defects of such a system as a better option than perceived unfairness or ineffectiveness in existing village political structures.

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3. *Willingness to Pay for Water in Rural Punjab, Pakistan (Water and Sanitation Report No. 4)* refers to survey results which demonstrate that over 65% of households in the areas under study believed that a water supply system should be managed by a government agency in preference to local political bodies, water committees or private entrepreneurs.

Where communities are willing to take on management responsibilities, the concern will be to ensure that the water supply improvements meet the community's needs in the most cost-effective way, and that the users can acquire the necessary knowledge, skills and resources to sustain the completed system. This "capacity building" within the community may benefit from specialized learning techniques, among which conventional "training" is only one aspect. Community management can be supported through the development of a learning process which reinforces the partnership between agencies and communities by acknowledging everyone as both a learner and a teacher, and also by encouraging the development of learning relationships within and between communities. Apart from training activities, other ways to learn include the establishment of community monitoring and evaluation systems, the development of participatory problem-solving methods, the holding of participatory meetings, and the pooling of resources through networking systems.

> **Willingness to manage is a key criterion**
>
> Before entering into an agreement with a community which has applied to join its Community Self Financing of Water and Sanitation Systems (CSFW) programme, CARE Indonesia undertakes a careful study. The primary indicators used are the presence of effective leadership and organization capability, successful completion of other community projects, willingness and ability to pay, and the affordability of technology options. CARE describes site selection as "probably the most important step" in CSFW in ensuring sustainability. Of all of the indicators used, ability to pay has been found to be the least important, with willingness to pay and organizational capability being of far more significance in contributing to success.

The basic challenge is to build up community self reliance, including self reliance in the sharing of knowledge and experience. Building capacity for community management includes developing learning systems that will enable those who have gained new knowledge to share it with others.

Typically, capacity building will follow a series of steps aimed at identifying what skills need strengthening and what support will be needed from outside the community. Using participatory techniques, in which community members play a leading role in diagnosing their own needs, the steps may be:

❑ Survey communities for existing skills and capabilities. Use a checklist and established interview/ research techniques. It is vital to recognize the community's own capability to build its own capacity by developing existing institutions, skills and knowledge.

❑ Establish what skills need strengthening, and what general institution building needs are apparent at both community and agency levels. The types of activities for which communities may need special skills development include technical operations (plumbing, repairs and maintenance, etc), accounting, secretarial work, and management techniques – with emphasis on problem solving and group decision making. Intensive training courses are not appropriate. Skills should be developed through flexible approaches which are responsive to community needs, following a pattern of learn/ practice/learn/practice.

❑ Identify local resources and assess how to use these efficiently.

❑ Identify gaps to be filled by external agencies; assess which agencies (NGOs, government, private sector) can best meet the community's needs; and how these outside services are to be mobilized and paid for.

The Multiplier Effect

As far as possible, training and other learning activities should aim to have a "multiplier effect". New skills should be passed on in such a way that the further sharing of them within the community is encouraged. On a broader level, steps need to be taken and methods developed to stimulate the multiplier effect, so that learners in one community can become teachers of neighbouring communities. In Guatemala, Agua del

Building community confidence

Water and sanitation projects supported by Agua del Pueblo in Guatemala begin when a community makes a request for assistance. From this point onwards, all stages of the project are undertaken in close partnership between the agency and community. Once agreements have been made on technical issues, local organization, and financing, a detailed action plan is drawn up together with the community to ensure that the work fits in with other important economic, social, and cultural activities. The practical work of installing a water scheme and constructing improved latrines is accompanied by training activities to help prepare communities for the management tasks ahead, and health and hygiene education programmes to promote improved sanitation and to support the achievement of long-term benefits from the water and sanitation improvements.

The partnership approach adopted by Agua del Pueblo has been so successful that not only has it led to the establishment of sustainable community managed water supplies and significant sanitation improvements, but has also encouraged many communities to undertake and manage their own self-help development initiatives in other sectors such as cash crop production and local trade.

