SAFE WATER FOR ALL

IAN BURTON

The supply of safe water is both a necessary condition for human wellbeing and a significant contribution to national production. In reviewing the progress to date, the author finds room for optimism but not complacency. He discusses the elements of success and failure of rural water supply programmes, highlighting the interface which must exist between national planners and local communities. He also draws attention to action needed from governments and international organizations.

1. Status and Prospects

1.1. An Intolerable Situation

There is widespread evidence that the nations of the world are now ready and impatient for a substantial acceleration in the rate at which rural water supplies and sanitation facilities are being improved in the developing countries. At recent international gatherings, and among the committees and working groups scattered in meeting rooms around the world, a consensus has been emerging that provision of a safe and adequate supply of water for domestic purposes is now a high priority item. A recommendation of the UN Conference on Human Settlements (held in Vancouver, June 1976) states that:

(a) In the less developed countries, nearly two-thirds of the population do not have reasonable access to safe and ample water supply, and even a greater proportion lack the means for hygienic waste disposal.

(b) SAFE WATER SUPPLY AND HYGIENIC WASTE DISPOSAL SHOULD RECEIVE PRIORITY WITH A VIEW TO ACHIEVING MEASURABLE QUALITATIVE AND QUANTITATIVE TARGETS SERVING ALL THE POPULATION BY A CERTAIN DATE; TARGETS SHOULD BE ESTABLISHED BY ALL NATIONS AND SHOULD BE CONSIDERED BY THE FORTHCOMING UNITED NATIONS CONFERENCE ON WATER.

(c) In most countries urgent action is necessary to:

(i) Adopt programmes with realistic standards for quality and quantity to provide water for urban and rural areas by 1990, if possible;

(ii) Adopt and accelerate programmes for the sanitary disposal of excreta and waste water in urban and rural areas;

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(iii) Mobilize popular participation, where appropriate, to co-operate with the public authorities in the construction, operation and maintenance of infrastructure;

(iv) Plan water supply and the sanitary disposal of waste together in the framework of national resource planning;

(v) Reduce inequalities in service and access to water as well as over-consumption and waste of water supply;

(vi) Harmonize and co-ordinate the interests and efforts of local governments and other public bodies concerned through the appropriate planning by the central government;

(vii) Promote the efficient use and reuse of water by recycling, desalination or other means taking into account the environmental impact;

(viii) Take measures to protect water supply sources from pollution.

In the light of the expressed aspirations of the Habitat Resolution, it is clear that every effort should be made to achieve a reasonably safe and adequate supply of water for all the world's people by no later than the end of this century, and before, if possible. These improvements must be accompanied by concomitant improvements in rural sanitation, especially excreta disposal.

Statistics on water supply conditions in 1970 assembled and analyzed by the World Health Organization showed that only 12% of the rural population in 90 developing countries (excluding China) had “reasonable access to safe and adequate” supplies of water. The publication of this statistic and its widespread use in reports and speeches helped to increase awareness of the unsanitary conditions in rural areas and to alert the international community to the need for swift action. [10]

In the light of the 1970 picture, the target set for the Second UN Development Decade was a doubling of the percentage of rural population with reasonable access to safe and adequate water supply from 12 to 25%. This entailed the provision of improved supplies to an estimated 217 million rural dwellers over the decade at an estimated cost of 2.8 billion dollars (1970 values). These figures suggested that the average investment over the decade should be $280 million annually, compared with the estimated level of expenditure in 1970 of $138 million. To many it seemed that at these prices the goal of doubling the percentage of people supplied was unattainable by 1980. It was also pointed out that even if the target were to be reached, the absolute number remaining without improved supplies would be larger at the end of the decade than at the beginning, due to rural population growth (Table I). If projected to the end of the century the target rate of progress for 1970–80 would still leave 50% of the rural population without benefit of any improvement (Figure 1). Clearly a higher level of aspiration is widely shared among the nations, and major efforts are needed to improve present performance and future prospects.

