

HOSPITAL BASED HEALTH CARE

17 INSPECTIE - EVALUATIE

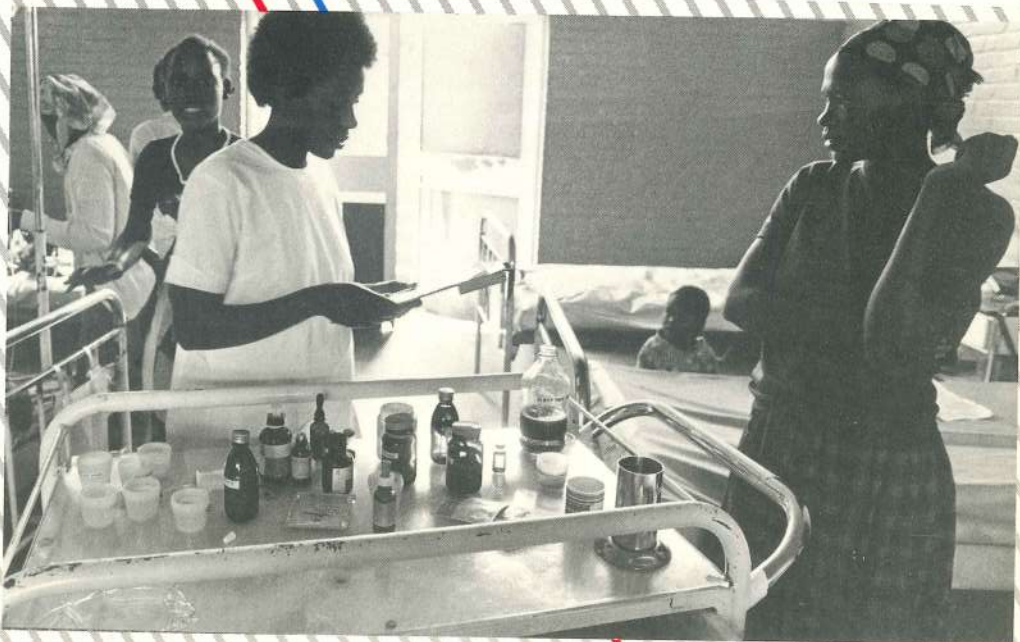
17.2 IOV

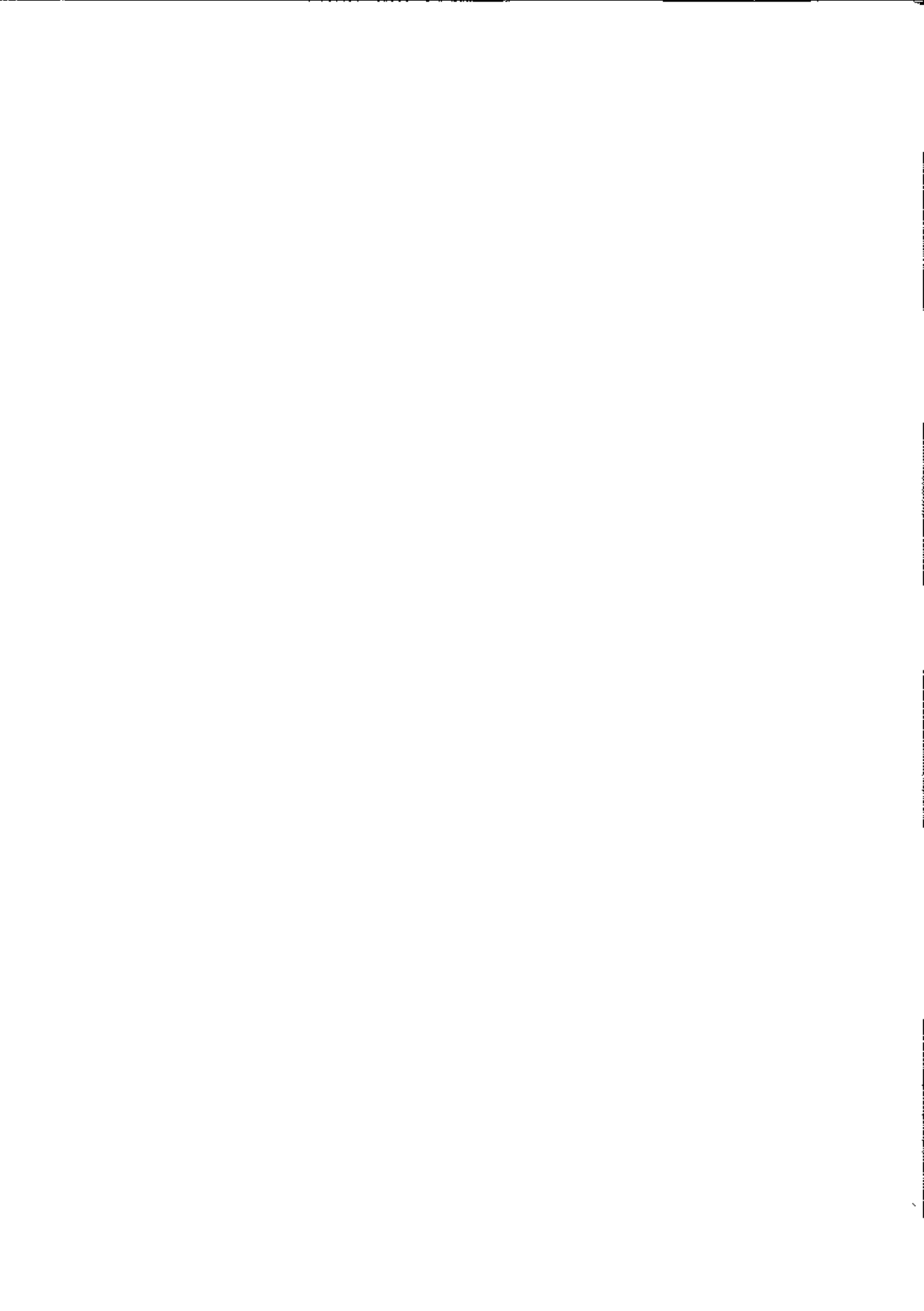
Datum : *aug. 87*

Onderwerp :

Zukunfts-gerondheidszorg

Zie ook : *5.6*





HOSPITAL BASED HEALTH CARE

**EVALUATIVE SUMMARY OF DUTCH-SUPPORTED
ACTIVITIES IN THE FIELD OF
HOSPITAL-BASED HEALTH CARE, 1975-1984**



CONTENTS	PAGE
FOREWORD	4
PART I: CONTEXT	5
Chapter I: Health and health care	6
Chapter II: Hospital-based health care	10
Chapter III: Rehabilitation	13
Chapter IV: Development assistance and health care	14
PART II: FINDINGS	19
Introduction	20
Chapter V: Budgetary commitments in the health sector	21
Chapter VI: Equipment	23
Chapter VII: Hospital-building and expansion projects	30
Chapter VIII: Maintenance of facilities and equipment	38
PART III: GENERAL COMMENTARY AND ASSESSMENT	43
Chapter IX: Summary and conclusions	44
Chapter X: Recommendations	47
PART IV: APPENDICES	49
1: Hospital-based health care projects evaluated	50
2: Dutch health workers in the Third World	51
3: Cat. Ia, Health care projects in programme countries	52
4: Cat. Ia, Subsectors as a proportion of total commitments	53
5: Cat. Ia, Types of assistance and subsectors	54
6: Cat. IIIa, Annual budgets and commitments	55
7: Cat. IIIa, Subsectors as a proportion of total commitments	56
8: Cat. IIIc, Social and economic emergencies among groups	57
9: Cat. IIIc, Subsectors as a proportion of total commitments	58

FOREWORD

Support for hospital-based health care occupied a dominant position in the Netherlands' programme of cooperation with developing countries in the field of health care until 1981. From the late seventies onwards, however, there was a gradual shift towards extramural care, i.e. health care outside hospitals. This is one of the conclusions reached by the Policy Memorandum on Health Care which the Minister for Development Cooperation sent to Parliament in March 1986. After outlining the problems of health and health care in developing countries, summarizing previous policy statements and giving overall figures for previous expenditure, the document deals in particular with future plans and criteria for the acceptance of new project proposals.