Pueblo has successfully encouraged the establishment of inter-community organizations which pool knowledge and experience. In Indonesia, some communities have spontaneously developed relationships of mutual assistance. Many other programmes could benefit from promoting such approaches.

Obtaining the full benefits from improved water supplies depends on parallel improvements in hygiene behaviour and the provision of sanitation facilities. Early and continuous promotion of health and hygiene messages, in collaboration with primary health care workers already active in the community, is of great importance. Techniques for encouraging community self-help include hygiene and sanitation surveys at the very beginning of water projects, in which community members identify their own problems and begin to develop solutions, and the use of local channels of communication.

It has already been noted that community-managed water systems provide a stimulus for other community-centred development activities. This highly desirable spin-off can be encouraged from the start by developing linkages wherever possible with other community projects.

Raising funds from within the community and from outside

Communities in Indonesia have adopted a wide variety of approaches to securing funding for water and sanitation improvements in the CARE supported Community Self Financing of Water and Sanitation Systems (CSFW) programme. Cash to cover construction costs is raised from both inside and outside of the community.

Money is raised within the community through household contributions and local credit circles. In one village, funds were raised by renting and showing popular movies. The profits from ticket sales were used to buy pipes and cement. Where cash is short, resources are mobilized through in-kind contributions, sometimes using traditional mechanisms such as zakat, a system where members of a Moslem community donate agricultural produce or part of their income to support improvements to social services.

Outside funds are secured through bank loans and the establishment of credit from suppliers. Pipes, fittings, and cement are frequently obtained on credit, and repayments made over several months. Bank loans are also frequently used to help cover installation costs. CARE has assisted by convincing banks to advance loans for water and sanitation projects and classify them as investment rather than consumption loans, thus ensuring lower rates of interest. Loans to the community are secured through the deposit of land certificates and user right certificates, the payment of large deposits, or a guarantee against a government employee's salary or agreed amounts of movable property.

In one case, a community was so successful in raising funds for water and sanitation improvements that it was able to make a loan to a neighbouring village to start its own project.

Building the Partnership

An important strength of community management is its capacity to draw on a wide range of resources, while leaving control in the hands of the users. To make the best use of this capacity, it is helpful to involve from the start potential partners among NGOs, local government agencies, private sector contractors or suppliers, and other communities or community associations.

Community management usually commences with a bi-partisan arrangement between the community and the water agency or an NGO. Other partners may be drawn in later, as commercial opportunities arise or shortcomings are identified. One extremely useful way of broadening the partnership from the start is through Community Associations. Where these already exist, they provide a focal point for information sharing, resource pooling, and community support. Because of their wide influence, they can create mutually beneficial market opportunities for private sector contractors, mechanics, and other technical specialists; and they are generally better equipped than individual communities to liaise regularly with central and local government, NGOs and other communities. Every opportunity should be taken at the start of a community management project to establish both formal and informal inter-community networking. Periodic meetings among neighbouring water committees to discuss common problems can be a way of starting the collaborative process.

In almost all cases, community management requires initial inputs of financial resources and technical assistance from outside the community. Often, though not always, these come from central government with support from an outside donor. These initial sponsors of the programme can have an important influence on the early partnership arrangements, either by requesting that particular agencies should be involved in programme implementation, or through project guidelines which encourage involvement of NGOs and/or the private sector. In drafting any such guidelines, sponsoring agencies need to take account of both the strengths and the weaknesses of potential partners.

> ### Strong local management requires little external support
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> Where local organization is already very strong, community management of water schemes can sometimes be introduced with only a minimal amount of external support. In Yemen local management systems are worked out by each community, with the government providing only technical training for a system operator. The other major skills requirement is for a book keeper, who is usually already present in the village. While some villages may decide to appoint a water committee, others may simply rely upon the local leader and appoint a person to keep the books and read meters. Problems with the water supply may be solved by the committee, or through other routine meetings or special meetings held as required. Although some development goals, such as advancements in the position of women, are not met through this approach, the minimum and fundamental goal of establishing sustainable and clean water supplies is met very successfully.