1.2. Cautious Optimism

There are substantial indications that a major new effort is taking shape. It is to be detected primarily in the increased interest and determination being shown in the nation-
### TABLE I
Programme for rural water supply in 90 developing countries 1970-1980 (population in millions)

<table>
<thead>
<tr>
<th>Type of supply</th>
<th>1970</th>
<th></th>
<th>1980</th>
<th></th>
<th>Increase 1970-80</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Access to safe water</td>
<td>140</td>
<td>12</td>
<td>357</td>
<td>25</td>
<td>217</td>
</tr>
<tr>
<td>Without access to safe supply</td>
<td>1026</td>
<td>88</td>
<td>1081</td>
<td>75</td>
<td>55</td>
</tr>
<tr>
<td>Total population</td>
<td>1166</td>
<td>100</td>
<td>1438</td>
<td>100</td>
<td>272</td>
</tr>
</tbody>
</table>


...
Fig. 1. Linear extrapolations of rural populations with 'reasonable access to safe water' based on 1961-70 performance, 1970-80 programme, 1970-75 performance and 1975-80 target rate.

1.3 More on the Cautionary Side

The global rate of expansion of the improvement effort has been better than expected, but the magnitude of the problem in Southeast Asia is cause for concern. If the situation in that region could be substantially improved, the world picture would also look radically different. From an international perspective it appears that external assistance should be concentrated where the large mass of the problem lies.

The relatively slow progress of the Latin American countries is also somewhat alarm-
Fig. 2. Progress by regions 1970-75 and revised 1980 targets.

ing, since they have always been regarded as the leaders in the developing world as far as water supply and sanitation is concerned. It now appears possible that Africa could have caught up with them, or even be in a better position by 1980. The Mid-Decade Progress Report suggests that the relatively slower performance of the Latin American countries in the rural sector is due to the allocation of insufficient resources. A factor that might lie behind this is that much of the rural settlement in Latin America still without adequate water supplies is in dispersed or scattered farmsteads, or only semi-concentrated. After the more concentrated rural settlements (or urban in Donaldson's [5] terms) have been supplied, it becomes increasingly expensive to reach and supply the more dispersed settlements. The phenomenon of a declining rate of progress once more accessible rural communities have been reached might also occur in other regions. It is well-known that the larger communities, those nearer to major cities, and those more wealthy and with more influence, tend to be reached first. The accelerating rate of improvement suggested by
Fig. 3. Regional distribution of rural populations without reasonable access to safe water. 1975. (67 countries reporting).

Figure 1 should not lead to quick over-optimism. The greater costs of reaching poorer and more remote rural people, may come into operation sooner rather than later.

There are more reasons for caution. The reliability of the data collection in the WHO questionnaire surveys can vary considerably. The Mid-Decade Progress Report states, "The data obtained from this survey should be considered as order of magnitude estimates only." The data are also liable to two sorts of systematic error. First, the number of people with improved supplies may be overestimated because a national programme may assume that once an improvement has been provided it continues indefinitely to be available although this assumption may not be valid. An example can be cited from one African country where a number of new drilling rigs were purchased with the assistance of a capital loan from a bilateral aid agency. In compiling data on wells drilled, however, no provision was made for problems of rig or well maintenance, nor for the problem of
getting rigs into some villages because of lack of all-weather access roads. Hence there is a tendency to use the forecast number of wells as a basis for estimation and for it to be assumed that even when a well has been provided, water will continue to be available.

Second, and to some extent compensating for the first source of error, it is sometimes assumed that unless a village has been supplied with a water supply improvement through a national programme, no improvement has occurred, and that by definition the water used must be unsafe, inadequate in quantity or not accessible. This neglects the efforts that are sometimes made by communities to help themselves, or the assistance that they may receive from non-governmental bodies.

It would be cheering to say that these two sources of error in the statistics cancel each other out. They probably do not, and the likelihood is that the statistics suggest that the situation is in fact better than it is.

