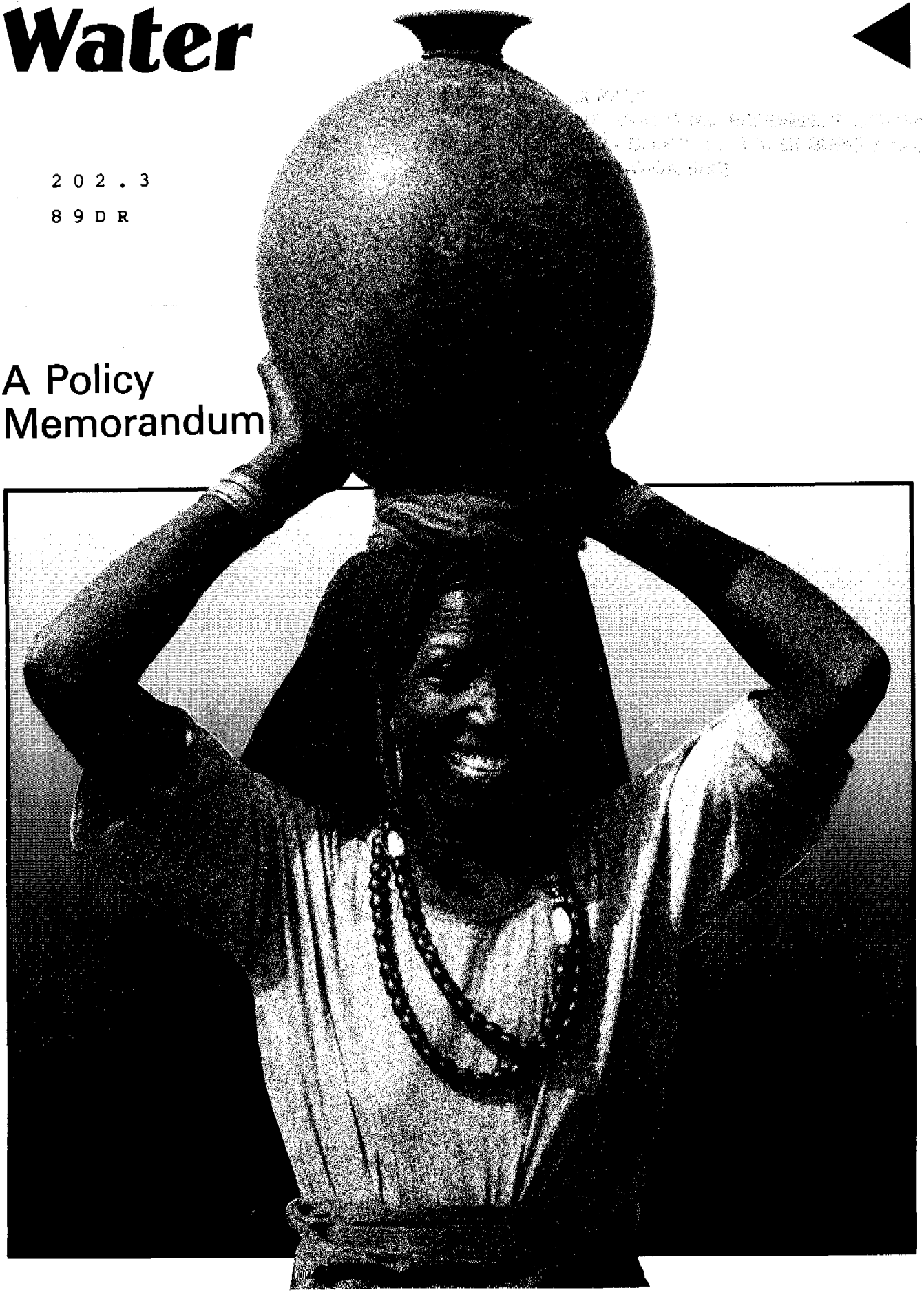
Water

A Policy Memorandum



DEVELOPMENT COOPERATION INFORMATION DEPARTMENT OF THE NETHERLANDS MINISTRY OF F

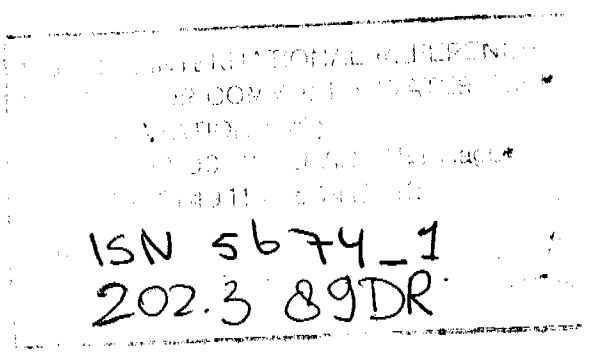
DRINKING WATER SUPPLY, SANITARY FACILITIES, DRAINAGE AND WASTE DISPOSAL

in

DEVELOPING COUNTRIES

SECTOR MEMORANDUM

February 1989



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1. INTRODUCTION

The provision of good quality drinking water in sufficient quantities and the hygienic disposal of waste water and of solid waste are two basic preconditions for achieving a reasonable standard of living, good health and economic progress. These conditions will be satisfied only if there is a reliable supply of water close at hand and effective sanitary facilities. In addition arrangements are required for the disposal of polluted surface waters, household waste water (including excrement) and industrial waste water. These technical facilities, together with facilities for the disposal of solid waste, are termed D/S facilities.