Following on from the Policy Memorandum, the Operations Review Unit (ORU) here presents an evaluative survey of projects aimed at intramural health care; a separate report will be made on the findings relating to extramural care.

The survey is in four parts. The first outlines the background against which the projects and programmes were carried out. The second contains the main results of twenty-five project evaluations. The third gives a summary assessment of the Dutch-supported activities in the field of hospital-based health care that were examined and concludes with recommendations for future action. The last part contains the Appendices.

CONTEXT



CONTEXT

HEALTH AND HEALTH CARE

1. Health situation

Despite the fact that life expectancy has risen considerably in many developing countries during the last two decades, the general health situation in developing countries still differs vastly from that in the rich countries. The figures below give some indication of the differences.

Table 1

Health indicators in countries with different income levels

Indicator*	National income level		
	Low	Medium	High
1. GNP per head in \$	240	1,420	9,440
2. Births per 1,000	42	34	15
3. Deaths per 1,000	16	10	10
4. Average life expectancy	51	61	74
5. Infant mortality per 1,000	49-237	12-157	13
6. Child mortality per 1,000	18	10	1
7. Drinking water (% of population with access)	25	58	100
8. Calories (% of need consumed per head)	96	109	131
9. Literacy (% of adults)	43	72	99

* Indicators

1, 2, 3, 4, 6 : 1979

5 : 1978

7 : 1975

8 : 1977

9 : 1976

(from Evans, 1981)

The figures in Table 1 show that poor health and poverty are related; understandably so, since poverty usually goes hand in hand with malnutrition (sometimes severe), unsafe drinking water, inadequate sanitation, poor housing, a rapid succession of pregnancies, and in many cases badly paid, 'dangerous' work – all factors which increase the risk of disease (including chronic disease) and premature death. Widespread infectious diseases which have not yet been brought under control, e.g. malaria, tuberculosis and bilharzia, are not in themselves poverty-related although they present an additional threat to the poor.

CONTEXT

Distribution

The highest mortality rate is found among young children, particularly in the first year of life. The main cause lies in the complex of malnutrition, worm infestation, anaemia and frequent infections. Particularly common are acute gastro-intestinal and bronchial infections, the former often complicated by dehydration, which can rapidly prove fatal.

From time to time whole areas are smitten with measles or whooping cough in a manner reminiscent of the plagues of medieval Europe. Tetanus in newly-born infants (the people themselves call it the 'disease of the seventh day') is among the first ten causes of death in areas where hygienic precautions at childbirth are inadequate.

Both men and women are affected by the major infectious diseases mentioned above. Many men are exposed to additional risks from their work, e.g. accidents and poisoning by insecticides. Women are particularly affected by diseases related to the reproductive cycle: miscarriages and even normal births are dangerous if there is no expert assistance available. Physical weakness due to the dual workload on women (in and outside the home) coupled with frequently recurring periods of pregnancy and breast feeding, although not included as a diagnosis in the statistics, are in many instances the main cause of chronic infection and premature death.

In many if not all societies unequal opportunities for health run parallel to, and form part of, social inequality in other fields: unequal access to employment, income and education, for example. The form the inequality takes may differ according to class, sex and race, and even between urban and rural areas. Health facilities are few and far between in many rural areas. Levels of health and patterns of disease similar to those in the rich countries can be found among the better-off in the towns and cities; in many of the rapidly growing slums around them, on the other hand, the level of health is very poor, similar to that in rural areas.