Working with NGOs

National and international NGOs have a well-justified reputation for successfully working at the "grass-roots" level. They can play an important "bridging" role between governments and donors and communities. National NGO networks can help to increase the outreach capacity of government agencies. As supporters of community-managed water supply projects, NGOs have a good track record, well reflected in the workshop case studies.

It is important that NGO involvement should not be seen as a panacea. Collaboration with government is not always easy for NGOs. Some may have their own political or sectarian agendas, and these may not always be compatible with national politics or

> ### Learning is a two-way process
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> In summing-up the lessons learned from the case studies, the workshop participant from Agua del Pueblo, Guatemala, noted that his own organization had been considerably strengthened as a result of supporting a community management approach. Agua del Pueblo has grown and strengthened as an organization because of its interaction with communities and the learning which has taken place as a result of this.
>
> Communities themselves have helped Agua del Pueblo to make the transformation from being providers to being supporters, and to understand what a genuine partnership means.

with a community's own priorities and beliefs. Sometimes the limited resource base of NGOs may constrain the rapid replication of community management programmes.

While recognizing that there may be some limitations, involving NGOs is an attractive option in community management programmes. In assessing the need and scope of NGO participation, governments and donors should look for ways in which NGOs can strengthen and complement the skills and resources of other partners.

Private sector services

Flexibility and accountability are key considerations in promoting the use of private sector services to improve the cost effectiveness of community management programmes.

One of the more obvious opportunities arises in the maintenance and repair of improved water systems. While maintenance of a simple water supply system may not always provide full time employment, it can be an attractive additional source of income for a local mechanic who also undertakes repairs to bicycles, agricultural implements, and so on. In larger communities, or where community associations enable resources to be pooled, plumbers, pump mechanics, and other specialists may be retained specifically to undertake water system maintenance.

Contractual arrangements and payment systems for private mechanics need careful consideration. Paying mechanics per repair, for example, may discourage preventive maintenance and lead to shoddy work. More success has been achieved where mechanics are paid a salary, given specific duties to perform – including both scheduled maintenance and emergency repairs - and report regularly on their work to the water committee or its chairperson. Long-term volunteerism does not appear to be sustainable and should be avoided.

An expanding community management programme generates business opportunities for local contractors in activities such as pipe laying, well drilling, tank construction, and other tasks which benefit from the use of specialist equipment or skills. Dependable supplies of spare parts are also often best assured through local shops or markets. Agencies can play a role in supporting local suppliers by providing them with information and linking them to potential clients.

Though use of private sector services has to be under the control of the community, government may have a role to play to ensure adequate quality control and the maintenance of standards, and to minimize the risks of corruption and exploitation.

Financing of Community Management

The mobilization of resources for a community managed water project can be facilitated through a series of steps in which the community is an equal partner with the agency. The steps are:

❑   Preparation and review of a series of cost estimates based on alternative technologies and service levels.

❑   Assessment of the socio-economic situation in the community, including the capacity and willingness to pay of different economic groups.

❑   Negotiation of the total community contribution required, in terms of cash, labour and materials, and assessment of the availability of loans and grants. At this stage, it may also be necessary to conduct a cost-benefit and opportunity cost analysis, to ensure that commitment to the water project will not mean that community members have to divert resources from other crucial activities or services (education, food production, health care, etc).

❑   Review of the selected design to examine the possibility of cutting costs, if necessary.

❑   Development and signing of a contract setting out the required commitments from both the community and the agency.

There is mounting evidence that even the poorest communities are willing and able to make substantial contributions towards improved water supplies. Indeed, many people currently deprived of public water services pay excessive amounts to water vendors to avoid the burden and inconvenience of fetching water from great distances. In Honduras, poor communities in the urban fringe actually ended up paying far less for improved water supplies than many were already paying to unlicensed vendors.