A reliable source of water is required not just for human consumption, but also for the industrial processing of agricultural products. There is also a significant demand for water for other industrial purposes; in urban areas, industrial and commercial use can amount to as much as 40% of total consumption. The same applies to waste water, which can pose complications for the surface water or ground water into which it is discharged, or for purification plants.

Recognition of the need for reliable D/S facilities led the United Nations in 1977 to declare 1980–1990 the International Water Decade. In this context the World Health Organisation (WHO) drew up a forecast of the total requirement in 1990, in which year it estimated that D/S facilities of an acceptable standard would be needed for three billion more people than in 1979. At a very rough estimate, this would cost between 300 and 600 billion U.S. dollars. Taking the lower of these figures, average annual expenditure during the decade would need to be five times as high as the amount spent in 1979 on D/S facilities.

A requirement for facilities on this scale and hence for work in the form of preliminary studies, planning, design, implementation and the transfer of knowledge and experience, including management and maintenance, meant that the stated aim of the decade was more of a challenge and a stimulus than a feasible, concrete objective.

There remains every reason for such an incentive: many people in developing countries, in both urban and rural areas, lack minimal D/S facilities. In 1970, 35% of the urban population and as much as 87% of the rural population had to make do without a proper water supply. In the case of sanitary facilities, the figures were 46% and 91% respectively. A certain amount of progress had been made by 1980, but 26% of the urban population and 67% of rural inhabitants still lacked safe drinking water, while 50% of urban dwellers and 87% of the rural community had to do without proper sanitary facilities. Apart from the common lack of proper facilities in working order, growing population pressures in both rural and urban areas have meant that existing facilities have become increasingly polluted or inadequate.

Inadequate or polluted drinking water and unhygienic sanitary facilities are to a significant extent responsible for the high morbidity and mortality rates in developing countries. According to estimates made by the World Health Organisation, 80% of all diseases are related to lack of water or use of contaminated water or stem from a lack of knowledge of elementary hygiene. In dry areas, for example, women – who always bear responsibility for household management and nutrition – may have to fetch water from a considerable distance. In other areas where water is closer at hand it may be heavily polluted, for example because open water is used as a latrine or because the water contains bilharzia or as a consequence of industrial discharge.

As a stimulus, the International Water Decade has been effective. Notable progress has been made in the D/S sector as a result of large-scale efforts in recent years, most notably in the developing countries themselves, where non-governmental organisations (NGOs) and the national authorities have assigned high priority to the D/S sector. The large-scale deployment of resources by national governments and substantial efforts on the part of the many NGOs, combined with numerous initiatives by users, have resulted in a particularly rapid increase in the construction of facilities. In financial terms, the developing countries are estimated to have funded two-thirds of the total costs themselves.

The international community has provided substantial support for these initiatives in financial, material and professional terms. The Netherlands too regards the D/S sector as one of the priority areas of its development-cooperation policy: in recent years the Dutch contribution to D/S activities has been running at between 100 and 150 million guilders a year.

The results of these efforts are impressive. In developing countries between 1980 and 1985, in both urban and rural areas, 300 million more people gained access to improved water supplies and 140 million to improved sanitary facilities.

The slogan adopted for the water decade, "WATER FOR ALL," has therefore worked as an incentive, but this ideal will not have been achieved in 1990. On the contrary: it is estimated that there were even more people in 1985 than in 1980 without proper D/S facilities; the first half of the decade has barely kept pace with the growth in demand for facilities. One of the reasons has been that the economic recession and debt crisis have meant that less money has been made available in recent years than envisaged when the Decade was declared in 1977. In addition the population has been growing rapidly in many developing countries, with the result that facilities have become overloaded and polluted.

A major source of concern in international consultations has therefore been the need to find new ways of sustaining and increasing the momentum with respect to both the construction of new facilities and the improvement of existing ones – apart from which

it is evident that many facilities rapidly fall into disuse through poor maintenance and management. Finally, studies have shown that the construction of improved D/S facilities is not sufficient in itself to bring about a reduction in water-related diseases. Equally as important are good hygiene in relation to the facilities and the optimal use of facilities. These latter aspects are promoted by campaigns to stimulate the level of participation and to provide information and education on proper use and hygiene.