Causes

The medical/biological view is that health and disease are determined by biological factors, and scientific medical care plays the major role in fighting and reducing the level of disease and death.

In many cultures the main causes of disease are sought in a complex of non-material forces outside the individual. The appropriate cures include not only magic but also other more or less empirical forms of health care.

A third approach attributes disease particularly to social causes. It exists in several variants and does not exclude elements of the other two approaches. Proponents of this approach regard disease as being caused almost entirely by economic circumstances, especially poverty, and are therefore most interested in the economic and social distribution of disease. In their view health cannot be improved without first relieving poverty.

Historical studies in this area (e.g. McKeown, 1979) reveal that the chances of health in the industrialized world did indeed improve more as a result of socio-economic developments than the development of medical technology, which

CONTEXT

came later. This finding has brought about an international revolution in thinking about diseases, their causes and ways of fighting them: the medical approach alone cannot solve the health problem. Some even believe that socio-economic factors are 70% responsible for it (Cumper and Lee, 1983).

Others, conversely, have demonstrated the effectiveness of purely medical means of fighting certain diseases, e.g. tuberculosis among the negro population of New York (McDermott, 1978). Unicef also seems to favour this approach, witness the strong campaign it mounted in 1983 to fight infant and child mortality (the GOBI* approach).

It is not possible to give a precise ratio between the specifically medical and socio-economic causes of disease, although there are indications that the poorer the health situation (e.g. in terms of infant mortality) the greater is the part played by socio-economic factors (Prescot, 1975). It can be demonstrated, moreover, that some types of disease are more poverty-related than others, and these are the worst killers in the Third World.

2. Health care

For practical purposes we may define health care as 'the organized efforts of a society to promote health, prevent and treat disease and rehabilitate the handicapped'. It thus promotes participation in an active social and economic life. The detectable medical effect could be described as the 'net health gain', normally expressed in terms of changes in infant mortality and average life expectancy at birth.

Health care also has social effects. Depending on its accessibility and orientation it can either confirm or help to reduce the inequalities between different sections of the population as regards opportunities for development.

Subsystems

Health care in most developing countries can be divided into a number of 'subsystems' which as a rule operate with little coherence or coordination. In many communities traditional methods of healing are used and retain their own position and status, separate from modern or 'scientific' health care. In some places their status is officially recognized and included in the national plans to promote health, as in the case of the Ayurveda approach in Sri Lanka. In any event, traditional methods, whether officially recognized or not, play a major role in large parts of Africa, Asia and Latin America.

As far as organization is concerned, 'modern' health care has developed into two sectors, public and private. The public sector is directed by and from a Ministry of Health, in medical and employment legislation and in programmes implemented accordingly. (Employment laws are usually implemented by a para-statal body and in many cases affect only a limited section of the population.) The private

* Growth monitoring, Oral rehydration, Breast-feeding and Immunizations

CONTEXT

sector comprises a large number of activities designed to promote health. First there are the private doctors and hospitals for whom profit-making is a subsidiary or principal objective. Then there are charitable institutions, e.g. missionary organizations, which make a major contribution to health care in many developing countries. The industries that supply health care products such as drugs and medical instruments may also be regarded as part of the private sector.

Levels

The 'modern' health care system consists of functional units such as hospitals, health centres and stations, doctors' practices (private or otherwise) and paramedical assistants. There are considerable differences in the size and technological capacities of these units. The most common classification is by level of medical care: primary, secondary and tertiary. Ideally they should make up a network of facilities interlinked by a referral system. They may be defined as follows:

1. Primary (extramural) health care covers all the activities and bodies at village or community (e.g. urban ward) level; health centres without beds are included here.
2. Secondary health care comprises hospitals with general medical facilities but without specialist care, at both district and provincial level.
3. Tertiary health care comprises hospitals with specialist facilities, e.g. regional hospitals and those with a national function, including teaching hospitals and specialist hospitals (dealing with one particular disease).