Even where improved water supplies are technically sound, and adequate provision is made for proper operation and maintenance, it does not follow that the number designated to be served will be an accurate reflection of what happens. If the improvement is successful with the local population, many more people may be drawn to a new source of water than anticipated. This can result in long queues for water and can interfere with the proper functioning of the system. More people may be supplied than anticipated, but the adequacy of the supply and eventually its safety may be jeopardized.

Where wells are constructed at widely scattered points people may be drawn from great distances to fetch water. This can result in excessively heavy use in times of drought or dry season, and little or no use when water is more abundantly available in more convenient but unprotected sources such as surface streams or ponds.

Where new or improved rural water supplies are properly maintained and operated and are well used by the local population, the situation may still fall short of the ideal. Often water has to be carried by bucket, kerosene can or traditional clay pot to the place of residence. Contamination can occur in transport or in the home, and thus offset the health benefits gained from high quality supply at the source. Such health benefits can also be diminished if improvements in water supply are not accompanied by simultaneous improvements in sanitation, especially in traditional practices of excreta disposal.

It has been widely observed that rural populations do not necessarily make use of improved sources of water. They may be too far away in the wet season relative to other more seasonal sources. They may not seem worth the effort of maintenance involved and they may not appear to offer significant advantages over traditional sources of supply. The reasons for the failure of rural water supply schemes are legion. Rural populations may object to the taste of ground water, they may dislike chlorination, or they may simply not wish to avail themselves of a source for a variety of other reasons such as contact with neighbours whom they prefer to avoid.

Even at the most optimistic levels it is clear that there are still in the order of one billion people living in rural areas of developing countries today who are forced to rely on unsafe sources of water, or else must spend hours of time and much effort in obtaining safe water for their daily needs. To reduce this number (which is constantly growing by natural increase) to practically zero at the end of the century will require a Herculean effort. There are grounds for optimism but not complacency.
2. Elements of a Global Programme

2.1. A Shared Responsibility

Responsibility for the improvement of rural water supplies is a shared one. It rests at the level of national governments; it rests with local leaders at the village, community and sub-national level; and it rests with the international community. No village should expect the task to be entirely undertaken from outside. There is no community so lacking in resources that it cannot do something to help itself. No national government need shoulder the burden without expecting help from those who will use the water, and all national governments can expect to call on the international community for assistance of various kinds, if they so wish.

2.2. Rural Is Not Urban

Rural water supply programmes deal with a fundamentally different problem than urban programmes. In urban areas wealth and population are highly concentrated. Usually funds can be raised to finance and operate a system that relies heavily on engineering and more or less costly technology. The system is professionally operated and maintained and the consumer is a relatively passive recipient who, more often than not, hopes to obtain water from his tap without worrying where it comes from or how it got there.

Rural populations are different. Dwellings are more widely scattered. The community is usually poorer than in urban areas in terms of cash flow. People live much closer to the natural environment, and the processes of the biosphere are much more significant and important in their daily lives. The source of the water, its taste, the location of the public outlet or supply, the nature of its construction and operation, the character of those responsible or in charge, and the symbolic or religious significance attached to parts of nature and society are all important elements in the relationship between man and water. Water percolates deeply into the social fabric and belief structure of most rural communities, and to attempt to manage it or change the habitual pattern of its use without a detailed knowledge of the community itself is to court frustration and failure.

A diagram listing some of the key elements in a rural water supply programme is shown in Figure 4. By the device of overlapping circles it is intended to convey the paramount importance of the relationship between the national programme and the community or local level, and their shared or common interests and responsibilities.

