UNICEF Strategies in Water and Environmental Sanitation

Stratégies de l’UNICEF en matière d’approvisionnement en eau et d’assainissement

Estrategias del UNICEF en Materia de Abastecimiento de Agua y Saneamiento Ambiental
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The pace of efforts in the field of water supply has increased in the 1990s, with some 780 million people gaining access between 1990 and 1994. Each year, almost 200 million people are now gaining access to safe water. The costs of providing water have fallen sharply in recent years. This is encouraging news — for the health of children and families; for the girls and women who must dedicate large amounts of time and energy to finding and carrying water; and for overall economic and social development.

But today, approximately 1.2 billion people — in both rural and urban areas — still do not have access to clean water. Africa is the region most in need, although millions of people in Asia and Latin America also lack access. And progress in providing adequate sanitation not only continues to lag, but it is estimated that by the end of the century a greater percentage of the world population will lack this essential service than at present.

Clean water and safe waste disposal — something most people take for granted — remains a life-and-death problem in much of the world on the threshold of the 21st century. This is both morally and practically unacceptable, for such extreme and widespread deprivation in parts of the global village affects us all.

Fortunately, there are affordable solutions at hand. The strategies described in this booklet reflect what works in the field of low-cost water and environmental sanitation. More than technological “fixes”, they represent sustainable, people- and community-centered solutions. Based on several decades of rich field experience in Africa, Asia and Latin America, they were developed over a period of nearly two years and approved by the UNICEF Executive Board at its Annual Session in May 1995.

The strategy paper presented to the UNICEF Executive Board was prepared through a broadly participatory process, involving close consultation between UNICEF headquarters and field offices, government counterparts and non-governmental organiza-
tions, donors, UN agencies and leading technical experts. Drafts were shared, discussed and refined in global meetings, regional workshops and expert consultations in New York, Bangalore, the Hague and other cities. The final Decision, contained in Chapter VI, reflects a wealth of collective local and global experience in the water and environmental sanitation sector. We believe it represents “state of the art” thinking on the most cost-effective ways to empower families, communities and nations to gain access to the safe water and adequate sanitation that are so necessary for individual, local and national development.

The challenge ahead for UNICEF is to translate these strategies into measurable and accelerating progress on the ground, with the continued support and collaboration of donors and sister agencies, partners, national governments and communities. I trust that this booklet will be useful to UNICEF staff and partners who are on the front line of efforts to attain universal access to safe water supply and environmental sanitation. The strategies are not intended as rigid, immutable blueprints — they are instead a form of guidance, a generic framework to adapt and use in the process of developing regional and country specific actions. We thank all those who participated in the drafting of this document and hope it provides encouragement for the important challenges that lie ahead.

Carol Bellamy
Executive Director
United Nations Children’s Fund
18 July, 1995
UNICEF Strategies in Water and Environmental Sanitation*

Summary

The overall objective of UNICEF in water and environmental sanitation is to contribute to child survival, protection and development by supporting efforts to achieve universal access to safe water supply and environmental sanitation services, as a basic right, in line with the goals of the World Summit for Children and by promoting the behavioural changes essential to realize the full benefits from such services.

The present report details the strategies to be followed by UNICEF in assisting Governments and communities to achieve their goals in water supply and environmental sanitation, building upon the lessons learned and experiences of the past while responding to changing needs and challenges. It provides an overall framework for country programming which countries can adapt to their particular situations.

Chapter I, which describes water as a basic right and central to sustainable development, summarizes the scope, purpose and process of developing the present strategy report. Chapter II sets the strategy within the global context, reporting on the lessons learned and the challenges remaining. The UNICEF contribution in the sector is detailed in chapter III, while chapter IV describes UNICEF programme strategies. Chapter V describes the implications for UNICEF, including staffing, organizational structures, the choice of partners and funding. The recommendation by the Executive Board is contained in chapter VI.

*As presented to the UNICEF Executive Board Annual Session in May 1995 (Document E/ICEF/1995/17, issued 13 April 1995) and as adopted by the Executive board with Decision 1995/22.
I. Background and Overview

“... As we go about our work, let us not forget for a single instant that 13 million children will die again this year — 35,000 again today — of causes, including poor water and sanitation, that are now largely preventable. Let us not forget this obscenity as we go about our daily lives, as we set our priorities, as we allocate resources, as we relate to our neighbours and families, as we relate to ourselves in our quiet moments of self-reflection. The world’s children are looking to us for something better, something that will give them — and us all — a better future. And they cannot do it without water and sanitation.”

(James P. Grant at the Ministerial Conference on Drinking Water and Environmental Sanitation: Implementing UNCED Agenda 21, Noordwijk, Netherlands, 1994)

A. Water and sanitation: a basic right

1. Water is life. It is a basic right of all human beings to have access to clean water and sanitation at an affordable price. Water and sanitation are crucial to the UNICEF mandate to promote the survival, protection and development of children.

2. Lack of clean water, inadequate sanitation and poor hygiene practices are among the underlying causes of child deaths and illness from disease and malnutrition. At the beginning of the 1990s, about 1.3 billion people in rural areas, cities and peri-urban slums of developing countries lacked access to safe water and 1.9 billion had no access to appropriate sanitation. Women and girls, who face the gruelling chore of fetching water in most cultures, often have to walk long distances, sometimes more than five kilometres, for water that may or may not be safe. They can ill afford to expend the calories that this effort takes, and they are left with less time and energy to care for their children, to participate in social activities, to attend school or adult education classes and to meet other social needs or responsibilities. Furthermore, the poor in many non-serviced urban areas pay as much as 20 to 30 per cent of their income for small quantities of water of poor quality, while those who are better-off often have plentiful supplies of cheap water.

3. In 1980, the United Nations General Assembly proclaimed the period from 1981 to 1990 as the International Drinking Water Supply and Sanitation Decade (IDWSSD), with the goal of achieving universal access to water
and sanitation in developing countries. Individual countries determined their own definition of “access” which, with regard to water, was often taken to mean the availability of at least 20 litres of safe water per person per day at a source within one mile (1.6 kilometre). Access to sanitation was understood to mean the safe disposal of excreta and waste. Although 1.2 billion people gained access to water supply and 700 million to sanitation during the decade through intensified national efforts and international cooperation, progress fell far short of the goal of universal access.

4. At the World Summit for Children in 1990, an historic promise was made to promote the survival, protection and development of children. This included the setting of goals to achieve safe water and sanitation for all by the year 2000. As of 31 March 1995, 166 countries have endorsed the World Summit goals and over 100 have prepared national programmes of action (NPAs) to achieve them, adapting them to national circumstances.

5. The Convention on the Rights of the Child, a landmark human rights legislation which set standards for better legal and social protection for children, was adopted by the United Nations General Assembly in 1989. Already the most widely ratified of all United Nations human rights conventions, the Convention recognizes the right of the child to enjoy the highest attainable standard of health. Article 24 of the Convention specifically urges countries to take appropriate measures to combat disease and malnutrition within the framework of primary health care (PHC). This requires, “among other things, provision of clean drinking water and sanitation services”.

B. Water and sanitation: central to sustainable development

6. In 1992, the United Nations Conference on Environment and Development (UNCED) emphasized the importance of integrated water resources development and management, the protection of water resources, universal access to drinking water supply and sanitation, and management of water for sustainable food production and rural development. The “Earth Summit”, as it was known, concluded in its Agenda 21 that development today must not undermine the developmental and environmental needs of present and future generations and that it must be human-centred. It also was recognized that human health and well-being depended on a healthy environment, including clean water, sanitary waste disposal and an adequate supply of food.
7. The World Summit for Social Development (WSSD), held in March 1995, underscored the fact that the condition of over 1 billion people in absolute poverty is characterized by the deprivation of basic human needs, including that of safe drinking water and sanitation facilities. It urged that in formulating strategies for alleviating poverty and eradicating absolute poverty, Governments and the international community should implement the commitments that had been made to meet basic human needs, including the provision “on a sustainable basis, access to safe drinking water in sufficient quantities and proper sanitation for all”. (See figure I below for expressions of international consensus on safe water supplies and environmental sanitation.)

C. The scope, purpose and process of developing the present strategy report

8. The present report details the strategies to be followed by UNICEF in assisting Governments and communities to achieve their goals in water supply and environmental sanitation, building upon the lessons learned and experiences of the past while responding to changing needs and challenges. The report provides an overall framework for country programming which countries can adapt to their particular situations.

