People’s Water and Sanitation Decade

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INTRODUCTORY EXAMPLES

In the village of Ban Huay Yang Tai located in Korat Province of Northeast Thailand, the village development committee has opened a small co-operative grocer store run by volunteer women who sell dry goods, simple but effective medicines and oral rehydration packets for treating diarrhea. Next to the room is a one-room well-built shed for storing rice. During hard times, village families can borrow needed rice and repay it after the harvest. Although such co-operative activities are not uncommon in Thailand, what makes it truly remarkable is that the funds for building and supplying the store came from profits made by the village development committee on the sale of water-seal latrine slabs and one cubic meter rainwater storage tanks. Every household has purchased its own sanitary latrine and enough jars to provide at least two litres of safe rainwater to drink to each member of the family per day. Moreover, the latrine and jar moulds, and finished products were made right in the village, and were based on designs developed in Thailand. Not too far away, sixth grade Thai schoolchildren are making similar rainwater jars and selling them to nearby villagers to earn money for their school development fund which includes health education and immunization programmes.

In the village of Belta in Tangail District of Bangladesh, five landless women have borrowed money from the Villager's Bank for purchasing cows, chicken, and a rice husking machine. With the money they have earned from the sale of milk, eggs and husked rice, they have purchased tubewells and pumps to provide their families with safe and convenient water. And, instead of walking long distances for water, they use their time earning money and lifting themselves out of poverty. These women and thousands more like them meet regularly with trained Bank workers to discuss family planning, disease prevention and other issues essential to their lives.

In the poor squatter's community of Baldia on the edge of Karachi, Pakistan, families are busy digging water-seal latrine pits, community drainage systems and are sending their daughters to ad-hoc neighbourhood schools for the first time. The schools are run by teachers who have received special training in sanitation and hygiene. These activities are being accomplished without government funds but with modest help from the University of Karachi, the local Junior Chamber of Commerce (Jaycees) with some technical support from UNICEF.

In Davao City in the Philippines and in Bandung, Indonesia, local charitable organizations have organized village families into self-help health programmes, have trained female volunteers in providing basic primary health care services, including improved household hygiene and environmental sanitation. In the village of Borobudwa in India, village people are actively assisting in testing the acceptability and affordability of water from community slow sand filters, which they have had installed by their own choice. In Bourkina Faso, in Omo State, Nigeria, in Kenya and in Tanzania, as well as countless other places, strong community self-help projects are under way with the goal of protecting health and well-being through improved water and sanitation systems.

As diverse as each of these activities are, they all have certain important features in common. Each has discovered innovative and locally effective ways of addressing their people's most serious health problem, the lack of adequate amounts of safe water for drinking and other uses, and the lack of safe ways of disposing of human wastes. The key to success in each instance has been to create meaningful opportunities for community residents to be a part of developmental activities which they see as being important to their lives and priorities. Top-down planning is absent. Over-emphasis on technical solutions to human problems has been avoided. Women play central roles in each of these projects. Finally, there are reasons to believe that community people involved in these activities will emerge with a greater sense of self-confidence and ability rather than feeling even more dependent upon outside experts and resources.

THE NATURE AND EXTENT OF WATER SUPPLY AND SANITATION NEED

The philosopher, Durkeim, once observed that there can be no understanding without comparison. Yet it is difficult to compare mankind's need for improved water and sanitation to its other great needs: peace, and freedom.
from poverty, hunger, greed, ignorance and pestilence. In many respects, inadequate water and sanitation systems is as demoralizing and dehumanizing as the absence of any of those basic needs.

It is difficult to imagine how much tragedy is implied by the fact that 30,000 people in developing countries die each day as a result of inadequate water supplies and sanitation. That is over 10 million people every year, year after year. Most are infants and children under the age of five. But many are older children about to enter their productive years. Parents of young children, community leaders, teachers: none are exempt from diseases associated with water. One usually thinks of cholera and typhoid fever, of amebic dysentery but can forget that the lack of clean water and sanitation is directly related to the spread of trachoma which damages the eyes of some 500 million people...., equivalent to the entire population of Europe. Consider 200 million people, equal to the entire population of the United States, with blood in their urine and their energy sapped from snail fever (called bilharziasis or schistosomiasis). Consider the nutritional damage resulting from three-quarter of a billion cases of several diarrhea among children whose health is already fragile, whose energy is already reduced by heavy loads of round worms, hookworms, tapeworms and other parasites common to people lacking adequate sanitation. And beyond this tragic toll of death, disease and disability are the endless hours of carrying buckets of water from distant sources on the head and shoulders of women who could be making other valuable community contributions, or carried by children who can't be spared from these labours to attend school.