The gap is an extremely difficult one to bridge. The communications and common understandings are often greater between national programmes and external international or donor organizations than between national programmes and their own village communities. For this reason, in the larger developing countries a decentralization of the national programme is essential. Offices have to be created at the sub-national level where planning, management and evaluation activities can be based, and to serve as a centre for operation and maintenance facilities and the training of village level manpower in intensive short-courses.
2.3. Settlement Policy

It is important that strategies for rural water improvement be examined in relation to settlement policy and the aims of regional planning. Three types of situations can cause special difficulty. In some rural areas human settlements are not established on a permanent site, as in the extreme case of pastoral nomadic groups, or in others, such as those cases where a collection of human dwellings may be established for a few years to exploit the natural resources of a particular area, and then moved elsewhere when the resources are depleted. A second situation is that of rural depopulation, as occurs when traditional peasant agriculture is replaced by the growth of large commercial, co-operative or communal enterprises devoted to cultivation of cash crops. A third and common situation occurs when rural settlement is so dispersed that supplying any community services is impracticable. Community water supply, health clinics and schools all need a tributary population above a certain threshold level before their establishment can be considered.

It is for these reasons that a number of national governments in developing countries have found it necessary to embark upon policies of settlement concentration or the relocation of rural peoples to more concentrated and accessible communities. Often it is only in this way that they can be brought into the mainstream of development.

Rural water supply programmes can therefore involve improvements in well established communities, (bringing water to the people) or the relocation and regrouping of people on sites where water is available and can be readily developed (bring the people to water). The resistance of people to externally imposed relocation is well known. Sometimes the national development strategy may suggest that there are compelling reasons to
find ways of overcoming this resistance. Elsewhere protected wells, springs or surface catchments may be introduced to permit the retention of a more dispersed rural settlement pattern.

Whatever the national policy, it is important to recognize that investment in rural water supply and sanitation programmes, and rural settlement policy are intimately related.

2.4. At the Community Level

An essential requirement for the success of rural water supply improvement programmes is that the community itself has an opportunity to participate in all stages of a project, from preliminary discussion of needs and implications of change, through design, construction and operation and maintenance. [9] Where new supplies are imposed or provided to a community by a national authority without consultation or participation, the community has no sense of ownership or pride in the improvement and usually fails to develop an appropriate sense of responsibility. [8]

There has been some debate about whether water supply should be regarded as a universal human right or a good to be paid for. Sometimes the water-as-economic-commodity view has been seen as an obstacle to improvement since only communities that could afford to pay for an improved supply were considered eligible. This has led some to argue persuasively for the recognition of water supply as a basic human right. [7] Elsewhere the view of water as a universal right encourages local demands for free government services and provides an obstacle or an excuse for the failure of local communities to help themselves. [4]

There is no necessary conflict between the declaration of a universal human right and the expectation that some effort will be made to gain it. To declare the right of every human being to a safe supply of water for domestic purposes would establish a common ideal towards which rural peoples, national governments and the international community would work in collaboration. The declaration of a right is not the declaration of a gift, it is a call to rally to the support of a common goal.

Where a community is so poor in cash resources that it cannot afford to buy the materials needed to make an improvement in its water supply, these may be provided at a minimal level of design free of charge by the national programme under an explicit agreement in which the local community contributes labour and other services in kind and agrees to maintain the system. Individual house connections or a system design higher than a basic standard should be supported by direct cash contributions wherever possible.

At the community level the right sort of organization is vital; it should facilitate local participation in all stages of a project and should organize a local contribution in kind or cash or both. This may be difficult to achieve where motivation is lacking and where the benefits of improved water supply are not understood. Health education in personal and community hygiene has been sadly neglected in the rural areas and a major effort to expand and strengthen education in basic health and preventive medicine should accompany the water supply programme.
2.5. *At the National Level*

However well organized and willing the local communities may be, little can be achieved without a national plan, in which a water supply sector is included and accorded an appropriate budget priority. This requires the assembling of data on the existing situation and the preparation of a national strategy with specified targets and procedures, including engineering, management, research, financing, incentive programmes, manpower, and planning.

Little can be achieved without a firm commitment of political support at the highest level. Situations can arise in which rural water supply is recognized as an element in the national planning framework, and an organization is created, only to be so starved of funds and imaginative leadership that it cannot respond to the demands placed upon it.