9. The process of developing the present strategy report began in April 1993 with a workshop on “Planning for health and socio-economic benefits from water and environmental sanitation programmes” held at UNICEF headquarters, New York. In March 1994, UNICEF organized a global meeting of water and environmental sanitation (WES) professional staff at Bangalore, India, which brought together over 130 participants representing UNICEF field offices, headquarters, government counterparts, non-governmental organizations (NGOs), donors and other major international partners. The meeting considered the policy and technical issues of expanding water supply and environmental sanitation services and improving hygiene behaviour in the context of the diversity of situations in different regions. A consultation was held at the Hague, Netherlands, in March 1995 with representatives of a number of developing countries, partner agencies and donors on the draft prepared. The participants took advantage of this UNICEF initiative to discuss strategies and priorities in the sector as well as the issues of collaboration and coordination among the external support agencies. The suggestions and comments have been incorporated in the present report.
Figure 1

Expressions of International Consensus

“All peoples, whatever their stage of development and their social and economic condition, have the right to have access to drinking water in quantities and of a quality equal to their basic needs.”

(United Nations Water Conference, Mar del Plata, 1977)

“All for some rather than more for some.”

(Global Consultation on Safe Water and Sanitation for the 1990s, New Delhi, 1990)

“... this Plan of Action calls for concerted national action and international cooperation to strive for achievement, in all countries, of the following major goals for the survival, protection and development of children by the year 2000: ... Universal access to safe drinking water and to sanitary means of excreta disposal ...”.

(Plan of Action, World Summit for Children, 1990)

“... it is vital to recognize first the basic right of all human beings to have access to clean water and sanitation at an affordable price.”

(Dublin Statement, International Conference on Water and the Environment, Dublin, 1992)

“Safe Water Supply and Environmental Sanitation are vital for protecting the environment, improving health and alleviating poverty. Safe water is also crucial to many traditional and cultural activities.”

(Agenda 21, UNCED, Rio de Janeiro, 1992)

“States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health ... shall pursue full implementation of this right and, in particular, shall take appropriate measures:

... to combat disease and malnutrition, including within the framework of primary health care, through inter alia, the application of readily available technology and through the provision of adequate nutritious food and clean drinking water, taking into consideration the dangers and risks of environmental pollution;

... to ensure that all segments of society, in particular parents and children, are informed, have access to education and are supported in the use of basic knowledge of ... hygiene and environmental sanitation ...”.

(Article 24, Convention on the Rights of the Child)
10. The present strategy report takes into consideration the findings and recommendations of the 1992 multi-donor evaluation of UNICEF WES programmes. It builds on the lessons learned during IDWSSD and draws on conclusions and recommendations from several key international forums, including the Global Consultation on Safe Water and Sanitation for the 1990s, New Delhi, India (1990), the International Conference on Water, Dublin, Ireland (1992), UNCED, Rio de Janerio, Brazil (1992) and the Ministerial Conference on Drinking Water and Environmental Sanitation: Implementing UNCED Agenda 21, Noordwijk, Netherlands (1994).

II. The Global Context, Sector Status and Lessons Learned

A. Global context

11. This strategy is set within a broader framework of development at the middle of the last decade of the millennium. Overall, the situation is not a promising one for the poorer people of the world. World population is expected to increase by almost 1 billion in the next 10 years, with the bulk of this population growth taking place in the areas and among the groups that currently lack basic water and sanitation services. Many countries, particularly in Africa, are affected by slow or even negative economic growth and the stresses of structural adjustment. There is great pressure to reduce government expenditure, creating increased competition for the scarce resources available. At the same time, overseas development assistance, which had hitherto been fairly steady, has declined in the last two years. The victims of this situation are frequently the social service programmes that serve the poor and the vulnerable.

12. The water and sanitation sector has been the subject of major reviews in recent years. High costs and low efficiency and reliability have characterized public utility services across much of the developing world. New trends seek to strengthen the autonomy of supply institutions through commercialization, achieved in many cases by privatization. While privatization may bring many benefits in terms of incentives for efficient service delivery, it is not necessarily a comprehensive solution and risks further marginalizing the poor. First, there are few incentives to reach out to informal settlements in peri-urban and rural areas. Low incomes and limited “voice” mean that the
poor can bring little pressure to bear. Second, privatization, particularly in monopoly services, has brought to the fore the need for the regulation of price and service quality, with special consideration to the prices and service levels for the poor. Good governance is a prerequisite for effective regulation, and in many parts of the world this remains weak.

13. Moreover, in recent years, and particularly in the follow-up to UNCED, increasing attention has been paid to comprehensive water resources management within the framework of sustainable development. Comprehensive water resources management includes the rational intersectoral allocation of water, taking into account its economic value, control of withdrawals from aquifers and demand management measures to conserve water, as well as pollution controls to protect water quality. Capacity-building, including the development of appropriate institutions, and the adoption of appropriate economic and regulatory instruments are central themes in achieving those goals. There are implications for the poor which require attention and are at risk of being neglected. First, it is essential to ensure equity in the provision of water and waste services as the lack of such services is among the most serious environmental problems that affect human society today, with potentially even more serious repercussions tomorrow. Second, rural and peri-urban communities can play a key role in acting as guardians of their own “water environment”, conserving and protecting the resource for the benefits of their children and future generations. Community management of the “water environment” is a powerful application of the principle of “think globally and act locally”.

B. Water and sanitation for the poor: coverage and investments

14. UNICEF support for water supply and sanitation started in the late 1960s as a response to drought emergencies. Since then UNICEF has supported government programmes for the provision of a minimum level of water supply and sanitation for those most in need. This, at the early stage, involved primarily the rapid drilling and installation of boreholes with hand-pumps in rural areas. In the late 1960s and 1970s, UNICEF and donor assistance diversified into relatively large-scale national water programmes, including the provision of sophisticated drilling rigs and equipment, gravity-fed systems, protected springs and wells, and upgrading of traditional water sources in rural areas.
15. Increasing awareness of the need for sanitation, hygiene education, improved community participation and national capacity-building, and greater emphasis on the central role of women became important features of programmes during the 1980s. Also, during the last two decades, improving cost-effectiveness to make access to services affordable for all was a growing concern. Efforts in research, development, field testing and technology transfers led to substantial reductions in per capita cost in both capital installations and operations and maintenance.

16. According to World Health Organization (WHO) estimates, (“The International Drinking Water Supply and Sanitation Decade - End of Decade Review”, 1990), global efforts during IDWSSD resulted in an additional 1.2 billion persons gaining access to water supply and 770 million to sanitation (see figure II below). Yet, in 1990, one quarter of the people in developing countries remained without access to safe water and one third lacked safe sanitation. While much progress has been made in Asia and Latin America in water supply coverage, sub-Saharan Africa in particular remains...
in need of enhanced national efforts and external support (see the annexes). In the case of sanitation, both Asia and Africa are far from reaching universal access.

17. WHO estimates that during the 1980s, an average of approximately $13 billion was spent annually in developing countries for water supply and sanitation; of this, only one quarter was spent in rural areas. On average, Governments contributed about 65 per cent of the total, with external agencies providing the remaining 35 per cent.

18. Of approximately $3.5 billion per year spent in rural areas of developing countries in the last decade (of which only about $1.2 billion was in sub-Saharan Africa, South-East Asia and Latin America) the UNICEF contribution, primarily in low-cost rural systems, averaged $65 million per year (excluding emergencies), which was less than 2 per cent of the total investment. However, with an emphasis on low-cost approaches, UNICEF contributed directly to the provision of water supply to an estimated 165 million people and of sanitation to 28 million people. That represents approximately 14 and 21 per cent of the additional total and rural coverage, respectively, achieved in water supply, and 4 per cent of additional total coverage in sanitation. This demonstrates the catalytic effect of UNICEF support to the sector. In the period 1990-1994, UNICEF support increased to an average of $81 million per year, excluding emergencies, as shown in the table below.