In some cases, willingness to pay may exceed a community's immediate capacity to pay, particularly where heavy initial investment is needed. Credit associations and banks need to be encouraged to take a fresh look at their conditions for granting loans. Communities may be hindered in initiating new projects because of the need to provide collateral for any credit obtained. Suppliers of equipment or private sector contractors involved in construction may be a source of credit. Government too should back a commitment to community

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Bringing down water costs through community management

Many low-income residents of the barrios marginales in Tegucigalpa, Honduras, have no access to government water supply systems and must pay exorbitant prices to private sector vendors. Fifty-five gallon drums of water sell for about US$ 1.10, more than ten times the government's official price for those connected to the public water system. It is estimated that many of Tegucigalpa's urban poor pay as much as 13% to 20% of their meagre incomes for water supply alone, supporting private enterprises with an estimated annual turnover of US$ 2 million.

In 1987 the national water agency SANAA, with assistance from UNICEF, set up a specialized agency (UEBM) to tackle the problem of water supplies in the urban fringe. Through the use of innovative solutions, UEBM has succeeded in bringing safe water at an affordable price to thousands of poor people and helped to establish a successful community-based management system. Community management of simple water supply systems in Tegucigalpa has led to tremendous cost savings, and has generated substantial financing for further development.

Reliable service means prompt payment

The record of community water committees in Guatemala in ensuring that loan repayments are made on time is first rate. In some cases, loans are repaid ahead of schedule, and defaulting is very rare. In cases where loan instalments have not been paid on time this has often been because of system breakdowns caused by faulty design or poor construction work by Agua del Pueblo itself. Once these faults are rectified, communities are usually very willing to resume payments. Conflicts within communities over payments are few and far between, with most water boards keeping good financial records and regularly reporting back to users on incomes and expenditures.

management with the creation of suitable loan systems for water projects which do not require collateral. In Indonesia, CARE has been highly successful in facilitating loans and credit for communities, and some communities have even be willing to extend loans and credit to their neighbours.

Revolving funds can help to extend or replicate systems, but they need to be properly organized. They should, for instance, be set up so as to earn interest on deposits. They also depend on consumers receiving a reliable service, or payments will dry up and the fund will disappear.

Transparency in handling community finances may require appropriate training of community members. Misuse of funds rapidly inhibits further contributions, and can wreck otherwise successful projects. Local management bodies, such as water committees and water associations, must be fully accountable and report regularly to the community, to avoid suspicion.

CREATING AN ENABLING ENVIRONMENT

A commitment to community management is a commitment to change. Empowerment of communities, new roles for technical agencies, involvement of NGOs, and encouragement of private sector initiatives will only happen if governments back them. Before strategies based on community management can be introduced, a number of constraints have to be removed. Then, incentives and supportive legislation are needed to legitimize and stimulate community management activities. Taken together, these government actions create the "Enabling Environment" for Community Management.

Political will

Discussion of the case studies at the workshop revealed a variety of reasons why individual governments or agencies have favoured the community management approach. Some reasons are negative:

- agency-managed projects cannot satisfy demand and individuals cannot satisfy their needs alone;
- government resources are inadequate to sustain completed projects; or
- people are unwilling to pay for the level of service provided by public systems.

Others are based on recognized advantages:

- local management brings greater reliability;
- many communities have adequate resources available to manage simple water supplies;
- community management means improved cost recovery, leading to greater sustainability;
- there are spin-offs in health improvements, income generation, and other community development activities; or
- community-managed projects mean more equitable water use and fairer charging systems.