Expenditure

Rough calculations indicate that developing countries spend 2-6% of their annual GNP on health care, of which 75% goes to the private sector (World Bank, Investing in Development, 1985).

3. Overall profile

Leaving aside the considerable differences between one country and another, the inadequacies of the official health service in most developing countries can be summarized as follows:

1. Poor reach: in many cases no more than 40% of the population.
2. Unequal distribution: concentrated in the towns and cities.
3. Lack of resources and a tendency (due to various causes) to reduce the percentage of public funds spent on health care.
4. Wrong use of scarce resources, caused partly by overconfidence in the value of relatively expensive hospital-oriented medical facilities, resulting in 'unbalanced growth'.
5. Heavy and increasing dependence on imported drugs, advanced technology which in many cases cannot be accommodated and ideas on strategies in the health service (e.g. training).

CONTEXT

HOSPITAL-BASED HEALTH CARE

Origin

In the colonized developing countries the building of hospitals coincided with the establishment of the Colonial Administration, albeit hospitals had already been set up by missionary organizations in some countries. Whereas government hospitals were primarily meant to serve government officials, traders and settlers, mission hospitals – partly for reasons of charity and religious conversion – were open to the native population right from the beginning.

Function

A constantly growing knowledge of infectious diseases resulted in specialist studies of the transmission of major tropical diseases such as malaria, trypanosomiasis, yellow fever and schistosomiasis around the turn of the century (Ransford, 1983). This laid the foundation for subsequent large-scale anti-disease campaigns by the colonial governments, in which hospitals played a changing role. At an early stage special centres were set up mainly to isolate patients suffering from dangerous infectious diseases such as cholera, tuberculosis and leprosy. As more effective drugs became available the emphasis shifted to treatment.

Around World War II major developments occurred in pharmacology and medical technology, producing not just new medicines such as penicillin but also new preventive techniques, e.g. in the field of vaccination. Hospitals came to be regarded – inter alia by the WHO – as the focal point of the health care system: they were supposed not just to be centres of healing but also to do preventive work; ‘prevention departments’ were therefore opened with specially trained doctors in charge. It was also thought that hospitals should supervise the treatment of patients at home and provide some of the training and research in this area (WHO, 1957).

Later these ideas were abandoned, for one thing because the healing function of hospitals was found to dominate to such an extent that the preventive work could not be done properly. Whereas in 1963 the hospital was described in official WHO documents as ‘the health centre of the community’, in 1968 the same organization defined it much less broadly, as ‘an institution that performs admissions for medical treatment and care’.

Nowadays hospitals act mainly as centres of medical technology skills and training institutions for the major medical disciplines.

Cost

The largest proportion of government funds allocated to health care is generally spent on hospitals (secondary and tertiary health care). This is illustrated by the following table of typical public spending on health care from Abel Smith’s ‘Poverty, Development and Health Policy’ (WHO, 1980):

CONTEXT

Administration and management	6.0 %
Education and research	4.5 %
Construction of teaching hospital	9.5 %
Running costs of hospitals	64.0 %
Construction of health centres	1.0 %
Running costs of health centres	11.0 %
Running costs of health stations	2.0 %
Environment and prevention	2.0 %

It is quite clear that the running costs – in particular staff salaries – place a disproportionately heavy burden on the available resources. In the light of these figures critical questions are increasingly being asked throughout the world as to the effect of hospital care on the health of the population and the position of hospitals as part of the total health care package.