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-emergency</th>
<th>Emergency</th>
<th>Total</th>
<th>WES</th>
<th>WES as % of total UNICEF expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General resources (GR)</td>
<td>Supplementary funding (SF)</td>
<td>Total (In millions of US$)</td>
<td>Total WES (In millions of US$)</td>
<td>UNICEF expenditure</td>
</tr>
<tr>
<td>1980-1984 a/</td>
<td>N/A</td>
<td>N/A</td>
<td>58</td>
<td>N/A</td>
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<td>1985-1989 a/</td>
<td>N/A</td>
<td>N/A</td>
<td>65</td>
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</tr>
<tr>
<td>1990</td>
<td>34</td>
<td>48</td>
<td>82</td>
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<td>48</td>
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<td>1994</td>
<td>37</td>
<td>44</td>
<td>81</td>
<td>37</td>
<td>118</td>
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</tbody>
</table>

N/A = not available  

a/ Average  
b/ Percentages are of programme expenditure, excluding emergency expenditure
19. Most of the past investment has favoured better-off urban areas, primarily providing high levels of service at costs as high as $550 per capita for water supply and sanitation, which are rarely fully recovered. In stark contrast, appropriate technologies in rural and peri-urban areas costing less than $30 per capita can extend rapid coverage to a much larger population.

20. To achieve universal coverage by the year 2000, taking into account projected population increases, roughly 2.2 billion people have to be provided with water supply and 2.9 billion with sanitation (of which about 1.7 billion and 2.2 billion people, respectively, are in rural and peri-urban areas).

21. Preliminary data on the trend in the expansion of water and sanitation services between 1990 and 1994 (WHO/UNICEF, Joint Monitoring Programme (JMP), 1995) suggest that the average rate of improvement in coverage in all geographic regions has been no more than 1 per cent per year, thus not keeping up with population growth rates. It is clear that “business as usual” — continuation of the same policies, strategies, funding levels and implementation rates — will not even keep pace with the population that needs to be served by the year 2000 (see figure II above). Clearly a higher level of effort is required to face the challenge of universal coverage.

22. Given the magnitude of the unfinished task, achieving universal access to water and sanitation in the remaining years of this decade in the majority of developing countries, and laying the foundation for achieving the goal in others early in the next decade, will require a determined acceleration of efforts backed by political will and appropriate strategies. First, the lessons from past experience have to be taken to heart regarding lower-cost approaches to reach the largest numbers; second, national and international priorities have to be shifted to promoting and supporting these approaches; and finally, commitments have to be made by national Governments and donors to reallocate existing resources and raise additional resources in order to reach the unserved populations in rural and peri-urban areas. As shown in the annexes, among 80 developing countries, less than one half of the population in 31 countries had access to clean water in 1994, and only in 29 countries did 70 per cent or more of the population enjoy this service. On the positive side, the data also show that several low-income countries, including Bangladesh, Burkina Faso, Cuba, India and Mauritania, exercising political will and adopting appropriate priorities and
strategies, achieved a high rate of coverage and are on their way to meeting the goal of universal access by the year 2000. The coverage rates for sanitation, however, are generally lower, except in 16 countries where priority has been given to this area.

23. UNICEF estimates that, with the adoption of low-cost technologies and cost-effective reforms in Africa, Asia and Latin America — areas where the greatest efforts are needed — an additional amount of $5 billion per year, with two thirds raised by developing countries in part by reallocating budgets for water and sanitation, and one third provided from external assistance, will be needed for a period of 10 years to reach the unserved in rural and peri-urban areas with water supply and sanitation services. The “20/20” concept, which has been endorsed by WSSD, giving priority to essential social services by Governments and donors in the allocation of funds, provides a realistic basis for mobilizing the necessary resources.

C. Lessons learned

24. International consensus, as well as UNICEF programme experience, provide a wealth of lessons for guiding policies, plans and actions in the future. Some of the key lessons learned by the sector in seeking to extend services to the poor and achieving the goals are summarized under four major programme concerns in figure III below.

Achieving universal coverage

25. Governments need to focus specifically on the goal of universal access to water and sanitation and to establish the process for developing, implementing and monitoring actions towards these goals. Setting national goals for achieving universal access provides a strong momentum to national and global efforts. Goal setting, implementation and monitoring have been found to be effective mechanisms in countries such as Bangladesh, Burkino Faso and India, which have accelerated coverage in water supply despite low per capita incomes. The NPA provides a framework for setting goals on a country-by-country basis as well as a process for implementing and monitoring their achievement.

26. Governments need to focus more on promotion, facilitation and coordination of services rather than merely on their provision. Extended and
Summary of Lessons Learned

Achieving universal coverage:

- Governments need to focus more specifically on the goal of universal access to water and sanitation and to establish the process for developing, implementing and monitoring action towards these goals.
- Governments need to focus more on promotion, facilitation and coordination of services rather than merely on their provision.
- Appropriate technologies continue to have a vital role to play.
- Greater equity in access to services will accelerate progress towards universal coverage.
- NGOs can play a catalytic role as champions of the poor and agents of change.

Promoting sustainability:

- Community involvement is an essential element of sustainability.
- The active involvement and empowerment of women promotes sustainability of services.
- Water and environmental sanitation efforts must be linked to social services and other development activities.
- Sector programmes must address environmental degradation and pollution.
- Sector monitoring and evaluation deserve emphasis.

Maximizing social and health benefits:

- Greater emphasis on sanitation, hygiene education and social mobilization in support of priorities and goals of the sector are essential.
- The interplay of technical, economic, political, environmental and social dimensions in water supply and sanitation programmes must be recognized to design effective programmes.

Effectiveness of resource mobilization and use:

- Determined actions can reduce costs and improve cost-effectiveness.
- Prudent cost-sharing and cost-recovery, with due consideration to the ability of the poor to pay, is an instrument for resource mobilization, for promoting sustainability and for improving access by the poor.
- Private entrepreneurship should be promoted where potential and opportunity exist.
sustained service provision are best achieved through the efforts of local communities and local public and private sectors, and building this capacity is recognized as an important role for Governments. In situations where local institutions and the private sector are weak, government service provision will remain important; however, sustainability of services and the role of the community in management have to be given special attention in these instances. Governments as providers are most able to ensure equity, multisectoral coordination, economies of scale and wide coverage. Governments also have a critical role to play in strengthening decentralization, building partnerships and facilitating the interface between service providers and service users.

27. Appropriate technologies continue to have a vital role to play. It is clear that carefully targeted technology development — such as of hand-pumps and improved latrines — supported by UNICEF and others, has benefited hundreds of millions of people across the world today and will make it possible to extend services to hundreds of millions more in the decades to come. Choice and adoption of appropriate technology are vital for programmes to go to scale in a cost-effective manner. Technology transfer is best accomplished through collaboration between the Government and the private sector.

28. Greater equity in access to services will accelerate progress towards universal coverage. The price that the poor in many countries pay today in time, ill health and cash for services is an extraordinary injustice, which is compounded further by the subsidies channelled through high levels of service to the better-off in many cities. Recognition and correction of these inequities provide opportunities to extend services widely to the poor.

29. NGOs often play a catalytic role as champions of the poor and agents for change. NGOs have a clearly demonstrated comparative advantage in working with communities in sanitation promotion, hygiene education, capacity-building and overall empowerment. Both international and national NGOs have contributed significantly to the sector.

Promoting sustainability

30. Community involvement is an essential element for sustainability. Successful projects are those in which communities have played a major role, and community management has proved to be a key strategy for
sustainability. The best projects often have women playing lead roles. These lessons are general, but extremely important for sustainable programme design and implementation. Clearly this requires local capacity-building, greater use of indigenous skills and adapting approaches to local cultural, social, environmental, political and economic situations.

31. The active involvement and empowerment of women, without adding to their burden, promote sustainability of services. As long as women and girls continue to spend a major portion of their time and energy on water collection and, more broadly, are excluded from the development processes at all levels, human and economic development suffer. By easing this burden and removing other barriers to entry into the decision-making and management processes of water and sanitation development, the risks to sustainability of services are lowered substantially. However, it is also important that men share this workload; added burdens on women’s time and energy must not be the unintended consequence of greater self-reliance and participation.

32. WES efforts must be linked to other social services and development activities. The WES sector is part of a multisectoral effort to reach important social and economic goals for society, communities and households. Coordination of programmes, complementarity and linkages at national and community levels all contribute to sustainability through building capacity and multiplying benefits. Activities in PHC, nutrition, education and women’s development offer many opportunities for coordinated action.

33. Sector programmes must address issues of environmental sustainability. Only a tiny fraction of the world’s fresh water is required for domestic purposes, yet this is threatened by natural and man-made causes such as drought, pollution and over-exploitation. In regions affected by water scarcity, water-intensive cash crops often are encouraged incorrectly, and heavy water abstraction results in falling groundwater levels, threatening the security of water supplies from simple wells. Similarly, industry and poor sanitation in peri-urban areas cause widespread water pollution, again threatening the water sources that the poor often use. Nevertheless, poor communities can play an important role in local water management if the opportunity is there. Such a measure can be a cornerstone to promoting comprehensive water resources management.
34. Sector monitoring and evaluation deserve emphasis. Systematic but simple and easily implementable monitoring is proving to be an indispensable management tool at key stages of WES programmes. Monitoring supports a process of assessment, analysis and action and can include health, hygiene and sustainability indicators. Communities can effectively play an important role in monitoring, bringing significant benefits.