It is not necessary to see community management as the only option for rural or peri-urban water supplies. There may be situations where villagers prefer to see their water supply managed by a *neutral* agency rather than have it subjected to local political influences. By its nature, community management has to be wanted by the community – it cannot be imposed In many cases, however, community management shows so much promise that it ought to be the preferred option. What is necessary is that governments should make their support for community management clear in policy statements and in national water management strategies. Having done so, they will need to back this commitment with resources and actions which facilitate community management, with enabling legislation, and with regulatory safeguards which protect national water resources and the environment.

Strategic planning

Community-managed water supplies relieve government of many onerous tasks. They also reduce the amount of direct control government can exercise over water use. In doing so, they reinforce the need for comprehensive national water resource

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Community ownership and self reliance

In Yemen communities are fully recognized as the owners of their own water supply systems. While they can obtain substantial government assistance in building a water supply system, they are fully responsible for it once it is installed. Government back-up support is limited to advice only. When major breakdowns occur which are beyond the technical capacity of the community's own system operator assistance is sought from the private sector and paid for by the community itself.

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management strategies. As competition grows for diminishing resources, governments face difficult choices. Water diverted for agricultural or domestic use upstream may deplete or contaminate resources needed for industrial growth or to satisfy the needs of expanding urban populations downstream. But without guaranteed and protected supplies, community management may be rendered worthless. Government has to ensure that water allocations are both equitable and sustainable.

Demand-driven development needs flexible timing, allowing sufficient opportunity for local decision making, resource mobilization and capacity building. Rigid scheduling of projects inhibits community participation and impairs long-term sustainability. A programmatic approach is preferable, with demand and capacity dictating the pace and sequence of sector development.

Policy and legislation

In many countries, existing policies or legislation inhibit the introduction of community management. Sometimes ownership of water supply installations may be legally vested in water utilities; or there may be regulations governing water charges. In some cases, there may be a long standing custom that water is a free good. Water projects are often used for political leverage by local politicians and political organizations, with the danger that projects can be based on political rather than community needs. A sound legal framework to support community management can help to minimize political interference, by controlling and channelling it to benefit the community at large.

Laws and contracts may be required to cement the necessary linkages between central government and decentralized agencies, and to promote financial autonomy and accountability in local institutions. To become effective and financially viable, local agencies, including community organizations, need to have clearly defined authority to set and collect charges and to make management decisions.

In peri-urban areas, land tenure may be a critical issue. In Honduras, land ownership is a precondition of participation in a community management project. That condition has itself been a catalyst for dealing with the land tenure issue. Government encourages landlords to do deals with squatters over land rights, and where this cannot be achieved may deal directly with the landlord to purchase the land on behalf of the tenant.

Active government involvement in construction, operation and maintenance can distort the market, inhibit private sector participation, and lead to low efficiency and high costs. Private construction and manufacturing firms and small-scale local contractors can both bring down costs and speed implementation. Government can encourage the formal and informal private sector, through training, provision of incentives and creation of the right market conditions.

Though NGOs have demonstrated their capacity for community outreach and grass-roots tasks, their role is not always encouraged. NGOs have important roles to play in piloting innovative approaches and in supporting community management of services. Governments can encourage this, and develop partnerships with NGOs in an overall sector development programme.

Women are the primary users of water in the household. Their participation is essential if systems are to be effectively used. Special efforts are needed to integrate women fully into the planning, implementation and management process, in both professional and community settings. In many countries, this will mean special efforts to enable women to occupy positions of authority.

In creating enabling legislation to facilitate community management, government needs to retain important powers and responsibilities for itself. Protection of public health and the environment depend on adequate controls and enforcement. Government must ensure that one community's freedom of action does not impair equivalent freedoms in other communities. Overall management by central government of water resources and environmental protection is likely to be a critical part of a successful, large-scale community management strategy.

Decentralization

The local nature of water and sanitation services makes decentralization important. The objective should be to create a support structure which supports local implementation, operation and maintenance. Where a highly centralized authority exists, decentralization will need to be a gradual process, matching the pace of human resources development and other capacity building programmes at the local level.