The growth in awareness during the Decade of these and other problems has formed the subject of regular international consultation on sector strategies and concepts. These consultations have resulted in a number of recommendations which are also of relevance for the D/S activities supported by the Netherlands.

These considerations provide the background to this memorandum, which is primarily intended for use in the Netherlands for the formulation of sound policies in this sector and for the compilation of handbooks for the planning, design and implementation of projects or programmes within that sector financed or co-financed by the Netherlands. The document also serves by way of background for consultations with governments and organizations in host countries. Thirdly, it has been written with a view to consultations with other donors and U.N. agencies concerned with or active in this sector; such consultations are particularly important for donor coordination, which can significantly increase the effectiveness of joint efforts.

This memorandum, which is set in the context of Dutch development cooperation policy in the fields of health care and rural development, is designed to stimulate the development of:
- general policy proposals - manageable goals and hence - practical guidelines.

2. PROGRESS AND PROBLEMS

Despite the fact that the construction and management of new D/S facilities and the improvement of existing facilities have lagged behind the growing demand, considerable progress was recorded during the International Water Decade.

In the first place, there is a much greater recognition that the availability of proper D/S facilities within walking distance is essential for attaining a reasonable standard of living and good health. Secondly, new and standardized designs have been developed which enable comparatively inexpensive, technically straightforward facilities to be constructed and maintained on a large scale. Another important factor has been the greater insight into a number of problems (of a non-sector-specific kind) such as:
- optimal participation by users;
- the setting up of D/S organizations for management and maintenance;
- financial self-sufficiency, depending on whether the facilities are run along public or private lines;
- the tendency to concentrate on drinking-water supply while underestimating the need for sanitary facilities, drainage and waste-water disposal;
- lack of coordination between national agencies, donors and multilateral organizations, and
- coordination with other relevant sectors such as rural development, health care, agriculture, manufacturing and rural industry.

Although much has been written on these subjects, there remains a marked demand for detailed and factual documentation on successful large-scale activities in such fields as community participation and the organization and financing of maintenance and repairs.

The following sections examine some of the general views on these problems. The sections broadly follow the recommendations drawn up by the Development Assistance Committee of the OECD and the WHO, which were in turn the result of intensive international consultations between the UNDP, WHO, World Bank, UNICEF and a large number of bilateral donors.

2.1 User participation

Experience has shown that where D/S facilities are provided without organized support and involvement on the part of the user community, the facilities soon break down and will not be used to best effect. The result is a low rate of return, e.g. on the health status of the beneficiaries.

User participation is designed to help ensure that the improved facilities will be used effectively and to maximize the improvement in living standards. This can be achieved

by involving the users in planning, implementation and maintenance. The community of users and the authorities will then share responsibility for the facilities, and the likelihood that the facilities will be properly used and looked after will be enhanced; rapid deterioration and frequent and often unnecessary repairs can be avoided. In order to avoid misunderstandings, however, clear agreements about the nature of user participation need to be reached between the authorities and users before a project is embarked upon.

Particularly important is participation by female users, since it is women who are primarily responsible for obtaining water and for domestic hygiene. It is also important that women participate in the management of D/S facilities, e.g. as members of maintenance committees or even as maintenance engineers.

User participation will be possible only where national policy permits. In a number of developing countries, the policy is for the central government to supply basic water facilities to the population free of charge. Active involvement on the part of users is not required in these countries, and the assignment of co-responsibility to users requires a change in national policy. This is a structural matter, in the sense that such a switch in policy necessitates the reformulation of responsibilities from user level right up to and including national level. With the support of such organizations as the UNDP, WHO and the World Bank, a large number of countries are in fact preparing for and implementing policy adjustments of this kind and are reformulating responsibilities and making the necessary organizational adjustments.

In those countries where user participation is encouraged, the nature and scale of community involvement are increasingly being taken into account from the planning stage onwards. Prior to the compilation of the project plan itself, a start is made with the education and mobilization of the users at the same time that the technical feasibility of the project is being evaluated. Increasingly, preliminary socio-economic studies are being carried out to assess the extent to which users might be able to help in preparation, implementation and maintenance. Education, information and mobilization, and the socio-economic research are often referred to as the 'non-technical' activities.

Upon completion of the feasibility study and the socio-economic research, consultations are held with the users concerning the results, including the most appropriate technique, desired locations of the facilities and the division of responsibilities between the various bodies concerned, etc. Actual implementation of the project does not get under way until these consultations have been completed.

In the case of the non-technical aspects a number of options are available. In some projects, special, temporary socio-economic units are set up for the duration of the project. A second, increasingly popular option consists of calling in a specialized NGO.