A common difficulty experienced in water supply programmes is that at the national level responsibility is poorly defined and becomes highly fragmented among a number of agencies of government scattered in departments such as Health, Public Works, and Rural Development. Lack of co-ordination and the inter-agency rivalries created can form significant obstacles to orderly progress. This is the more so when sharp distinctions are made between urban and rural programmes. It is now frequently suggested that a single agency be created for water supply and sanitation, or at least that one agency should be given a clear leadership role and responsibility for co-ordinating the others.

It is important to recognize in this connexion that there are at least three sorts of rural water supply programmes. These are described by Donaldson and Pineo [5] for Latin America as: (1) a community well programme for the dispersed population; (2) a rudimentary aqueduct for semi-concentrated populations; and (3) a rural aqueduct programme for the concentrated and village populations.

It should be added that while a large proportion of the world's rural population may best be served by community systems of water supply, a substantial proportion of the people cannot be reached by community systems and must depend on improvements for individual households or very small groups of households. Programmes should therefore take account also of the need to stimulate, guide and support activities by individuals within a rural community as well as the more normal community systems requiring integrated design, construction, operation and maintenance.

Finance for national programmes is of course an extremely important factor. Nevertheless, it can be overrated. If an unlimited supply of funds were made available they could not adequately be used due to other constraints of manpower, equipment and organizational infrastructure. Indeed there are signs in some places that making too much money available too quickly can do positive harm. It can, for example, encourage reliance on external help and experience, and on higher-level technology for which spare parts are costly, and which may exceed the skills of available manpower both for normal operation and for maintenance. Furthermore it may exert pressure on programme directors to spend all available funds in any one budget year because not to do so is thought inefficient. Hence money can be hurriedly spent on poorly designed or inappropriate schemes. These dangers must be recognized.

While the availability of funds can be changed over short periods of time, the flexibili-
ty of manpower availability is much less, and longer lead time is required to build up skilled manpower for an expanded programme. Manpower needs differ. In some countries there is a shortage of professionally trained engineers. In others, engineers are available but middle-level technical manpower is in short supply. Elsewhere it is the basic skills of village plumbers and handy men that are most lacking.

It is clearly a responsibility of national programmes to develop their plans with manpower needs clearly in mind and to make provision well in advance for the training of appropriately skilled personnel. A deficiency in the past has often been that highly trained engineers are oriented to technologically sophisticated approaches which are beyond the capacities of the receiving communities to support or maintain. Specialized technical training should be organized to stimulate adaptability and innovation.

There has been growing emphasis in some countries upon integrated rural development as an approach to improvements of life and productivity in the countryside. It is highly desirable that water supply and sanitation programmes wherever possible be associated with such broad spectrum approaches. In so doing, it has to be recognized that the relationship of different components in the programme is flexible and may vary. For example, in some instances improvements in water supply will only follow in the wake of large programmes of community development or health education. Elsewhere water supply and sanitation may be the spearhead for larger and more sustained programmes of modernization in other sectors.

Rural water supply programmes have been characterized so far by an almost complete lack of research. [6] Too often technology, standards and criteria and the whole administrative and planning approach have been imported from abroad and applied in an unthinking way to quite different circumstances. There is an important role for research to play, especially in taking stock of recent experience and subjecting it to a searching assessment. Much of the information about the successes and failures of rural water supply programmes is anecdotal. Perceptive observations are mixed with excuses and the difference is not always apparent.

Research should not only be carried out at the national level. More than any other activity, it is one that can be carried out jointly at national and local levels. Communities can be organized to assess their own needs, to evaluate improvements and to measure changes in health and other variables. Research should not be a monopoly of the academy. Broadly defined it has a role to play at all levels, and the use of research at the local level can help to ensure that the lessons of experience are incorporated into everyday practice.

2.6. Common Interests

There is much to be learned about appropriate design standards for rural water and criteria and appropriate technology for rural water supply and sanitation programmes. These are areas which have suffered most for the extension of urban thinking into rural situations. It is much more important to create water supply improvements consistent with an incremental improvement in safety of supply or water quality and which is consistent with the communities’ aims and needs as it understands them, than to strive
for a sophisticated system in one giant stride forward which will not be effective because it will remain unused.