Using local rules to manage water use

Water use in the Northern Areas of Pakistan is subject to traditional rules which, although not written down, are strictly adhered to. Village water committees in projects supported by the Aga Khan Rural Support Programme (AKRSP) are able to raise additional funds to pay operation and maintenance costs by imposing fines for the breaching of these rules, including the wasting of water by leaving taps running or using drinking water for agricultural purposes.

Saving money through community management

The average development cost of the water systems offered by UEBM in Honduras is about US$ 20 per capita. This amount is fully recovered from the users, who contribute about 30% as an initial down payment, and repay the rest into an interest-free revolving loan account.

Users pay a monthly fee to their community water board, in accordance with the service level they enjoy. Current rates are about US$ 1.75 for the use of a standpost and US$ 3 for a yard tap. The water board uses this money to pay a monthly metered bill to UEBM, to cover maintenance costs, to pay for the administrative costs of the board itself (including in some cases payment of a secretary and other staff), to make repayments into the revolving fund, and to pay for materials and equipment. The water boards do not collect the fees themselves, but send a monthly bill to householders who must deposit the money into their board's bank account.

Many community boards have accumulated substantial savings through fee collection. These savings are often put to use to support other community development initiatives. One community is using its savings to contribute to a local sewerage project, while another lent US$ 5,000 to the community government for a local social development project. The 21 de Febrero water board has saved US$ 45,000 after three years of fee collections and has contracted engineers to design a local sewage system, constructed toilets for their kindergarten, and bought a pump for a second well.

Decentralized operations require better information and communication systems. To be effective, local agencies need access to technical, management and training information. Lack of information or adequate communication systems are often most acute in rural settings. Special provisions may have to be made on a project-specific basis, to ensure that all those involved in local sector activities have access to practical information. Development of a "communications culture" should be among the aims.

Training and education

Successful professional training builds both competence and confidence. A well-planned national programme of human resources development, based on assessment of needs, should be at the core of any country strategy. It should reflect the need for partnership in sustainable sector development between government, communities, the private sector, and NGOs, and build appropriate skills at all levels. It should also recognize the particular needs of women, and ensure equal training and employment opportunities.

Training can benefit from recent developments in methods, media and materials. An important first step is to take stock of training tools and methods employed in the country, to reduce duplication and identify gaps which may have to be filled by developing new materials. Participatory training techniques, where people learn through group involvement, are particularly important when dealing with socio-cultural issues.

Education too is a key part of the new approach. Schools offer a large and receptive audience for promoting behavioural change through hygiene education. Polytechnics and universities are able to instill the right principles into future professionals, providing that their curricula are updated with current sector approaches. Donors can make an important contribution in supporting the training of sector professionals. They can also contribute to national capacity building by promoting the employment of local rather than international consultants as much as possible for specialist project inputs.

Essentially, strategies need to focus on people, rather than on technology or coverage. Countries should aim for a critical mass of appropriately trained people within a sound institutional and policy framework, to meet the sector's technical and managerial challenges.

In addition to the right training, sector staff need to be motivated and properly rewarded. Incentives are important, especially where there are attractive employment opportunities outside the sector. Responsibility, recognition, promotion opportunities and pleasant working conditions all contribute to job satisfaction. Regular political interference is a strong disincentive, which can be avoided by devolution of responsibility and authority to local management.

Special incentives may be needed to encourage performance. These can include production bonuses, or inducements to central agency staff to relocate, particularly to rural areas. It is important to ensure that incentive programmes have control procedures to prevent inequities and abuse, and reward "software" as well as "hardware" achievements.

National professional and trade associations can help sector development by establishing professional standards. Workshops and publications can give sector professionals an opportunity to share experiences and to gain recognition for their work. They may often be able to assist with training curricula and courses. Governments and donors can foster the development of sector-related professional associations, enabling them to support the profession and the industry.