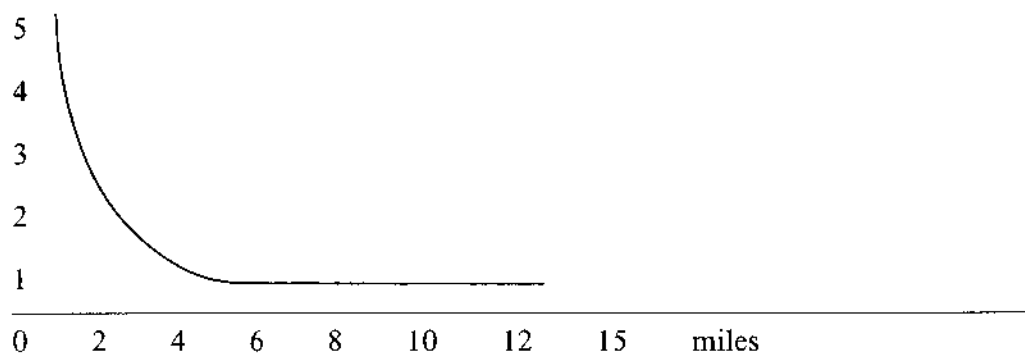
Limitations of hospital care

Official health care in many developing countries, as stated above, reaches no more than 40% of the population on average. The proportion reached by hospitals is even smaller since the average radius of the area served is often no more than 5-10 miles or an hour's walking. The graph below, which is based on research in Africa in the sixties, illustrates this point.

Figure 1

Outpatient visits to hospital *per person, per year* in relation to distance between home and hospital (ed. M. King, 1966).

Number of visits



CONTEXT

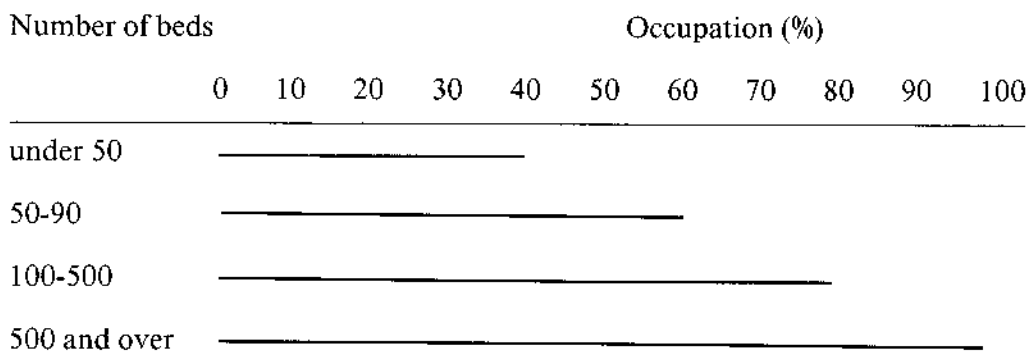
Since then the infrastructure and public transport facilities have improved considerably in many countries and areas, but the cost of travel and long stays away from home (for patients and accompanying relatives) are such an obstacle as to place hospitals out of reach for many rural inhabitants.

Given the high cost of running a hospital, the limited reach of hospital care is a problem in itself; on top of this, the use of often very costly technologies is constantly increasing. On the other hand, the development of primary health care, universally acknowledged to be essential, is getting under way with difficulty because of lack of funds, among other things.

Lastly, there is something of a paradox in the distribution of hospitals and the use made of them. Although most developing countries are short of hospital beds, there is distinctly underused capacity in the more peripheral areas of hospital care in particular, as illustrated by the following example from Latin America.

Figure 2

Average occupation of hospitals of different sizes in five Latin American countries (Colombia, Costa Rica, Cuba, Honduras, Panama), circa 1978



Trends

Despite the problems outlined above in connection with function, cost, distribution and use of hospitals, there have been improvements in many developing countries during the last 25 years. A greater variety of facilities has become more widely available: more small hospitals in remote areas and better planning of regional and national (including specialist) hospitals. The particular problems facing policy-makers relate to avoiding unbalanced growth (geographically and technologically) and the coordination of facilities in an effective referral system. The objective in every country remains to create or maintain a system in which the hospital is not the pivot but just one component of the health service.