Alternatively responsibility for the non-technical side may be assigned to a specialized ministry, e.g. Community Development or Health. Finally, additional tasks may be assigned to the body responsible for the technical side of the project, e.g. the Ministry of Water. In all cases, it is fair to say that the continuing and careful coordination of the technical and nontechnical sides is required for participation to be a success.

2.2 Organizations

National organizations and agencies responsible for D/S facilities are often not properly equipped to handle the numerous and rapidly increasing activities in the D/S sector.

In deciding how to use their own financial resources or funds obtained from abroad (e.g. from multilateral development banks), many developing countries assign priority to the construction of facilities in urban areas. Bilateral Dutch activities tend to concentrate more on the construction or improvement of D/S facilities in rural areas or on the periphery of intermediary, regional towns. In both cases the use, maintenance and repair of D/S facilities will generally be the responsibility of the national D/S agencies.

National D/S agencies tend to have a limited executive capacity. Lack of trained staff and poor management, in combination with insufficient or poor materials, hold back the pace at which D/S facilities can be constructed. Large projects financed by one or more donors therefore often make use of a temporary project organization which is then phased out some time after the project has been completed (usually after several years). Many D/S facilities have been constructed in this manner, but it is a system that does little to build up local executive capacity.

D/S facilities constructed by a temporary project agency are normally handed over (within a limited period) to the national body responsible for utilization, maintenance and repair. Generally speaking these national organizations will be unable to take on additional tasks on account of staff shortages and budgetary constraints.

The delegation of responsibilities down to and including user level can appreciably ease the burden on national bodies at central level. The delegation of responsibility depends, however, on the complexity of the technology. Maintenance and repair are possible at village level only where the technology permits, besides which the village will need the necessary equipment and parts. These form the central objectives of the Village Level Operations and Maintenance concept (VLOM). Inspired by this concept, a number of hand pumps have been developed which are now being installed on a large scale. These hand pumps are primarily intended for application in rural areas and sparsely populated localities, but are also being used in poor urban districts. Under the VLOM approach, the government's role, in terms of both construction and maintenance, can be

kept limited to that of advisor and where necessary sponsor. For the government to exercise these supporting functions properly, however, up-to-date and reliable information is required on operational aspects of existing D/S facilities, so that the user can be accurately advised of the costs of usage and maintenance, wear and tear and the need to replace components, etc. Such information is still largely lacking, but cost-effective methods for gathering operational information are at present being developed and introduced.

Generally speaking, technically complicated and ramified urban facilities lend themselves less well to decentralized utilization and maintenance. In most cases these aspects are handled by semi-government agencies or public utilities. In order to promote efficient management and to establish a more direct relationship between costs and income, vigorous efforts have been made in recent years to privatise the running of these facilities. Examples include the PDAM enterprises in Indonesia and the Water Corporations in a number of African countries. In order to meet the marked requirement on the part of these new enterprises for training and support in such fields as management, administration, financial matters and technical training, a number of 'twinning' arrangements have been established in recent years between D/S companies in developing countries and Dutch public utilities.

2.3 Cost effectiveness and financial self-sufficiency

It is essential for investments in the D/S sector to be costeffective. Cost-effectiveness is established by means of a analysis, in which a distinction is drawn between the financial, economic and social effectiveness of the costs. Various calculation models and quantitative yardsticks have been developed for cost-effectiveness analysis. These models and yardsticks are also used in the D/S sector, especially for companies supplying drinking water.

A second basic requirement for the sustained development of the D/S sector is that capital costs (= interest and depreciation), operating costs (= costs of usage) and maintenance costs (= repair costs) must be covered. The capital costs of D/S activities are generally funded in whole or in part in the form of investment capital provided by external development banks or donors. Operating and maintenance costs are normally charged to the users and the national D/S agencies.

Capital, operational and maintenance costs vary greatly, depending on the technique in question, local factors and the number of users per facility. The World Bank regularly publishes cost figures for a large number of countries. These reveal that the capital costs of a well plus hand pump serving between 50 and 300 people are between 20 and 60 guilders per head. Piped water systems with public standpipes cost between 60 and 120 guilders a head and piped systems with house connections between 120 and 220 guilders a head. Consumption costs also vary markedly. In the case of hand and foot

pumps and latrines, the costs are negligible. Where motorised pumps are used, however, labour and energy costs can drive the price up to between 10 and 50 guilders per head per year. Similarly the utilization costs of sanitary facilities vary considerably, depending on the technique. Sewerage with full-scale water purification can cost up to 40 guilders per head per year. The repair and maintenance of water facilities cost in the order of 1 guilder for a hand pump; 3 guilders for a standpipe, and 5 guilders for a house connection.