**Maximizing social and health benefits**

35. Greater emphasis on sanitation, hygiene education and social mobilization in support of priorities and goals of the sector are essential. Experience has shown that health and other socio-economic benefits will not be realized fully unless behavioural change is actively promoted and achieved. The aim is to create a demand for, and ensure the use of, water and sanitation facilities as well as to promote hygienic attitudes and practices through education and communication.

36. The interplay of technical, economic, political, environmental and social dimensions in water supply and sanitation programmes must be recognized to design effective programmes. The complex interplay of these different aspects of the programmes must be recognized in order to make programmes effective and serve the beneficiaries well. Financial provisions and the installation of facilities do not guarantee that the benefits will be realized. Therefore, specific national and subnational solutions should be adopted to address these issues fully.

**Effectiveness of resource mobilization and use**

37. Determined actions can reduce costs and improve cost-effectiveness. One key to reducing costs is the adoption of appropriate technologies. These are becoming increasingly cost-effective because of economies of scale and improved practices, allowing coverage of a large number of poor people with fewer resources. Today it is possible to extend safe water and sanitation services to most poor rural communities for less than $30 per capita and for even less where hydrological conditions are favourable and communities are actively involved.
38. Prudent cost-sharing and cost-recovery, with due consideration to the ability of the poor to pay, are instruments for resource mobilization, promoting sustainability and improving access by the poor. In recent years, cost-sharing and cost-recovery have become features of many WES programmes. An element of cost-sharing of the capital costs of even basic service levels fosters ownership, and recovering recurrent costs helps sustainability. However, cost-recovery from the poor must take into account their ability to pay. Mere emphasis on “ownership” of water supplies through payment may undermine rights of access of the poor, and the household water security of more marginal users may be seriously compromised. Overburdening the very poor, who place high priority on water, risks adverse impacts on health, nutrition and access to essential services. Cost-recovery of higher than basic levels of services is much more important, as subsidies here typically absorb substantial resources and largely benefit the better-off who are able to pay the full cost of services. Furthermore, this promotes accountability of the supply institution and releases funds to extend the coverage of basic services.

39. Private entrepreneurship should be promoted where potential and opportunity exist. The private sector at different levels already plays a role in service delivery to the poor. At the community level, artisans often construct and maintain water and sanitation systems, performing an important marketing role as well, particularly in sanitation. Private sector involvement is increasing in the design and manufacture of hardware (e.g. pumps, pipes and sanitary wares), in the implementation of schemes (e.g. design and drilling of boreholes), in the delivery of services (e.g. private utilities and cooperatives) and in operation and maintenance (e.g. the increasing number of hand-pump repairers). Private media also can play an important role in promoting attitudinal and behavioural changes through social marketing. In addition, private finance increasingly is being raised to meet the costs of water and sanitation services. Building capacity in the private sector at different levels has become an important objective in many programmes.

D. The challenges

40. While many lessons have been learned, many challenges remain, including:

(a) Reinforcing political will and encouraging all countries to prepare programmes of action in support of reaching the unserved;
(b) Overcoming the perception that the extension of water and sanitation services is necessarily a costly and complex intervention, that countries cannot afford to achieve goals for universal services and that people are not prepared to pay for such services;

(c) Expanding coverage through building capacity of communities rather than through centralized service delivery and, at the same time, ensuring the commitment and ownership essential for sustainability;

(d) Mobilizing both external and national resources, the flow of which has stagnated or declined, for critical and catalytic support to sector programmes;

(e) Maintaining the focus on research and development of least-cost approaches and technology options that can be brought to scale and sustained at the community level;

(f) Ensuring that environmental concerns and water resources management objectives are integrated into, and do not further marginalize, programmes to meet the needs of deprived communities;

(g) Focusing increasingly on cost-sharing, cost-recovery and financing mechanisms for equity and sustainability.

III. The UNICEF Contribution in Water and Environmental Sanitation

A. Overall objective

41. The overall objective of UNICEF in water and environmental sanitation is to contribute to child survival, protection and development by supporting efforts to achieve universal access to safe water supply and environmental sanitation services, as a basic right, in line with the goals of the World Summit for Children and by promoting the behavioural changes essential to realize the full benefits from such services.
B. A conceptual model for water and environmental sanitation

42. A conceptual model showing multiple levels of causality and the need for multilevel and intersectoral actions has been found useful in understanding the role that water and environmental sanitation plays in achieving the goal of child survival, protection and development (see figure IV below). The model identifies the conditions that have a bearing on achieving the desired outcome at three levels — structural, underlying and immediate. The structural conditions relate to natural, human and economic resources. In order to influence the underlying conditions, it is necessary to have social and gender equity in the availability, access and control of these potential resources. The resources need to be organized to cultivate an empowering environment by promoting and supporting self-motivation, building skills, communicating knowledge and aligning social service systems.

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**Figure IV**

A Conceptual Model for Water and Environmental Sanitation Programme Development

- **Structural Conditions**
  - Social and Gender Equity in Availability, Access and Control of Natural, Human, Economic and Organizational Resources

- **Underlying Conditions**
  - Motivation, Knowledge, Skills
  - Household Water Security
  - Safe Environmental Sanitation
  - Better Hygiene Practices and Care of Children

- **Immediate Conditions**
  - Better Nutrition
  - Income Generation
  - Improved Children’s Education
  - Time and Energy Savings for Women and Girls
  - Less Disease

- **Child Survival, Protection and Development**
43. The underlying conditions affecting the achievement of goals include (a) household and community water security; (b) safer environmental sanitation; and (c) better hygiene practices and adequate care of children. Water security requires household, community and national action to protect and preserve water sources, to use water as a scarce resource and to ensure its equitable supply. Safe environmental sanitation includes the prevention of faeces and other wastes from gaining access to community, household and individual surroundings, thereby promoting health and preventing disease, disability and death. Adequate care and better hygiene are the practices which ensure the effective utilization of safe water and sanitary facilities to achieve the full health benefit. Better hygiene practices include the protection of drinking water from the source through transport and run-off, suitable usage of water for personal and domestic hygiene, and the safe handling, treatment and disposal of excreta and other wastes.

44. Water security, safe environmental sanitation and adequate care and hygiene practices directly influence the immediate conditions for child survival, protection and development, which include girls’ education, better nutrition, women’s time and energy savings, income generation and less disease. Because girls and women are the main carriers of water, improved access to water frees up time and energy for girls to attend school and for women to take better care of their children and engage in productive activities. Improvement in the underlying conditions also contribute to less disease by reducing the transmission of and exposure to pathogens and waste in and around communities and households.

45. The conceptual model demonstrates the need for synergy and complementarity between interventions in the WES sector and other fields of UNICEF support. It also shows how approaches followed in WES interventions relate to those followed by other sectors, achieving synergy and complementarity in the total UNICEF effort leading to the well-being of children and women and the empowerment of people.

C. Comparative advantages of UNICEF

46. UNICEF support for water and sanitation programmes through advocacy, service delivery, capacity-building and empowerment addresses some
of the worst manifestations of poverty affecting women and children. The organization’s expertise and experience built over a number of years of working with Governments, communities and donors have provided it with a comparative advantage in a number of areas. As noted in paragraph 18 above, the limited assistance of UNICEF, deployed strategically, has achieved catalytic results.

47. In many countries UNICEF is the only external agency providing substantial long-term support for water and sanitation programmes in rural areas. The decentralized nature of UNICEF operations has allowed it to support innovative demonstration projects and technology development such as hand-pumps and low-cost sanitation. UNICEF has assisted Governments and NGOs to design projects that recognize the varying local conditions and institutional structures. UNICEF has accumulated rich experience in social communication and social marketing, as well as technical expertise, in all the major regions of the world. The organization’s intersectoral involvement in promoting the well-being of children and women has made it possible for UNICEF to raise policy and strategy issues at the highest levels of Government and at the same time to work with communities. In 1985, UNICEF was awarded the Crystal Drop prize by the International Water Resources Association for “its remarkable work to benefit humanity”.