REHABILITATION

Rehabilitation of the handicapped, while an integral part of health care, occupies a somewhat special place. We may define a handicap in the broad sense as any more or less 'permanent' physical or mental deficiency that impedes normal daily life. It requires treatment, care and in many cases modification of living and working conditions. Rehabilitation thus comprises all measures, medical, employment-related and educational, that facilitate functioning at the highest possible level.

Since in practice a large proportion of these measures are taken by special care institutions, they are regarded here as part of the secondary or tertiary health services. Historically, it was mainly private, for the most part charitable, organizations that took on the tasks of care and rehabilitation and set up specialized institutions for the purpose – specialized, that is, because of the wide range of handicaps: blindness, deafness, paralysis, malformation and mental disorders exist in all sorts of gradations, and require appropriate methods of treatment and facilities depending on their nature, cause and severity. Little by little the number of experts from non-medical disciplines involved in rehabilitation work is growing, e.g. physiotherapists, ergotherapists, teachers and social workers.

In the early seventies the institutional approach adopted hitherto in rehabilitation centres came in for increasing criticism. The low proportion reached (a mere 2% or so of Third World handicapped), uncertainty as to the effectiveness of the methods of treatment and the high cost per patient were the main targets. According to the WHO some ten percent of the world population could be regarded as handicapped in a certain, fairly broad sense; three percent needed daily assistance as a result of their handicaps (WHO, 1976).

Since then, at the instigation of the WHO, new approaches have been developed in this area aimed at rehabilitating more handicapped people in or near their homes. This 'community-based rehabilitation' has some parallels with the new ideas on health care as a whole.

CONTEXT

DEVELOPMENT ASSISTANCE AND HEALTH CARE

International

The development of international efforts to improve health in the Third World since World War II has essentially seen three phases. First, large-scale 'vertical' health care programmes were mounted to fight certain endemic diseases such as malaria, leprosy and tuberculosis. Then there was a period when emphasis was placed on the planning and decentralization of general health care with more clearly defined objectives, the aim being to bring large sections of the population within the reach of health care; this produced new hospitals, particularly in rural areas, and a large number of health centres and stations for outpatients. Most recently, the Primary Health Care approach was developed in the late seventies (at the 1978 WHO-Unicef conference on the development of health care to the year 2000 in Alma Ata).

The World Health Organization (WHO) plays a major role in cooperation with developing countries in the field of medicine, in particular acting as a catalyst in the development of strategies and their formulation, acceptance and implementation in concrete programmes. In its capacity as a forum the WHO is also able to channel funds for international cooperative activities.

During the last ten years the role of Unicef has also become more important, especially in the field of mother and child care and the culturally and politically sensitive area of family planning; the World Bank too is becoming more and more active in this area.

The Netherlands

Action

Assistance in the field of health care has been a substantial and acknowledged component of Dutch cooperation with developing countries since the fifties. As a colonial power the Netherlands acquired a good deal of expertise in tropical medicine; since then continuing direct involvement in health care programmes has enabled it to maintain this expertise and to keep up with new developments in the field.

Some thousands of Dutch tropical doctors have been employed in developing countries through private and government channels during the last thirty years (see Appendix 2). In recent years there has been a continuing presence of an estimated 250 or so Dutch doctors in developing countries. Many experts from developing countries have received additional training in tropical medicine in the Netherlands.

Private (religious and non-denominational) organizations have traditionally supported health care in developing countries. The Dutch Government began doing so in the sixties.

Research by Kunée (Royal Tropical Institute, 1979) showed that the Netherlands spent 6.5% of its official bilateral aid on health care in the 1973-77 period. During

CONTEXT

the period covered by the present report (1975-85), the average percentage was approximately the same, although with a distinct drop towards the end. Expenditure by joint financing organizations in this field ranged from 3% to 12% according to earlier studies (1982).

Policy

Annual Explanatory Memoranda and the four major policy documents on bilateral aid published since 1974 (1976, 1979, 1980 and 1984) contain broad policy statements on health care. Efforts in this area implicitly follow developments in overall Dutch development policy.