A few statistics may help to explain these conditions. It has been estimated that 73% of rural Africans lacked safe drinking water in 1980. This danger is further compounded by the fact that 67% of them lack safe ways of disposing of human wastes. The obvious

<table>
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<th>Region a/</th>
<th>Population</th>
<th>Water supply</th>
<th>Sanitation</th>
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<tr>
<td></td>
<td>1980</td>
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<td>1980 Number</td>
</tr>
<tr>
<td></td>
<td>1983</td>
<td>1983 Number</td>
<td>1983 Number</td>
</tr>
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<td>Urban</td>
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<td>89</td>
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<tr>
<td>Total</td>
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<td>Asia and the Pacific (Economic Commission for Asia and the Pacific) b/</td>
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<td>Urban</td>
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<td>277</td>
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<tr>
<td>Rural</td>
<td>124</td>
<td>52</td>
<td>25</td>
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<td>Total</td>
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<td>235</td>
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<td>Urban</td>
<td>27</td>
<td>25</td>
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<tr>
<td>Rural</td>
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<td>Total</td>
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<td>Urban</td>
<td>824</td>
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<tr>
<td>Rural</td>
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<tr>
<td>Total</td>
<td>2,367</td>
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Sources: 1980: report of the Secretary-General concerning the Decade (A/35/367); 1983: WHO surveys (see para. 8 above).

a/ No comparative data are available for the region of the Economic Commission for Europe.
b/ Excluding China.

Table 1: Service coverage by region in 1980 and 1983 (Population in millions)
result is that such wastes are washed right back into ponds, and open wells/streams used for drinking. In the three years from 1980 to 1983, the proportion of rural African with safe waste disposal declined from 20% to 18% as a result of population growth. In rural South-East Asia, excluding China, these figures were 11% and 9%.

Sixty-six percent of rural people lacked safe water in 1983 and 91% lacked safe waste disposal. Resources are greater in urban areas where somewhat less than three-fourths of the people have safe water and half are protected by waste disposal systems (Table 1). But sanitary conditions there are worsening as people are forced to leave the land and crowd into cities to seek a livelihood.

THE DECADE RESPONSE

The importance of safe water and sanitation to human well-being is certainly no new discovery. As early as 2400 B.C., the people of the Sind, in present-day Pakistan, built cities like Moenjodaro which had pour flush toilets, covered town drainage, public baths and zoning regulations. Hippocrates observed in 400 B.C. that water contributes much to health, and the ancient Romans trained forerunners of today’s sanitarians as health inspectors. But it was not until 1972 at the UN Conference on Human Environment held in Stockholm that worldwide attention was given to the urgent need for improvements. Later conferences such as Habitat and the UN Water Conference of 1977 in Mar del Plata, Argentina lead directly to the launching of the UN International Water Supply and Sanitation Decade as of 1981. Also of great significance was the International Conference of Primary Health Care held in Alma-Ata in 1978 which recognized safe water and basic sanitation as necessary for achieving health for all.

In the years which have ensued since these conferences were held, some remarkable progress has been made. Over 60 nations have prepared specific water supply and sanitation plans. Another 30 are in the process of preparation. Bilateral assistance for water supply and sanitation has increased from only 1-2% in the '70's to over 7% now. World Bank loans sharply increased to over $810 million by 1983, while the U.N. Development Programme, the World Health Organization, UNICEF and other multi-lateral and bi-lateral agencies have also responded to the Decade's challenge as witnessed by Table 2. On the UN-side, the Steering Committee for Co-operative Action for the Decade is developing into an action stimulating body which by some is being seen as a good example of adequate co-ordination amongst programmes of the United Nations Organization.

But what is more important - and in my view the impact of the Decade should be measured by those facts - in country after country... Brazil, India, Malawi, Haiti, Nigeria, Mali, Senegal, Sri Lanka and many more, major new programmes are under way. Programmes in many cases with a new approach, a new thrust which at present is being discussed and developed between the country governments and external support agencies (ESA's). A general awareness and agreement begins to develop, that three components of that new thrust are particularly important:

(i) Institutional Development: The water supply and sanitation sector institutions are limited in the amount of activities they can handle, due to constraints in their organizational structure and availability of own resources, funds and manpower. New and existing installations need to be maintained regularly. The generation of national funds through cost recovery, at least partially, is a vital step in ensuring operation and maintenance and the sector's viability. Therefore, if sector investments are to reach the objective of improved service coverage, it ought to be kept in mind that the institution's capacity needs to be developed in advance of construction projects;  