48. Some specific areas of relative advantage are:

(a) Experience with setting and defining goals and mobilizing for their achievement;

(b) Effective advocacy;

(c) Credibility with different stakeholders earned through long years of support to countries;

(d) An experienced, decentralized and dedicated staff of approximately 140 sector professionals in about 100 countries;

(e) Close partnerships with Governments, NGOs, other institutions and communities;

(f) Emphasis on “going to scale” from pilot projects;
(g) Integration of software and hardware in sector programmes;

(h) Centralized but responsive, cost-effective and efficient procurement of supplies;

(i) A primary environmental care approach, resulting in capacity-building and empowerment at the grass-roots level, which is linked to national and subnational plans and programmes.

49. UNICEF recognizes that its own resources are limited compared to the total effort needed for sustainability and that there are other providers of assistance, including other multilateral agencies, international and regional financial institutions, bilateral donors and NGOs, which also have comparative advantages in their own areas of expertise. UNICEF-assisted programmes, therefore, seek complementarity with other active partners and are planned in collaboration with others when opportunities arise.

D. Areas of activity supported by UNICEF

50. The UNICEF mandate determines the main areas of UNICEF support in the sector. The country programming process, with an analysis of the situation of children and women and the formulation of strategies and objectives for UNICEF cooperation in a country, is the mechanism for adapting general objectives to the circumstances of each country. A typical UNICEF country programme of cooperation will consist of a combination of WES activities in the areas described below.

**Strategic support to expanding access**

51. In order to meet child survival, protection and development goals in a cost-effective and sustainable way, UNICEF-assisted programmes will need to continue to provide catalytic and strategic support for expanding and improving service delivery by (a) reducing the distance and elevation to safe water sources; (b) increasing the quantity of water supply and providing it closer to the home; (c) improving the quality of the water supply; (d) improving the reliability of services with effective systems for operations and maintenance; and (e) designing strategies and approaches for hygiene and sanitation programmes that can be taken to scale. The focus of action will continue to be on rural poor and vulnerable peri-urban populations, as
well as on population groups with high endemicity of water-related and sanitation-related diseases.

Support for policy development

52. Universal access can be achieved only if there is political will and support from Governments, communities, NGOs and external agencies. UNICEF will continue to work with those partners to mobilize support and commitment and with Governments to develop appropriate policies and strategies for accelerating coverage, with a priority to reaching the largest numbers of the underserved in affordable ways.

53. Many Governments have prepared national strategies for water supply and sanitation. UNICEF will continue to provide support for developing subnational and local plans to reach the unserved and achieve universal coverage. This support includes improving situation analyses, research and studies on emerging issues, assessment of impacts and promoting coordination of external assistance in national and subnational programmes.

Support in emergency situations

54. Emergencies will continue to be an important area for UNICEF water and sanitation actions. UNICEF will continue to respond to emergencies within the framework of its mandate to help meet emergency as well as long-term needs of children. Within the limits of the resources UNICEF is able to mobilize, and in close coordination with other concerned organizations, UNICEF will provide assistance in water supply, environmental sanitation and hygiene education in emergencies. Assistance will be aimed at meeting immediate needs and expediting rehabilitation, including laying the foundation for long-term development wherever possible.

55. Although the response to emergencies needs to be rapid and coordinated, the extent and intensity of UNICEF support will be contingent upon the availability of sufficient human resources to the WES sector to facilitate building operational support networks at various levels. The degree of support will depend on the timely availability of financial and human resources for emergency operations and supplies.
56. In affected rural and peri-urban areas, UNICEF will focus on the most affected and vulnerable populations and seek to ensure the rapid availability of basic minimum water supplies and facilities for the safe disposal of excreta using low-cost appropriate technologies. Particular attention will be given to sanitation in situations involving large concentrations of displaced persons. Improved hygiene practices will be promoted through hygiene education and social mobilization in order to prevent or control water- and sanitation-related diseases.

57. In urban areas affected by emergencies UNICEF will, in conjunction with other agencies working in urban WES programmes, provide support to assure a minimum level of water supply. Where feasible, UNICEF also will provide support to assure the functioning of sewerage systems through basic spot repairs and reinforcing local capacities for the operation and maintenance of such systems or, where necessary, for the establishment of alternative arrangements based on cost-effective appropriate technologies. Such support will be time-bound and adapted to assessed needs and practical possibilities, including the availability of specific spare parts for existing equipment and local technical expertise.

58. UNICEF is taking measures to enhance its capacity for rapid assessments and timely, cost-effective responses to emergencies in general, as well as to support vulnerability reduction and capacity-building at the community level in emergency-prone areas. UNICEF, in collaboration with others, will continue to:

(a) Develop and refine approaches to providing essential WES services in emergencies;

(b) Develop and refine specific guidelines and provide technical support for field offices for emergency interventions, including ways to support linkages with longer-term development assistance;

(c) Develop and continuously refine supply kits and establish standing arrangements with partner organizations and institutions for assessments and emergency interventions;

(d) Provide support to build capacity of local personnel in the WES sector to improve local emergency planning, response and management.
59. UNICEF also will develop and maintain support networks with strategic emergency WES partners in the United Nations system, other specialized institutions such as the International Committee of the Red Cross and NGOs. This will include establishing cooperation agreements, common guidelines and arrangements for joint training to facilitate joint/collaborative assessments and action to support the protection, rehabilitation and, where necessary, the development of water and sanitation services (including the rehabilitation and/or establishment and maintenance of water storage, distribution and treatment systems) and for hygiene education for the control of cholera and diarrhoeal diseases.

60. Within this overall framework, the UNICEF approach will be adapted to the situation. In general, UNICEF will assist relevant public authorities to expand their capacities to address the problem at hand such as supporting their efforts to make effective use of all available resources, including the services of NGOs. In instances where the public administration systems have been totally disrupted, the major priority of UNICEF, working closely with WHO and other partners, will be to help re-establish appropriate public health services structures and management and, in the meantime, to facilitate coordination among the various organizations providing urgent services. This may include guiding and assisting NGOs to work at the community level to meet the priority needs of the populations while developing local capacity and establishing a basis for sustainable services in the future.

Monitoring and evaluation

61. UNICEF will continue to support appropriate monitoring systems at different levels to improve decision-making and encourage and support periodic evaluations that will lead to appropriate adjustments in WES programmes.

62. This will require an emphasis on capacity-building of communities and national and subnational Governments. It also will necessitate developing appropriate measurable indicators at each level that are relevant to the pertinent users. The indicators, especially those pertaining to coverage, should allow comparison within and among countries to facilitate regional and global monitoring. To this end, UNICEF will continue its support to countries through the WHO/UNICEF JMP.
63. In general, monitoring systems should (a) be coordinated at the national level; (b) have a limited number of simple yet measurable process and impact indicators; (c) be decentralized as much as possible down to the community level and be meaningful to users; (d) assist in capacity-building at all levels; and (e) be used actively for effective planning, advocacy, resource mobilization and ongoing management.

64. Evaluations of WES programmes should involve communities and individual households as well as other stakeholders. They should be ongoing or at least periodic to facilitate critical analyses of programmes and allow timely and appropriate adjustments as required.

E. New emphases in UNICEF-assisted programmes

65. While UNICEF will continue to emphasize the above areas of activity, the lessons learned, the evolving situation and the challenges posed suggest the need for new emphases in programme activities. These include:

(a) Increasing attention to environmental sanitation and hygiene promotion as well as to operation and maintenance in water supply;

(b) Emphasizing communication methods, as well as behavioural and attitudinal changes, with sanitation and hygiene education in schools as a key channel;

(c) A greater focus on the utilization and sustainability of services, not merely on coverage;

(d) A greater focus on cost-sharing, cost-recovery and financing mechanisms for equity and sustainability;

(e) Increased attention to the health impact on populations and geographic areas with a high prevalence of water- and sanitation-related disease;

(f) Greater attention to environmentally vulnerable areas, including urban areas (i.e., the poor in peri-urban areas and slums);
(g) Attention to sustainable community-based water resources management linked to national and subnational programmes, where appropriate;

(h) Pilot research and development projects on cost-effective approaches, community participation and management and intersectoral linkages, with continuous learning and dissemination of learning experiences;

(i) Standardizing the definition of “coverage” (globally or regionally) and improving monitoring systems to include impact and process indicators as well as coverage figures.