Sophisticated technology for rural areas in developing countries is often expensive in capital cost; demanding in skills required for operation and maintenance; and difficult to maintain because of the lack of local supplies of spare parts and the high cost of maintaining an adequate inventory. The technology employed may also be inappropriate because it fails to make use of local skills and labour and local materials and designers, and may actually displace some people from gainful employment which cannot easily be recaptured. In fairness to the field operator or project manager it must be said that there is little incentive to search for the new and innovative when there is no support to do so from the system generally, and to depart from accepted practice is to entertain severe risks of ridicule or worse.

In fact, the situation is far worse than simply a lack of innovation or adaptation to the needs and conditions of rural communities. Typically water supply programmes employ a wide variety of makes and styles of standard equipment. The inventory and maintenance problem is enormously more complicated because as many as a dozen designs of the same piece of equipment may be used in one project. This is serious enough in a large city when the whole system is within comparatively easy reach. Small wonder that rural schemes are often found not functioning and awaiting the delivery of some spare part that can only be obtained hundreds if not thousands of kilometers away.

Clearly an immediate and massive expansion of financial resources is neither possible nor desirable. Steady increases are needed at a level that can be sustained, and accompanied by efforts through appropriate designs and simplified operation, appropriate standards and criteria and simplified operation and maintenance approaches, to do much more with available funds.

Two common threads run through this discussion of national, community and common responsibilities. They are research and information. Research is needed at all levels to appraise and evaluate performance and to feed in suggestions for improvement. Disseminating the results of research is an important part of the information programme needed.

2.7. A Role for the International Community

The sort of action needed from the international community of organizations follows from the previous discussion.

1. External financial assistance is important but should not be thought of as a universal panacea. In particular it should be directed to support investigations, planning and simplified operation of the right kind of rural water supply programme for a country’s needs and not impose inappropriate technology or external ‘urban thinking’ in rural areas.

2. Assistance in the development of institutional infrastructure can be extremely valuable if directed to the sort of programmes needed for rural areas. In particular these should be directed to strengthening the links between national programmes and the community or villages level.

3. External assistance in manpower training is needed especially since a long lead
time is required significantly to expand availability of skilled manpower. Training is
needed not only at the professional level but also at the technical and sub-professional
levels down to and including the village-level operator and maintenance man.

4. External support for collaborative research has been pitifully small in relation to
the size of the capital expenditures. There are promising payoffs to be gained from research
studies of practically all elements of a rural water supply programme.

5. The international community has a special role to play in the generation, evalua-
tion and dissemination of information. Encouraging experience in one country or region
is rarely relayed in any detail to other places with similar problems. Rarely is information
evaluated or tested, it is just passed on. The difficulty of getting information in the right
form, the appropriate language and in sufficient detail, disseminated to precisely those
people who in various roles deal with rural water supply programmes at or close to the
‘grass roots’ level cannot be overestimated, but the challenge must be accepted.

3. Programme Suggestions

In the spirit of the Habitat Conference recommendation on community water supply,
Governments should give serious consideration (where they have not already done so) to
the following:

1. The establishment of rural water supply and sanitation programmes within the
national framework for development and with realistic standards for quality and quantity,
including the establishment of targets and the preparation of strategies to attain them.

2. The integration of rural water supply and sanitation activities in a co-ordinated
administrative structure, including sub-national centres where needed. The staff assigned
to these organizations could include a group of technicians, able to handle adequately the
planning, financing, and implementation needs for each rural region. They would imple-
ment the programme directly or would assist the communities in their implementation.

3. Daily water demand per capita, in rural areas, would be established and used as a
basic criterion for the installation of rural water supply units. In this respect national
‘data banks’ collecting information related to water demand and supply should be estab-
lished in each country, where these do not yet exist. Alternatively they could be estab-
lished at a regional level within the context of mutual co-operation between neighbouring
states. Where feasible the data bank would work in close co-operation with research
centres responsible for investigations on the use of appropriate technologies and adequate
equipment and on projections of rural water demand for each region.