In practice many national D/S agencies find themselves unable to cover the interest payments on loans. Even the operational and maintenance costs often form too heavy a burden for the national D/S agencies: charges are often too low, while the collection of payments is often patchy. This may mean that fuel for the motors or essential spare parts can no longer be afforded, so that the D/S facilities operate only intermittently or lapse into premature disuse. It is, however, essential for the costs of utilization and maintenance to be met in all cases and from the outset by the responsible national D/S agencies or by the consumers/users. Interest payments on the investment capital could be paid in the longer term.

Experience has shown that the users of improved facilities are willing and able to contribute towards the costs of construction, utilization and maintenance, particularly if the facilities are satisfactory and if the charges are set at a reasonable, i.e. income-related level. For the lowest income categories, the guideline is sometimes used that the total costs of utilization and maintenance should not exceed 3% to 5% of household income. It may also be possible for users to contribute in kind, for example by supplying unskilled labour or locally available building materials. They may also be able to carry out simple repairs and/or to assume co-responsibility for careful and responsible use.

Final decisions about the financial and other contributions of users, the provision of grants by the national government and the implications for the selection of the technique will of course need to be taken in close consultation between the users and the national D/S authorities.

The total costs and the choice of technique will depend to a significant extent on the location of the D/S facilities, i.e. whether they are being installed in a densely populated urban area, a less densely populated regional centre, a village or in sparsely populated rural areas.

Urban areas

Urban D/S facilities are concentrated in a small area. The utilization of hand pumps in combination with latrines is generally inadvisable, since the latrines can pollute the wells from which water is drawn. Generally speaking, however, the poorest population groups in urban areas will be unable to pay for the operational let alone the replacement

costs of a public mains system or central sewerage. To enable these groups to be reached, urban facilities require:
- the development of a national policy under which all population groups, including the urban poor, are provided with proper D/S facilities;
- the introduction of a progressive system of charges for wealthier user groups, with relief for poorer users.

Rural areas
The rapid growth in population in thinly settled rural areas means that existing (often traditional) water facilities become overloaded, that water quality declines and that people have to fetch water at a greater distance. Rural communities are well aware of the consequences of these developments and usually attach high priority to the improvement of drinking water facilities. With the exception of gravity-feed systems, mains networks are not generally suitable for sparsely populated rural areas. The construction costs are high and an effective organizational infrastructure is required for the management and utilization of the facilities, while maintenance is elatively complicated and requires well-trained engineers, properly equipped work shops and a wide range of spare parts.

For these reasons, simple and inexpensive techniques, such as hand pumps and straightforward distribution systems based on gravity feed, are much to be preferred in sparsely populated rural areas. The construction and maintenance of such facilities can be handled by the users themselves. These techniques have, however, only a brief history of being applied on a large scale, and utilization and maintenance systems remain the subject of widespread experimentation, especially in rural Africa. In some countries, repairs are carried out free of charge by the D/S agencies at district level. In other countries repairs are carried out against payment by specially trained independent specialists. Some of the specialists are paid by the users of a water system for each repair carried out, while others are paid a monthly salary. The collection of money for utilization and maintenance also varies. In some cases money is specially collected each time a repair is carried out, while in other cases the users make a monthly contribution to a water fund. Generally speaking, the arrangements for collecting funds and making payments will need to be worked out in close consultation with the users or their representatives.

2.4 Techniques and local manufacture

Technically complicated and expensive D/S facilities have proved unsuited for large-scale application in poorer developing countries. Considerable and successful efforts have been made in recent years to develop simple and affordable techniques.

The most important technological advances have been made in the field of hand and foot pumps. The Netherlands has also made a significant contribution in this area.

Many types of hand and foot pumps, including direct action hand pumps and easy to maintain hand pumps, have been placed in production and hundreds of thousands of hand and foot pumps are being installed annually. New techniques for sinking wells have also become available, e.g. manual augers. Similarly a number of variations have been developed in the field of sanitary facilities, e.g. Ventilated Improved Pit (VIP) latrines, composting latrines, 'pour-flush' latrines, and so on. A number of simple techniques have also been developed for the disposal and purification of waste substances, such as small bore sewers and biogas plants.

Since they are technically straightforward, a number of the recently developed facilities are now being manufactured in developing countries, e.g. various hand and foot pumps, shallowwell augers and latrine steps. By permitting only a limited number of manufacturers within a given country, the range of facilities available in the open market can be kept down and local manufacture can contribute towards standardization.

The commercial viability of local manufacture depends however on a number of conditions. Import duties on raw materials and sales taxes on the end-products will need to be set at levels that enable local goods to compete against imported products. Local producers will also need sufficient hard currency to buy the necessary raw materials. In setting up local manufacturing plants, the desirability has also emerged of limited expert assistance in such fields as management support, quality control and product development. In recent years a number of local joint ventures have been set up and there has also been an increase in local manufacture under licence.