IV. Programme Strategies

66. The sector has now reached a transitional point where the lessons learned and sound experiences of the past need to be applied widely. Both water supply and environmental sanitation are no longer to be considered as vertical programmes for the delivery of physical services. Greater emphasis needs to be placed on health and socio-economic benefits and on providing the knowledge, skills, tools and techniques, as well as on generating motivation and fostering supportive systems for communities and people to take decisions and make choices to help themselves.

A. Guiding principles for water and environmental sanitation strategies

67. A number of principles emerge that will be used to guide UNICEF strategy formulation, particularly at the country level. These are:

(a) Advocacy, highlighting the needs and rights of children and the poor and building political and public commitment to the adoption of appropriate policies and accelerated action;

(b) Basic services, managed by the community, retaining strong commitment and providing catalytic support to the expansion of cost-effective services using appropriate technologies, paying particular attention to sanitation
and taking into account the potential for upgrading services by the communities themselves;

(c) Capacity-building, adopting programme approaches that build capacity at all levels and in all segments of society, to ensure sustainable sector development;

(d) Community cost-sharing of capital and recurrent costs of basic levels of service, taking into account the willingness and ability to pay, as well as the need to recover the full capital and recurrent costs of higher levels of services in order to generate additional resources to extend basic services and ensure their sustainability;

(e) Community management of the “water environment”, including water conservation, water quality protection, and solid and liquid waste management, within the context of Agenda 21 and primary environmental care (see document E/ICEF/1993/L.2);

(f) Gender-balanced approaches, recognizing women as key players and agents of change and not solely as primary beneficiaries, in the context of overall efforts to empower women (see document E/ICEF/1994/L.5);

(g) Global, national and local goals, defined and set in collaboration with appropriate partners at different levels and pursued through effective monitoring systems;

(h) Intersectoral linkages with health, education, nutrition, environment and other development programmes, exploiting synergies among all sectors that support child survival, protection and development;

(i) Participatory approaches to meeting the objectives, empowering communities and promoting their role, supported by other stakeholders, in planning, implementing, managing and monitoring services;

(j) Partnerships, formed and strengthened with Governments at all levels as well as with civil society, NGOs, the private sector, external support agencies and others, thus ensuring cooperation and complementarity.
B. Operational strategies

68. The diversity of country situations, their problems and differing requirements for UNICEF support necessitate the development of country-specific strategies which most appropriately respond to the challenges of universal coverage and child survival, protection and development goals. Furthermore, the range of regional diversity may necessitate the development of regional-specific WES strategies to augment current initiatives in planning, coordination and resource mobilization. In all situations, a mix of essential operational strategies is required. The relative emphasis will depend on the particular country situation. The main operational strategies are described below.

Catalytic support to the expansion of services: focus on going to scale

69. UNICEF will continue to play a catalytic role in the expansion of WES coverage through the implementation of service delivery and increasingly through advocacy of approaches that enable Governments to act as promoters, coordinators and facilitators in going to scale. In supporting government programmes for service delivery, UNICEF will take into account the need to coordinate and develop complementary approaches with other partners — NGOs, other international agencies and the private sector — so that they are mutually reinforcing.

70. The components of the strategy for expanding coverage will include:

(a) Country programme preparation as the main mechanism for developing country-specific and coordinated responses to service delivery;

(b) Adopting a comprehensive approach in the design of service delivery programmes to include sanitation, hygiene education, environment, health, nutrition, education and gender-balanced community participation at various stages of programme development and implementation;

(c) Providing direct or catalytic support for delivering, developing and piloting methods and approaches to accelerate coverage. These services will be used to demonstrate to Governments, NGOs, the private
sector and others the use of proven appropriate and affordable technologies and approaches, including adapting traditional methods, where appropriate, in order to go to scale;

(d) Supporting standardization of technologies, as appropriate, in countries and the transfer of technology and experiences between countries;

(e) Supporting priority actions by Governments and donors for meeting the service needs of unserved and underserved rural, peri-urban and slum areas, particularly those with high incidences of water- and sanitation-related diseases such as guinea worm, diarrhoeal diseases and intestinal parasites;

(f) Supporting institutional-strengthening for service delivery and capacity-building of communities to go to scale in an efficient, cost-effective and sustainable manner;

(g) Strengthening monitoring and evaluation of service delivery, their utilization and sustainability, including issues of cost-effectiveness and improved accountability.

**Promotion of intersectoral linkages and integrated programme delivery**

71. Maximum health and socio-economic benefits and improved cost-effectiveness can be achieved when the processes are participatory and when interventions are coordinated or integrated at the planning stage and during implementation. As WES interventions reduce time and energy in collecting water, especially for women and girls, and also provide opportunities for capacity-building in decision-making, management and maintenance of WES services, they offer the potential for mutually supportive links with other sectors such as health, nutrition, education and women’s programmes. Taking full advantage of this potential will require that country situation analyses and programme operations be more holistic and seek these opportunities for synergy.
Capacity-building

72. The essential pillar for sustainability of water supply and sanitation services is capacity-building at different levels. The objective of UNICEF support for water and sanitation is for the national programmes eventually to be self-sustaining, thus rendering external support unnecessary. Programme sustainability depends on implementation through national institutions that are decentralized, accountable and focused on developing community-based solutions. UNICEF will continue to support institutional-strengthening for rural and peri-urban services. Components of the strategy for capacity-building will include:

(a) Support for sector studies to identify the constraints and opportunities, including needs assessment of the nature and extent of capacity-building required in each country context;

(b) Identification and training of the target groups at various levels and in different areas, with special efforts to achieve gender balance. Training will include topics such as policy development and planning; institutional-strengthening for service delivery, including training of drillers, artisans and sanitation and hygiene education personnel; community mobilization; and management at all levels from Government to village committees;

(c) Making water utilities more accountable to communities and responsive to people’s needs, particularly in rural, peri-urban and slum areas.

Empowerment of communities and households through participatory approaches

73. While capacity-building is the pillar for sustainability, empowerment is the foundation. Empowerment is the outcome of overcoming the lack of human, financial and organizational resources and skills of the unserved and underserved, enabling them to make the choices and decisions and to take action to help themselves. Empowerment is, therefore, an outcome of capacity-building activities and a continuous process by which people take charge of their own development.

74. The components of this strategy are:
Promoting gender-balanced community participation and decision-making in the planning, implementation, management, operation and maintenance of water and sanitation services;

(b) Sharing and providing access to information, knowledge and skills to people, especially beneficiaries, to facilitate informed decision-making;

(c) Saving time for women by making access to safe water more convenient;

(d) Designing programmes that promote mobilization of financial resources for the initial capital investment and allow operations and maintenance to be managed by the communities themselves.

Advocacy and social mobilization

75. A key programme strategy is to support, through information, communication and public education, policies and actions at different levels that will help Governments and communities meet their goals. Support also will be required for policy formulation relating to a number of aspects, such as according priority to water supply and sanitation in national plans and budgets, the equitable allocation of resources both within the sector and among sectors, promoting and enhancing the role of women in the sector, and strengthening the role of NGOs and the private sector. In this context, NPAs that have been prepared by most countries provide a basic framework.

76. Specific aspects of this strategy include:

(a) Developing advocacy materials for and participating in various national and international forums, and promoting thorough research, documentation and dissemination the rich field experience of UNICEF and others;

(b) Advocacy for capacity-building and empowerment to promote universal access to water and sanitation programmes in a sustainable manner.
Partnerships

77. The WES sector has particularly rich experience of partnerships with national Governments, institutions and external support agencies. The latter include United Nations agencies, international financial institutions and donors. Partnerships with the private sector also have provided rich experience in technology development and transfer, research and development, human resource development and expansion of coverage, especially with respect to hand-pumps and drilling. The importance of close complementarity and partnerships is more important in this decade owing to the complexity of operation, the paucity of funding and the need for optimal use of human resources. With the likelihood of increasing resource constraints, it is imperative to avoid duplication and strengthen complementarity between agencies and institutions. This is particularly important in the development of innovative community-based approaches, for which NGOs are particularly suited, and in the development, field testing and promotion of affordable and appropriate technologies. In this regard, UNICEF will continue to support those NGOs working in traditional water resource development and protection, as well as in sanitation and hygiene education, including local environmental protection. Those NGOs building the capacity of communities, focusing on gender balance, to better maintain, manage and sustain water and sanitation services and those taking initiatives for disparity reduction, will be preferred partners.

Resource mobilization

78. The scope for mobilizing both domestic and external financial resources depends crucially on the macroeconomic environment. However, as UNICEF has advocated, it is possible, through political will and prioritization in resource allocations, to meet the needs of basic social services and overcome the worst manifestations of poverty, even for countries with low per capita incomes.