(ii) Co-ordination of Assistance to the Water Supply and Sanitation Sector: In the present economic world environment, the flow of external funds to the water supply and sanitation

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<tr>
<td></td>
<td>(in millions of US Dollars)</td>
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<tr>
<td>Bilaterals</td>
<td>2 419.0 (242)</td>
<td>715.3 803.5 (x3.3)</td>
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<tr>
<td>Development Bank and Funds</td>
<td>2 200.0 (220)</td>
<td>450.0 500.0 (x2.3)</td>
</tr>
<tr>
<td>World Bank</td>
<td>2 850.0 (285)</td>
<td>631.0 641.5 (x2.3)</td>
</tr>
<tr>
<td>United Nations</td>
<td>370.0 (37)</td>
<td>145.0 150.0 (x4.0)</td>
</tr>
<tr>
<td>Non-Governmental Organizations</td>
<td>300.0 (30)</td>
<td>110.0 130.0 (x4.3)</td>
</tr>
<tr>
<td></td>
<td>8 139.0 (814)</td>
<td>2 051.3 2 225.0 (x2.7)</td>
</tr>
</tbody>
</table>

Table 2: Distribution of external support in the first year of the Decade
sector may not increase substantially in the foreseeable future. Nevertheless, external support agencies can help in optimizing the impact of limited funds, by co-ordinating among themselves and with government authorities their approach to the sector's development, thus streamlining their activities through co-ordinated support of recipient governments' sector policies;

(iii) Decade approaches: The focus of water supply and sanitation sector investments needs to shift from the traditional project approval to more cost-conscious, socially adapted programmes. Therefore, particularly the following so-called Decade approaches need emphasis:

- complementarity in developing water supply and sanitation;
- strategies giving precedence to under-served rural and urban population;
- programmes promoting self-reliant, self-sustaining action;
- socially relevant systems that people can afford;
- community involvement at all stages of project implementation;
- association of water supply and sanitation with relevant programmes in other sectors, particularly with primary health care, concentrating e.g. on health education, human resources development, and the strengthening of institutional performance.

The judgement of the impact of the Decade so far depends on which questions are being asked. The most important ones seem to be:

- are better approaches being developed, leading to more lasting and used facilities?
- are the benefits of water and sanitation being more appreciated and are facilities more desired by the people concerned?
- do the governments assume more commitment regarding water and sanitation, including the allocation of internal resources?
- do international agencies and bilateral donors take an increased interest in the sector?

The overall assessment based on the answers will undoubtedly depend on who does the assessment based on the answers will undoubtedly depend on who does the assessment. A point of fact is that the answer to all questions 'yes' in varying degrees. There perhaps lies the danger. Developments and actions may show a positive trend, but may not be enough in the long run. The more reason to forcefully pursue the three components aforementioned. It is up to all of us whether the Decade's present judgement will in the end lead to a self-filling prophecy uphill or downhill.

WHAT MATTERS IS PEOPLE

At IRC the initial focus was on urgently needed technology, including handpumps, slow sand filters, public standposts and water quality. At present we are increasingly involved in the more human side of the Decade. That, in my view, is the other major impact of the Decade: new thinking and the development of alternative strategies. It is therefore that we and many others - in particular in the developing countries themselves - are involved in such issues as local participation, and questions as: how can women play more effective roles. At the IRC we are also concerned that valuable lessons learned over the years are not being disseminated to where they are needed and in usable forms. A programme for exchanging and transferring information has been initiated through a network of regional and country information points. Knowledge is also generated and transferred through demonstration projects, training activities and evaluation programmes. They include such aspects as human resources development, operation and maintenance, local financing, and, increasingly, strengthening of community participation in water supply and sanitation activities.

Community participation promised to be one of the most exciting and valuable of our undertakings as we and our colleagues throughout the world seek to achieve the goals of the Decade. It is no accident that UNICEF, WHO, as well as the IRC and countless other agencies and governments are beginning to realize that effective community participation is an indispensable pre-requisite for the attainment of their goals. The reasons for this are many. First and foremost, it has been estimated that the investments required to achieve the Decade's goals can range from $300-600 billion dollars, depending upon levels of technical sophistication. An average of $30 billion dollars per year for ten years is far more than is now being spent. Demand for scarce development dollars come from many quarters ... the military, agriculture, education, medical and others. Several droughts in 24 African countries, swelling numbers of refugees, unending wars within and between nations, economic upheavals, all draw heavily upon the world's scarce resources for development. To achieve the Decade's goals, people in the villages, town and cities of the developing nations will need to contribute their own resources, labour, sand, gravel, time and dedication. They must be counted on to volunteer their efforts, provide leadership, lubricate pumps, drain ditches, install their children with hygiene habits, protect their food from flies and contamination, understand the dangers of human wastes, use oral rehydration therapy when diarrhea strikes, use effective medical techniques and so forth. Governments do not have and never have had the resources to "give" health.