4. The establishment of a sound financial plan to ensure adequate financial resources
for the programme, drawing where necessary on external financial assistance and using a
revolving fund approach where practicable.

5. The inclusion of rural water supply and sanitation programmes in schemes for
integrated rural development, and the development of a strategy in relation to national
settlement policy. These should encompass the construction of (a) community wells in
dispersed areas; (b) rudimentary aqueducts and sewerage systems in semi-concentrated
rural areas; and (c) aqueducts and sewerage systems for populations concentrated in
villages (urban programmes).
6. The assessment of manpower needs and the provision for associated training at all
levels, including health education at the village level.
7. The establishment of an ongoing research programme in collaboration with inter-
national, regional and community groups, especially to monitor and evaluate performance
and acceptability of contentious and innovative equipment.
8. The creation of an enhanced capacity to assemble, disseminate and receive informa-
tion pertaining to all aspects of the water supply and sanitation programme.
9. The establishment of communications and other links to the community or village
level, and the establishment of methods for developing community health education
programmes, facilitating local contributions and community participation in water supply
and sanitation schemes, and taking steps to strengthen local organization and the capacity
of communities to work as partners with national programmes.
10. Collaborate in regional groups with other national governments in the above
activities, especially in research, manpower training, information and the provision of
materials for health education.

With respect to activities at the international level, the organizations concerned could
take steps to:

(1) Organize themselves into a more effective and better co-ordinated force for the
promotion of the global effort in rural water supply and sanitation. This could be a-
chieved by the establishment of an effective co-ordination mechanism which might be
developed on the basis of the existing Ad Hoc Working Group on Rural Potable Water
Supply and Sanitation.

(2) Expand financial support commensurate with the needs and the capacity of
programmes to make effective use of funds, for all aspects of programme development
including engineering investigations, project studies, capital costs, manpower training and
health education, research and information systems.

(3) Collaborate with governments in the establishment or designation of a series of
international, regional and national centres for rural water supply to engage in informa-
tion transfer, research and testing, manpower training and health education.

(4) Collaborate with governments in a series of special studies designed to take stock
in a systematic way of past undertakings and to facilitate the development, testing and
incorporation of innovative ideas and approaches in demonstration or pilot projects.

If the men and women who are working to bring safe water to all, whether behind mud
walls in remote rural villages, or within the glass and marbled halls of Geneva, are to
have their faith strengthened and their optimism renewed, two steps should be taken,
both of which are practicable. First, it would be a source of encouragement if the
international community could adopt a ringing declaration that safe water is a basic
human right and that every effort will be made towards achieving this right for all the
human family, no later than the end of this century, and earlier if possible. Second, this
declaration should be given tangible support in two ways. UN organizations, bilateral aid
agencies and others, should co-ordinate their efforts. This co-ordination should then be
used to bring about the creation, under international auspices, of a new high calibre
research, training, and information centre. Such a centre should be built in a developing
country and in a region where such centres are now lacking.

Finally the aesthetic aspect of water must not be forgotten. In the villages and towns of Switzerland, the traveller’s eye is delighted by beautifully built fountains of flowing water, constructed at a time when water supply technology and the funds available for its use were both short of today’s resources. Artistic expression and creativity of a kind seldom seen today went into the design of public water outlets. It will be a hollow victory if in achieving safe water for all we neglect the fact that water can not only slake our thirst, and help us to keep clean and healthy; it can also replenish the human spirit.

Note

1 UNICEF = United Nations Children’s Fund
UNDP = United Nations Development Programme
UNEP = United Nations Environment Programme
IBRD = International Bank for Reconstruction and Development (World Bank)
WHO = World Health Organization
IDRC = International Development Research Centre
OECD = Organization for Economic Co-operation and Development

References