Public education and social marketing

New attitudes and behaviour within communities are often necessary to promote the effective use of water, to stimulate demand for hygiene and sanitation improvements, and to raise environmental awareness. In the community, women play a vital role in promoting improved hygiene behaviour. Women are thus both important targets and key agents of change in the community. Public education and social marketing campaigns have been successful in immunization and family planning programmes. These techniques should be more widely applied in the water and sanitation sector, especially in hygiene education, where press, radio and television can have considerable impact.

Lack of communication between government agencies and communities ranks high as a cause of project failures. Policies and plans must be understood by communities and be responsive to their stated needs and desires.

Monitoring and evaluation

In the past, sector monitoring has focused heavily on service coverage. Too strong a focus on coverage targets can jeopardize sustainability, as it places emphasis on installation rather than sustained utilization. The new emphasis on sustainability and effective use of services is spawning new monitoring techniques. The use of participatory monitoring and evaluation methods help agencies to respond better to consumers' expressed needs. They also contribute to local capacity building. Helpful new indicators and participatory evaluation methodologies are described in a report of the 1990 Geneva Workshop on Goals and Indicators for Monitoring and Evaluation of Water Supply and Sanitation, published by the UNDP/World Bank Water and Sanitation Program.

> **Counting pumps is not enough**
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> An important lesson learned in the workshop, and underlined in the Uganda case study, is that broader-based tools are required for monitoring and evaluation to support approaches with community management as a major objective. Measuring success on the basis of quantifiable achievements alone is not sufficiently rewarding or motivating for field staff as these fail to recognize or reward the crucially important "process" achievements which are essential in building up community management capacity.

TOWARDS A BETTER UNDERSTANDING OF COMMUNITY MANAGEMENT

The experience shared at the workshop adds fresh evidence to a growing dossier on the benefits of community-managed water supplies. This new evidence reinforces the case for community management as a preferred option in most rural and many peri-urban situations in developing countries. However, there are still some aspects of the community management approach which are based more on intuition than on firm evidence. Anomalies also arise in comparing experiences from country to country. As well as strengthening hopes for the future, the workshop also encouraged caution and took note of gaps in knowledge which still remain to be filled.

As experience grows, it is important that information continues to be generated and knowledge continues to be shared. Further studies are needed to resolve anomalies and harden guidance on the most effective way of promoting and implementing successful community management.

1. Time costs and improved cost-effectiveness

The need for awareness raising, community motivation and capacity building may extend the time scale of community management programmes in comparison with conventional agency-managed projects. The payback for this early investment in time and resources should come from improved cost recovery, greater sustainability, and reduced government and agency commitments to operation and maintenance. The consensus among workshop participants with direct experience of introducing community management is that the return significantly outweighs the investment, but the comparison is not an easy one. It also includes some hard to quantify costs (delayed improvements, alternative use of resources) and benefits (community self reliance, better hygiene behaviour, women's development).

A coordinated effort is needed to gather and analyze specific data on time scales, costs and benefits. The analyses should cover community management programmes operating in different phases, so that the benefits of moving to scale can be reflected in the comparisons.

2. Replicability and moving to scale

Along with reliability and sustainability, replicability is an important goal for governments and donors facing huge challenges in meeting future water needs. Workshop participants were impressed by new evidence that community management programmes can develop a momentum of their own. Inter-community collaboration and networking has been highly successful in some instances, leading to economies of scale and accelerated progress in extending coverage. This is in direct contrast to one of the perceived disadvantages of community management – that it requires repeated preparatory steps in one community at a time, and so may lead to slower progress.

The factors stimulating self-motivated community networking are not yet fully understood. In Guatemala, communities have tended to combine initially to resolve one common problem, then to extend the collaboration into resource pooling and extension of support services to others. In Indonesia, the spur seems to come more from a desire to share successful experiences on a community and family basis. There may well be many more culturally specific ways of stimulating community networking. As this aspect may be crucial in achieving accelerated coverage, there is plenty of incentive to learn more and seek innovative methodologies.