2.5 Uneven development

Drinking-water supplies have traditionally been the main focus of attention in the D/S sector; sanitary facilities, drainage and solid-waste disposal have received less priority, on the basis that responsibility for the construction and maintenance of sanitary facilities is primarily a matter for households. In addition the costs of sanitary facilities (especially sewerage) are high and special organizations are required for the purpose, while given a choice, users generally give preference to improving the water supply over sanitary facilities, since drainage and solid-waste disposal are generally less urgent problems in rural areas.

The demand for proper sanitary facilities, drainage and waste disposal is, however, increasing, partly because the problem of pollution is becoming more acute in and around urban areas, and partly because information and education activities on the technical possibilities have stimulated interest in improving sanitary facilities. In addition, the development of cheaper techniques has brought the improved facilities within the financial reach of poor population groups.

A significant handicap for balanced sectoral development is the fact that separate organizations (including the Ministry of Water, Ministry of Health and municipal agencies) are generally responsible for the individual sectors of drinking-water supply, sanitary facilities, drainage and solid waste disposal. The balanced provision of these facilities therefore depends on establishing effective coordination between the various bodies concerned. This is more easily said than done.

Effective coordination between the various bodies responsible for water supply, sanitary facilities, drainage and waste disposal in therefore a pre-condition. Examples of integrated and coordinated urban projects supported by the Netherlands include the Kanpur/Mirzapur project in India, the Integrated Urban Infrastructure Development Project in Indonesia and the Integrated Urban Water and Sanitation Project in Rada, North Yemen. Examples of integrated projects in rural areas are the drinking-water and sanitation projects in Morogoro/Shinyanga, Tanzania and in various states in India.

Although it is still too early to measure the effect, it may be assumed that living standards and health will benefit more from this integrated approach than from an isolated improvement.

2.6 Coordination and Cooperation

Coordination and cooperation among donors, between donors and national agencies and between the D/S sector and other sectors often leaves a lot to be desired.

Thanks partly to regular international consultations (such as those organized by the DAC), there has been a considerable improvement in coordination and cooperation among donors in recent years. Sector strategies have been developed that are gradually finding their way into sector policy plans in many donor organizations. The continuation of such coordination and cooperation, even once the Water Decade is over, will be to the benefit of the sustained development of the D/S sector.

At national level, coordination and cooperation between the national government and donors and between the various agencies responsible for the D/S sector is of course primarily a matter for the national government. During the Water Decade, consultations on sector policies and strategies have been initiated between national D/S organizations and international bodies such as the WHO, UNDP and the World Bank. In certain countries, the national D/S agencies have been helped by the Sector Development Teams of the World Bank/UNDP to draw up sector investment plans.

In a number of countries, Regional and Country Sector Strategy Workshops organized with the aid of the WHO or bilateral donors have led to necessary adjustments in national policy and sector strategies. An example was the Arusha seminar (1986) in

Tanzania, which explored in detail the delegation of responsibilities from national to district level and user participation.

The D/S sector cannot be viewed in isolation; developments in this field have implications for other sectors, such as health, the environment and productive capacity, while conversely developments in other sectors can have a major impact on the D/S sector.

- agriculture: the large-scale extraction of water for industrial or agricultural purposes - especially irrigation can seriously reduce water reserves, and hence pose a threat to drinking-water supplies. The increasing demand for water makes the effective management of the available water supplies all the more important.
Sound management requires a knowledge of water reserves - which are rapidly being depleted - and extraction techniques. In countries such as Indonesia and North Yemen and in the Sahel, the need for such knowledge is often acute.
- the environment: the large-scale withdrawal of water from limited water reserves and discharges of polluted waste water can affect the environment. Examples include desertification, serious forms of surface-water pollution and the salination of ground water resulting from the intrusion of sea water. Measures to control or prevent this degradation and pollution of the environment will need to be taken in good time.
- physical infrastructure: improvements in D/S facilities generally have the most impact on welfare and health if they are coupled with improvements in living conditions and general economic progress.
- health: primary health care and to a much lesser extent curative health care are complementary to D/S facilities. Effective primary health care enhances the effectiveness of activities in the D/S sector.

3. DUTCH INVOLVEMENT, PRINCIPLES, OBJECTIVES AND GUIDELINES

3.1 Involvement

The Netherlands has taken an active interest in the improvement of D/S facilities in certain developing countries for some time now; in recent years it has allocated 100–150 million guilders a year to the D/S sector.

Apart from the financial contribution made by the Dutch government, many institutes, educational establishments and agencies are also involved. There is a growing interest within the non-governmental sector to help develop this sector by means of commercial and industrial contacts.