79. Improved cost-effectiveness, including cost-reduction, is possible in a number of areas. This will be explored in the context of each specific country. Experience has shown that costs can be reduced significantly in the delivery and operation and maintenance of services in many situations. Attention also will be needed to build national and subnational capacities in the mobilization of human and organizational resources.
80. As noted earlier, UNICEF will advocate prudent cost-sharing and cost-recovery in country programmes, generating resources and ensuring sustainability for meeting water supply and sanitation objectives. Cost-recovery mechanisms should be designed in a flexible and pragmatic manner and must be sensitive to the local conditions and implementation capacity, with regular monitoring and adjustment to the evolving socio-economic conditions.

81. The strategy for mobilizing financial resources will include advocacy for additional resources from Governments and donors as well as for restructuring the financing of the sector. There are potentials for the development of new financing mechanisms which could include rural credit schemes, revolving funds, debt-for-development swaps and the raising of funds on capital markets for utilities through bonds and other financial instruments. There already exist a number of successful examples of such schemes in Africa, Asia and Latin America.

82. Government and donor support have been critical in the past and will continue to be so in the foreseeable future. The Government will continue to play a lead role as the provider of services for the poor. If both developing and developed countries apply the “20/20” concept in their allocation of funds, the sector would benefit significantly in most developing countries.

83. The private sector can play a major role in service delivery in developing countries as shown by progressive regional water utilities which have extended water coverage to rural areas through the adoption of a local water-basin management approach to service delivery. Such examples of successful water utilities from developing countries are often more relevant to other developing country situations than those from developed countries.

84. The private sector represents an untapped potential of resources that can help in capital mobilization; installation and implementation; capacity-building and training; operation and maintenance; quality control and technology transfer; financing and commercial services; improved efficiency in urban utilities, in particular in the area of cost-recovery and prevention of loss of water; and cost-effectiveness and efficiency through competition.
Community management of the “water environment”

85. This important new element of the strategy is the response to growing concerns about environmental degradation and recognition of the role that water plays in global and local environment. This approach is of particular relevance in degraded mountain environments, in areas affected by drought and desertification, and in other fragile eco-zones where people’s livelihood as a whole is intricately linked to the state of the “water environment”. Global strategies for the comprehensive management of water resources within the framework of sustainable development have been articulated clearly, and in many countries national strategies are being developed. These actions are aimed at ensuring the supply of water for drinking, food and fodder, industry, and conserving a healthy and diverse environment for all in society today and in the future.

86. The locus of much of the necessary action is at the community level, with concerned citizens serving as the primary guardians of the local “water environment”. However, when people are poor and without even basic water and sanitation services, it is hard for them to play their civic role effectively. Moreover, the absence of sanitation itself is a serious threat to both the environment and human health. Community-based water and sanitation programmes that target the poor, therefore, should serve as an entry point for developing community management of the “water environment” in which beneficiaries live.

87. UNICEF will advocate for and promote the community’s role in managing its water environment and proposes to work closely with other partners, particularly NGOs, in this new area. Elements of a strategy to be incorporated into the WES programme would depend on the environmental, cultural and, to some extent, institutional and regulatory environment, but also could include:

(a) Broad public awareness campaigns to raise general concern for the “water environment”;

(b) Targeted educational efforts aimed, for example, at schools, women’s groups, farmers’ clubs and community associations, with clearly defined messages;
(c) The promotion of environmental action groups and community “water environment” councils;

(d) Community-based situation analyses, identifying priority issues, actions and actors;

(e) Support to specific “mini-projects” in addition to standard water and sanitation interventions which could include, inter alia:

(i) Tree planting and terracing for soil conservation and catchment protection, as well as fuel wood;

(ii) Small bunds and terraces to promote groundwater recharge;

(iii) Clean up of streams, ponds and canals, and conscious habitat protection;

(iv) Improved solid waste disposal, possibly including recycling;

(v) Construction of storm drains;

(vi) Rainwater harvesting, using roof tops as well as through the construction of underground check dams and dikes;

(vii) Rehabilitation and protection of wells and springs;

(viii) Improved irrigation practices to conserve water.

V. Implications for Unicef

88. Limited resources and the increased scope and complexity of problems demanding attention in country programmes will require an improved capacity for programme planning and evaluation processes. Situation and policy analyses of the WES sector in each country are needed to assess interventions in terms of equity in access to essential water and sanitation services. Such analyses also need to highlight the link to other related sectors such as health, nutrition, education and environment, as well as to key epidemiological factors. Disparity reduction in services will require the identification and characterization of vulnerable populations, as well as the strengthening of data and information management to advocate on their behalf. New capacities will be needed to design programmes aimed at changing behaviour, including training in planning, implementation and management of WES programmes within the context of this new strategy.
A. Staff and organizational structures at the country level

89. These issues are expected to receive special attention during the ongoing implementation of management reforms within UNICEF. Developing and reorienting, where necessary, human resources in field offices will include attention to increasing the proportion of women professionals to work on UNICEF-assisted WES programmes to increase their representation from its current level of only 10 per cent. Furthermore, while WES staff are very proud of their achievements and contributions to the organization’s overall goals and objectives, their morale is sometimes low due to insecurity of contract and insufficient priority given to the sector in country programmes. There is also a need to clarify the policy regarding core positions and/or longer fixed-term contracts for staff working in the sector. Clear rotation policies are needed to encourage greater transfers of knowledge and skills. These issues will be addressed as part of the human resources strategy, which is being prepared as a follow-up to the management study.

B. Regional presence and water and environmental sanitation staff at headquarters

90. At present there are no UNICEF WES advisers at the regional level. The advantages and disadvantages of regional advisers need to be re-examined in light of the recommendations of the management review of UNICEF. The absence of WES staff in regional offices has, on the one hand, weakened reviews of and support to national programmes; on the other hand, it has resulted in some capacity enhancement in country programmes, and their direct communication with headquarters has facilitated two-way experiences. Overall technical capacity needs to be strengthened whether at the country or regional level. There is also a greater need for intercountry exchanges of experience and expertise, particularly during programme strategy development, evaluation and monitoring. Regular reviews of country programmes at the regional level are also necessary.

91. The role of WES staff at headquarters is primarily to act as a repository of WES sector knowledge, facilitators of information exchange and promoters of global coordination with other organizations. They also have to provide support to policy development at global, regional and national levels. Recent examples of regional initiatives and pilot projects in areas such as freshwa-
ter, sanitation and hygiene studies show that, with limited operational funds, UNICEF headquarters staff can be pro-active in supporting country programmes. The dissemination of information through the “Waterfront” newsletter as well as through occasional technical and policy papers also will be strengthened. Successful implementation of this holistic approach will depend heavily on the availability of financial and human resources at headquarters.

92. Operational support for emergencies will need to be strengthened at regional and subregional levels and in Supply Division at Copenhagen. Headquarters support for emergencies will be provided through the Office of Emergency Programmes to identify appropriate short-term personnel and in policy guidance. Heavy involvement in emergencies can limit support to regular programmes unless sufficient financial and human resources are made available. WES staff with prior emergency experience will be identified, as well as others willing to be involved in emergencies, to develop skills in emergency planning and operations. Regional networks will be formed to facilitate a quick response on short notice. In areas of persistent emergencies, more permanent structures and capacities will be developed and supported to facilitate a rapid emergency response without affecting the regular country programme.

C. The choice of national partners and institutions

93. At the country level, UNICEF works through the master plan of operations agreed between the Government and UNICEF within a broad national plan. Within this context, priority will be given to collaboration with other multilateral and bilateral agencies, NGOs and others. The limited funds in country programmes will be used by the Government and UNICEF to develop and launch innovative pilot projects and to encourage other stakeholders, particularly NGOs, to participate in programmes. UNICEF will continue to act as a catalyst to bring NGOs, Governments and others such as the private sector, academic institutions and individuals together to advocate for the sector and to carry out its activities. UNICEF also will collaborate with other related government ministries such as those for women’s affairs, child welfare, social welfare, rural development, planning, finance and environment in supporting WES objectives and programmes.
D. Partnerships with other donors and multilateral agencies

94. Donors and United Nations agencies need to continue to work together at national, regional and global levels to complement each other’s strengths and to support Governments effectively. UNICEF will continue to collaborate with donors as well as with other agencies through the Collaborative Council, the Administrative Committee on Coordination and the Inter-agency Steering Committee.