3. Does community management really reach the poor?

One of the proclaimed advantages of community management is that it enables communities to establish their own priorities and to achieve the most equitable system of using and paying for water. To what extent is this achieved? In some cases, preconditions for involvement in a community management programme such as land tenure or ability to pay may limit participation. If some people are excluded for these or other reasons, is there a danger that community management may further marginalize the poorest sections of the community?

Community management does not, of course, exclude subsidies. Indeed, in many ways it makes it easier to determine the most effective ways of subsidizing those in greatest need. Again, proponents of community management maintain with some confidence that properly planned community management is more effective than agency-managed alternatives in reaching the poor with basic services. What is needed is well-documented evidence which can be used to demonstrate these claims and serve to promote community management as a contributor to poverty alleviation.

4. How much should the community pay, and who pays the rest?

A crucial aspect of successful community management is that the community develops a sense of ownership and responsibility for the improved water system. It is generally accepted that this sense of responsibility comes primarily from having invested community resources (time, labour, materials and money) in achieving the improvements. From the point of view of sustainability, it is also generally agreed that community contributions must result in at least the recurrent (operation and maintenance) costs being fully covered. Replicability requires that implementing agencies also continually supplement resources needed for capital investment and for the provision of backstopping and support services.

Willingness-to-pay studies, and analyses of payments made to water vendors by those not served by public systems, generally indicate that even in the poorest areas many communities have both the ability and the willingness to pay significant amounts for reliable services. This is not universally true, however, and there is a danger that the poorest sections of the community may be excluded by a heavy emphasis on high cost coverage.

The extent to which community management programmes are and can be financed by community contributions, general taxation, private sector donations, and external grants or soft loans is an important area for further study.

5. What are the limits of community management?

The workshop clearly recognized that community management is not a cure-all, and may not be appropriate in all settings. The principal models for community management are based on rural experience, with a prime motivation for switching to community management being the difficulty faced by central agencies in extending support services to widely dispersed rural communities. It is becoming increasingly clear, however, that community management may also be effective in resolving similar difficulties faced by urban water utilities seeking to meet the water needs of low-income peri-urban communities. The Honduras case study is an impressive example of a water utility achieving greater reliability and extending coverage in marginal urban areas by adopting a community management approach.

At the same time, some rural communities continue to see the provision of water as a government responsibility, and moves towards community management as an avoidance of that responsibility. Where efficient water agencies or local authorities have been able to achieve reliable services at affordable costs, a move towards community management may be an unnecessary diversion of resources.

In both peri-urban and rural areas, there is a need for a better understanding of the factors which motivate communities to decide in favour of community management, and to identify situations in which community management is not appropriate and should not be promoted.

Annex 1   List of acronyms and abbreviations used in this publication

AdP	*Agua del Pueblo* (People's Water), Guatemala
AKRSP	Aga Khan Rural Support Programme (Pakistan)
CARE	CARE International
CSFW	Community Self Financing of Water and Sanitation Systems, Indonesia
DGIS	Directorate-General for International Cooperation of the Netherlands
IRC	IRC International Water and Sanitation Centre
NGO	Non-Governmental Organization
NRC	National Resistance Council, Uganda
RC	Resistance Council, Uganda
SANAA	*Servicio Autonomo Nacional de Acueductos y Alcantarillados* (National water and sewerage agency), Honduras
SWIP	South West Integrated Programme, Uganda
UEBM	*Unidad Ejecutora Barrios Marginales* (Unit for marginal barrios), Honduras
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
VDC	Village Development Council, Cameroun
VLOM	Village-level operation and maintenance
VO	Village Organization, Pakistan
VTC	Village Traditional Council, Cameroun
WASH	Water and Sanitation for Health Project of the US Agency for International Development
WC	Water Committee
WHO	World Health Organization
WSC	Water and Sanitation Council, Uganda

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