The Netherlands supports numerous and varied D/S facilities in developing countries, ranging from one-off projects with a specific aim (e.g. conducting a groundwater survey in a particular area or the secondment of a specialist to a national D/S agency) up to and including the preparation and implementation of a multidisciplinary and integrated project in which water supply, sanitary facilities, surface-water drainage and waste disposal form integral elements in addition to the provision of information and education on hygiene and optimal utilization. Money is also provided to help provide spare parts, equipment and other materials.

3.2 Principles

The Netherlands will continue to devote its specialist expertise and such resources as it can to the D/S sector. Because those resources are limited, choices have to be made. In this respect the following considerations and criteria will apply:
- the allocation of priority to countries with which the Netherlands has a long-standing development relationship, namely the programme countries and regions, as they are known.
- in consultation with the host government, and with the latter's agreement, preference will in appropriate cases be given in programme countries or regions to limited areas (e.g. regions, districts, regional centres and small towns).
- activities supported by the Netherlands will be consistent with the policy framework and development plans for the D/S sector of the local partner(s) and the Netherlands. Where such frameworks and/or plans are lacking, their development will be encouraged. Where possible Dutch support will be provided for an extended period. Before a project is commenced, the objectives, various activities, actors and the financial, material and professional input of the various parties concerned will normally be described and agreed.
- D/S facilities will as far as possible lead to concrete, quantifiable results. Preparatory activities and studies e.g. into the need on the part of a particular population group for improved D/S facilities or into the availability of groundwater reserves – will qualify

for Dutch support where these activities can be followed up by a concrete project – activities supported by the Netherlands should enhance the potential for autonomous sectoral development. Dutch assistance will therefore be geared towards local capacities in the sector in question. The transfer of knowledge and demonstration will remain key elements in Dutch assistance.

3.3 Objectives

The overall Dutch objective in supporting the D/S sector is to contribute towards a lasting and effective improvement in the living conditions and health of primarily the poorest population groups in rural areas, regional centres and the intermediate towns.

Specific objectives relate to improving the quantity, quality and/or accessibility of drinking-water supplies and sanitary facilities. Other activities in this sector include the responsible utilization and management of ground water and surface waters, measures to improve the recovery and/or purification of waste substances, and steps to prevent or reduce environmental pollution.

3.4 Guidelines

Two of the central, overall objectives of Dutch policy are durability and effectiveness. A detailed account was provided in Chapter 2 of factors affecting durability and effectiveness, e.g. participation, institutional support, financial self-sufficiency, coordination and sound management. Needless to say the emphasis on individual factors will vary greatly from locality to locality; in some cases active participation will be a central concern, while in others the focus will be on training and development of institutions or on promoting coordination between various collaborating agencies, e.g. by setting up a Steering Committee.

A careful examination will be needed in the case of each project to determine which aspects require special attention (e.g. participation, covering costs or coordination), and what form that attention might take in practice, e.g. preparatory studies or the development of guidelines for funding and maintenance.

With respect to the factors outlined in Chapter 2, the following general Dutch guidelines apply.

3.4.1 Community participation

The Netherlands recognizes the importance of active participation by users from the preparatory stage up to and including the utilization and maintenance of D/S facilities.

The Netherlands recognizes that changes in national policy will be required in a number of countries in order to permit effective user-participation. A number of developing countries are being successfully assisted in this field by the WHO and the World Bank. Where possible activities of this kind will qualify for Dutch support in countries where the Netherlands is involved in the D/S sector.

With respect to D/S facilities supported by the Netherlands, it will in principle be assumed that the users will play the fullest possible role in planning, implementation and especially maintenance. More specifically this means:
a. during the planning stage, the need for an improvement to D/S facilities will be assessed by means of a preliminary study carried out in collaboration with the present or future users. In close consultation with the users, especially the women, agreement will also be reached concerning the technical options, the extent and nature of participation and the location of the facilities;
b. in the case of technically uncomplicated D/S facilities, especially in sparsely populated rural areas, regional centres and smaller towns, every effort will be made to encourage user-management where this is technically and organizationally feasible;
c. special attention will be devoted to active participation by women;
d. to ensure that improved D/S facilities are effectively used, instruction on the interrelationships between improved D/S facilities, optimal utilization, hygiene and health will form an integral part of the planning and implementation of D/S facilities.

3.4.2 Financial self-sufficiency

The Netherlands will continue to operate on the principle that utilization and maintenance costs should be borne by the users or the national authorities. The Netherlands will promote the overall financial independence of the D/S sector, meaning that it will also encourage users and the national D/S agencies to bear the cost of interest and depreciation. Where this is not yet feasible, grant aid will be provided. On the basis of preliminary socio-economic studies, project proposals will be required to determine the social and financial capacity of users and the viability of the activities, as well as how and by whom the costs of utilization and maintenance are to be met. These studies will need to result in specific agreements beforehand between the users and the national authorities concerning charges and the collection of payments to cover (as a minimum) the costs of utilization and maintenance.