95. UNICEF will continue to emphasize and support country-level collaboration among the various donors and partners, with the Government as the coordinator, facilitator and promoter of the sector. The relationships and credibility of UNICEF with Governments present it with an opportunity to facilitate external coordination of sector support. To this end, UNICEF already has initiated and led joint inter-agency missions to countries such as Malawi, Myanmar and South Africa. The aim is to help countries develop policies and strategies for addressing complex transitional situations and determine external assistance needs. UNICEF will continue to encourage similar inter-agency missions and also coordinate activities with, among others, the World Bank in rural, peri-urban and slum areas; with the United Nations Development Programme (UNDP)/World Bank Water Supply and Sanitation Program wherever they are active; with UNDP and the United Nations Department for Development Support and Management Services on national water resources policy development; with the United Nations Environment Programme, the World Meteorological Organization and the United Nations Educational, Scientific and Cultural Organization in freshwater issues and research and development; with WHO in developing a joint WES strategy in relation to health goals for the year 2000, in monitoring and in the promotion of hygiene and sanitation; with the Food and Agriculture Organization of the United Nations on rural water resource management; with the International Water and Sanitation Centre on information and communication issues; with the United Nations Centre for Human Settlements (Habitat) on urban issues; with United Nations regional commissions such as the Economic Commission on Africa for regional activities; with regional development banks in project development and sector policy development; and with other donors on environmental health, communication, hygiene education, sanitation, gender issues and technology development and transfer. UNICEF also will endeavour to:
(a) At the country level:

(i) Learn lessons in cooperation with partners in the sector, i.e., national and local Governments, communities, external agencies, NGOs, the private sector and professional institutions;

(ii) Share and disseminate lessons learned and develop improved policies and strategies with key stakeholders in the sector;

(iii) Concentrate on capacity-building exercises with relevant partners in a systematic way;

(b) At the regional level:

(i) Share lessons learned so that all countries can profit from each others’ experiences;

(ii) Promote necessary regional-level capacity-building;

(c) At the global level:

(i) Continue its energetic advocacy for the WES sector at the highest political level, working with other agencies and promoting the role of the Collaborative Council;

(ii) Share and learn from other partners, rigorously analysing experiences and lessons distilled;

(iii) Cooperate with other interested partners to develop networks on technology communication and information.

E. Programme funding

96. WES expenditure as a percentage of total UNICEF expenditure averaged 15 per cent in 1994, of which $81 million were for regular programmes and $37 million for emergencies. However, total programme expenditure, excluding emergencies, has dropped from an average of 26 per cent during 1980-1984 and 19 per cent during 1985-1990 to 15 per cent during 1990-1994.

97. In 1986, the UNICEF general resources allocation to water and environmental sanitation programmes was approximately $25 million, or 14 per cent of the total general resources budget. By 1994, this figure rose to almost $37 million, as shown in the table above. However, as a percentage of the overall
general resources budget of UNICEF, the allocation actually dropped to 9 per cent in 1994.

98. In supplementary funding, excluding emergencies, the UNICEF WES sector received $33 million in 1986, which increased to $44 million in 1994. However, in percentage terms the supplementary funding provided to the sector fell from 28 to 23 per cent in the same period. A greater share of WES resources now come from supplementary funding than from general resources, as shown in the table above. The unpredictable fluctuation of supplementary funding tends to undermine the continuity of UNICEF WES programme support, which can have serious adverse consequences for long-term capacity-building support to Governments.

99. The 1992 multi-donor evaluation of UNICEF highlighted the programmatic dichotomy that UNICEF WES programmes face as a result of the insufficient allocation of general resources to ensure continuity of WES activities and “to move beyond its traditional strengths as a water supply and service delivery agency”. It further observed that UNICEF WES programmes depended on supplementary funding to a greater degree than other sectors. This reflected UNICEF success in designing WES programmes that were attractive to bilateral donors, but it reduced the flexibility enjoyed by programmes financed from general resources. The UNICEF medium-term plan for the period 1992-1995 proposed an indicative target of 20 per cent of programme expenditure to be allocated to water and sanitation by the year 2000. This target, dependent on actual country programme allocations, is not likely to be reached without strong donor support. The provision of general resources is critical, especially in countries where supplementary funding is difficult to mobilize or where great fluctuations in supplementary funding occur from one programme cycle to the next. The UNICEF WES Section at headquarters will work closely with the Programme Funding Office, country offices and donors to develop a stronger WES programme resource base.
VI. UNICEF Executive Board Decision 1995/22, issued by the Office of the Secretary of the Executive Board

The Executive Board,

1. Takes note with satisfaction of the report on UNICEF strategies in water supply and environmental sanitation (E/ICEF/1995/17);

2. Recognizes that universal access to clean drinking water is a fundamental human need which is essential to attain the right of the child to the enjoyment of the highest attainable standard of health;

3. Endorses the framework for the water supply and environmental sanitation programme, including the scope, objectives, areas of action, guiding principles and programme strategies as set forth in document E/ICEF/1995/17 and as clarified in the secretariat’s statement which will be reflected in the final report of the meeting;

4. Encourages the UNICEF secretariat to continue its support to countries in achieving the goals of universal access to water supply and environmental sanitation by implementing national programmes of action;

5. Further encourages the UNICEF secretariat, in collaboration with national partners and external support agencies, and selecting pertinent strategies within the framework of country programmes, to continue:

   (a) To promote and advocate public commitment, national policy and accelerated actions for meeting the needs and rights of children and the poor in respect of water supply and environmental sanitation;

   (b) To set, define and review national and local goals, working with government and appropriate partners and pursuing their achievement through effective monitoring systems;

   (c) To promote and strengthen partnerships, formed and strengthened with Governments at all levels as well as with civil society, non-governmental organizations, the private sector, external support agencies and others, ensuring cooperation and complementarity;
(d) To support the expansion of basic services, managed by the community, retaining strong commitment and providing catalytic support to the expansion of cost-effective services using appropriate technologies, while taking into account the potential for upgrading services by the communities themselves;

(e) To support emergency programmes for essential water supply and environmental sanitation needs within the framework of the United Nations system for emergency response;

(f) To allocate appropriate resources, as envisaged in the medium-term plan (E/ICEF/1994/3), from general resources and supplementary funds for water supply, sanitation and hygiene education, and to improve the capacity of national counterparts to effectively meet the challenge in the sector;

(g) To promote appropriate standardization of technologies for water supply and sanitation services to minimize the cost of installation, operations and maintenance;

6. Urges UNICEF to put a greater emphasis on, and allocate resources as required, for:

(a) Environmental sanitation, hygiene and behavioural change;

(b) Community management of the “water environment” within the context of Agenda 21 and primary environmental care (see document E/ICEF/1993/L.2);

(c) Capacity-building, adopting programme approaches that build capacity at all levels and in all segments of society, including establishment of community resource centres, to ensure sustainable sector development;

(d) Community cost-sharing of capital and recurrent costs of basic levels of service, taking into account the willingness and ability to pay, and recovery of full capital and recurrent costs of higher levels of services in order to generate additional resources to extend basic services and ensure their sustainability;
(e) Gender-balanced approaches to meeting the objective, recognizing women as key players and agents of change, and not solely as primary beneficiaries, in the context of overall efforts to empower women (see document E/ICEF/1994/L.5);

(f) Participatory approaches to meeting the objectives and promoting the role of the community, supported by other stakeholders, in planning, implementing, managing and monitoring services;

(g) Research and development on technology and social and economic issues, including transfer of technology, in order to promote cost-effectiveness, impact and sustainability;

(h) Assistance to countries to standardize the definition of coverage and improve monitoring systems by including process and impact indicators;

(i) Enhanced linkages with health, education, nutrition, environment and other development programmes, exploiting synergies among all sectors that support child survival, protection and development;

(j) Improvement and strengthening of the capacity of UNICEF water supply and sanitation staff by, inter alia, increasing the proportion of women in the sector and improving staff training, including the transfer of knowledge and skills and orientation and career structure to respond effectively for meeting the goals for the sector;

(k) Appropriate support for promotion of water supply and sanitation services in deprived, low-income urban areas.

Annual session
26 May 1995
Annex I

Access to Safe Drinking Water and Sanitation
Africa
(Countries reporting in 1994)

Annex II
Access to Safe Drinking Water and Sanitation
Asia and the Pacific
(Countries reporting in 1994)

Annex III

Access to Safe Drinking Water and Sanitation
Latin America and the Caribbean
(Countries reporting in 1994)