They can only offer modest leadership and some
They can only offer modest leadership and some technical support to enable people to make healthful sanitary practices their way of life. By participating as full partners in Decade activities, villagers and town people will have better opportunities for understanding complex relationship between what they do and the health for their families.

They will have opportunities to experience improving their own lives in a way which can lead to even broader development in other vital areas such as irrigation, agriculture, education and animal husbandry. They can discover new feelings of independence and a new sense of control of their lives, of power over their futures. They can assure that what is done is what they want to have done, not what some well-meaning official says ought to be done. They can draw upon their own skills, knowledge and insights which has helped them to survive over the generations.

There are dangers in placing so much hope in community participation. Government leaders shirk their own responsibilities for village improvements while continuing to spend their nation's resources on the needs of urban residents. They might not fully appreciate that community organization and education are complex and time-consuming processes which will require greater sensitivity, understanding and patience. They may find it painful to give up rigid bureaucratic practices and offer the kind of flexibility which a partnership requires. Most important of all, officials may be slow in realizing that community participation must mean more than simply allowing communities to select a spokesman or to decide who in the village will help to dig a ditch or who will donate land for a well. Rather, it implies a full sharing of decision-making power over such key issues as what will be done, when, by whom and under what circumstances.

Fortunately, water and sanitation people are not alone. Expectations for community support and participation are exactly the same as those discussed by primary health care planners, that is, full participation by each community in planning, implementing and evaluating all programmes intended to improve community health and well-being.

CONCLUDING REMARKS

In light of the importance being placed on community participation in water supply and sanitation programmes, and on the occasion of its 15th anniversary in 1984, the IRC held a Symposium in Amsterdam attended by invited social scientists, engineers, primary health care specialist, and many others from thirty-five nations. Half of the participants were women, and issues related to the role of women had strong emphasis. Some of the concerns and suggestions which emerged from the Symposium's intensive workshop are the following.

First, the participants were not satisfied with amounts of resources allocated for human resources development, community organization and education when compared to money spent on technology.

Second, new policies are needed which would re-allocate a greater proportion of funds for sanitation, since improved water is essential but not usually sufficient for preventing diseases associated with poor environmental sanitation.

Third, as far as the role communities can play it is imperative that they have meaningful involvement as full partners in all stages of planning, implementing, managing and evaluating improved water supply and sanitation. Tokenism is short-sighted and can only lead to frustration. Along this vein, careful community planning is needed to promote financial viability over time. Such planning must influence decisions about appropriate technology, revenue collection schemes, and how revenue is to be used for further community development. A positive attitude on the part of national and local authorities including non-governmental agency representatives, is a basic pre-requisite but one which does not often come easily.

Fourth, given the limited financial capacities of both governments and local communities to rapidly expand and improve their water and sanitation systems, innovative methods must be found for generating urgently needed resources over long periods of time. The cases of the People's Bank in Bangladesh and of Thai village committees and school making and selling water and sanitation products, referred to in my introductions, are only two examples of imaginative solutions. Others must be found, including greater use of the private sector.

Fifth, there must be a strive for agency participation in community projects rather than the other way around. It is up to each community to judge whether available technology is socially acceptable and financially affordable. The time has long past when such decisions can be made on the basis of engineering assumptions, experiences in distant places, or what happens to be available from donor agencies.

Sixth, women must be given far more central roles in all aspects of water supply and sanitation improvements. This included not only inclusion on planning committees, but making whatever provisions are needed to assure that they are fully able to contribute. Holding
meetings at times convenient to women, includ-
ing them in labour-intensive activities, sharing financial planning and revenue collec-
tions responsibilities, using their services as both volunteers and staff, and many other possibilities must be explored if the goals of the Decade are to be met.

And, finally, knowledge attained by people like yourself who represent the engineers, doctors, sanitarians, public health organizers programme planners, and many others must be shared more widely. The needs are far too great and the resources far too small for us to have to repeat each other’s mistakes or re-discover effective approaches. The poet, Gibran, once said:

"And when one of you falls down,
he falls for those behind him,
a caution against the stumbling stone.

And he falls for those ahead of him,
who though faster and surer of foot,
removed not the stumbling stone."

REFERENCES

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