If the preliminary study should reveal that the costs of utilization cannot reasonably be charged to users (i.e. if they exceed 3–5% of the average household budget) or to the relevant D/S agencies, the activities will not be proceeded with unless projections indicate that it will be possible for the users and/or the D/S agencies to finance these costs in the not too distant future.

The effective and lasting provision of services depends on sound economic and financial management. At the least this means that there must be a self-supporting system to cover utilization costs. In the case of D/S facilities in rural areas this will need to be devised in close consultation with the users, with the authorities providing encouragement, supervision and advice, if necessary with temporary support in the form of foreign (e.g. Dutch) expertise.

3.4.3 Institutional development and transfer of knowledge

On account of the inevitable budgetary constraints on the part of central governments, and with a view to involving the community in aid activities, the Netherlands supports the present trend towards the decentralization of national D/S agencies down to user level. Support will also be provided for initiatives to transfer relevant activities to the private sector (e.g. the manufacture of hand-pumps and drilling equipment, or construction work).

Dutch experts can, in appropriate cases, play an advisory role in helping to decide the form that decentralization should take. They can also make a valuable contribution towards the training of staff at all levels.

In the private and semi-private sector, Dutch know-how and experience are already been used for a large number of activities, including consultancy on business management in the form of twinning arrangements and joint ventures. The encouraging experience with management training in the water sector provide grounds for stepping up these arrangements.

If the improved facilities are to be properly used and maintained the scale of new D/S facilities will need to be geared to the current or future institutional capacity. The institutional capacity of local D/S agencies will therefore need to be determined in the preparatory phase, when feasible plans (e.g. budgetary commitments) for institutional development in the longer term can be made. These plans will need to lay down the tasks and duties of the national D/S agencies at all levels as specifically as possible.

Foreign experts may be temporarily deployed for planning and training/transfer of knowledge.

3.4.4 Technology

The Netherlands will where possible support research programmes for the development of simple and affordable D/S techniques for the poorer population groups in developing countries. Local, commercial manufacture will also be encouraged. Limited support in the fields of training in business management and product development may be considered.

Selection of the appropriate kind of facility will be based on the following criteria:
- local capacity to maintain the facilities properly;
- the adequate provision of services at an acceptable price to consumers.

3.4.5 Balanced development

In both urban and rural areas, the policy favours the balanced improvement of the water supply, sanitary facilities, drainage and waste disposal. Active and effective cooperation and coordination between the national D and S organizations will therefore be encouraged. In the preparatory phase, intersectoral planning will be encouraged in conjunction with information activities.

It is assumed that prior to implementation, projects with Dutch support that involve the extraction of ground water or surface water or that lead to the discharge of waste water or the generation of waste will advise the relevant authorities of any adverse effects on the environment. Such advice will also be accompanied by recommendations as to how these adverse effects could be limited, e.g. by the introduction of a licensing system for water extraction or a levy system in the case of waste discharges or dumping.

3.4.6 Coordination and cooperation

The Netherlands will actively stimulate coordination and cooperation between donors, e.g. by means of close collaboration and consultation with international bodies such as the UNDP, WHO and World Bank. In this respect the Netherlands will continue to participate actively in international consultations on sectoral policies and strategies, which received a particular boost during the International Water Decade.

Closer cooperation will be pursued in programme countries and regions with the World Bank's Sector Development Teams, and the Netherlands will take part actively in the sectoral policy talks between recipient countries and donors.

The transfer of information and knowledge between national and international organizations and the development of relevant stocks of knowledge (e.g. in data banks or in library form) will be encouraged as an integral element of projects.

4. POLICY IMPLEMENTATION

With a view to the implementation of the Dutch objectives and guidelines for the D/S sector as outlined in Chapter 3, the following principles will apply:

1. In the case of programme countries and regions where the Netherlands supports the D/S sector, the policy plan shall include a section on the D/S sector setting out the goals and principal implementation aspects for bilateral cooperation activities in that sector.
2. In the programme countries and regions where the Netherlands provides support for the D/S, multi-year sectoral plans will be drawn up for each country, and especially for the targeted regions within that country. These sectoral plans will describe the general and specific aims of the programme as well as the package of activities, the actors and the resources to be deployed. The plan will also cover the relationship with other sectors, such as health, agriculture and rural development, and will examine the effects on the environment. Sectoral plans will need to be brought up to date at regular intervals. The plans will provide the basis for the Netherlands to make forward-looking commitments.
3. The national authorities, in consultation with the Dutch embassies, will continue to be chiefly responsible for the identification of appropriate activities. A number of sector specialists will be appointed for this purpose and for the consultations with national authorities on the Dutch guidelines. Independent experts not in any way associated with the implementation of projects will be engaged for the purpose of monitoring and reporting on project progress. Generally speaking the implementation of projects will be contracted out to the private sector.