At the Ministry's request a Medical Working Group on Technical Assistance (a group of external experts) in 1975 submitted a report containing general principles for a health policy as part of the Dutch development programme. It stressed the need to shift the emphasis from hospital-based care to primary health care by helping to achieve an 'affordable package of facilities for the rural and in some cases peripheral urban population. The traditional distinction between prevention and cure is not really relevant in this connection.' The package should include drinking water supply, health education, simple medical services (not necessarily performed by 'expensive' doctors), mother and child care, campaigns against endemic diseases and vaccination programmes. 'The creation of "multi-purpose centres" at local level should be part of health care planning, since it must be possible to refer to more specialized echelons of treatment for direct medical elements.'

In fact the group made a plea for an integrated approach to health problems in which the lowest level of medical/social services would be strengthened and given a broad reach, local expertise would be mobilized and popular participation in health activities would be encouraged. The development of Dutch expertise in this direction was also mentioned as a subsidiary goal of future development policy. These general principles were developed in the Policy Memorandum on Bilateral Aid (1976) and later official Memoranda. The 1984 Memorandum 'Review of Bilateral Cooperation Policy' again gave priority to 'simple, affordable health care with maximum spread, brought about with the participation of the population', to be approached in an integrated manner and coordinated with other activities. Local financing of running costs should be given higher priority than in the past so as to ensure continuity.

The general direction set out in the 1984 Memorandum was developed in the Policy Memorandum on Health Care of 1986, which concentrates on the phenomenon of 'poverty diseases', with infectious diseases at the centre. Health care should be seen as part of the general socio-economic development process. The document supports the objective of Health for All by the Year 2000.

This cannot be achieved unless good progress is made with the time-consuming process of reorganizing health services. The reallocation of funds in favour of decentralization and strengthening of preventive care will form central issues in that process. The emphasis should be more on the public health approach to fighting disease and on high-risk groups than on the treatment of individual

CONTEXT

patients. Promoting primary health care (PHC) in the deprived rural areas will be a central theme of policy, requiring continuity and an intersectoral approach. There is scope for supporting special 'vertical' programmes (to fight one or more endemic diseases) as well as PHC, insofar as the structure of the health service permits. Training, education and research must follow this set of priorities. The document makes the following points on the function of hospitals.

1) Support for primary health care

It is essential that the higher echelons of the health service support PHC. Training, supervision, public participation and logistical support for village workers and paramedical staff are essential components here, since it is in these functions that many health services in developing countries fall short; they therefore occupy an important position among the activities the Netherlands intends to support, and Dutch technical assistance will concentrate on them. Given the shortage of funds and manpower, these basic supporting functions will as a rule have to be performed by higher echelons in the present structures.

2) Higher curative care

Curative activities in primary care – the first echelon of the service – should be kept simple in view of the limited technical, financial and manpower resources. More complex diagnosis and treatment can only take place at the higher echelons, i.e. hospitals.

The primary level should therefore refer seriously ill patients requiring hospitalization to the second echelon of district or provincial hospitals where one or more general practitioners will usually be found. The tertiary level consists of larger hospitals with more facilities and more up-to-date equipment, staffed by specialists.

Given the increased cost per case in the second echelon and the still higher cost of treatment at the tertiary level, the priority accorded to curative activities in official policy is inverse to the level of care.

3) The tertiary echelon

The fact that this care reaches a very small section of the population – with the result that the improvement in health care for the population as a whole will be slight – is an additional reason for giving low priority to tertiary care, except cost-saving proposals such as the introduction of a system of essential medicines or improvement of the maintenance system for medical equipment, provided it is spread over several echelons. Proposals for technical assistance with selected aspects of training and research may also be eligible, e.g. through the topping-up programme.

4) The secondary echelon

As stated, the support of primary care (education, management, supervision etc.) by the second echelon will be eligible for official assistance.

Priorities as regards curative activities in the second echelon (simple hospitals)

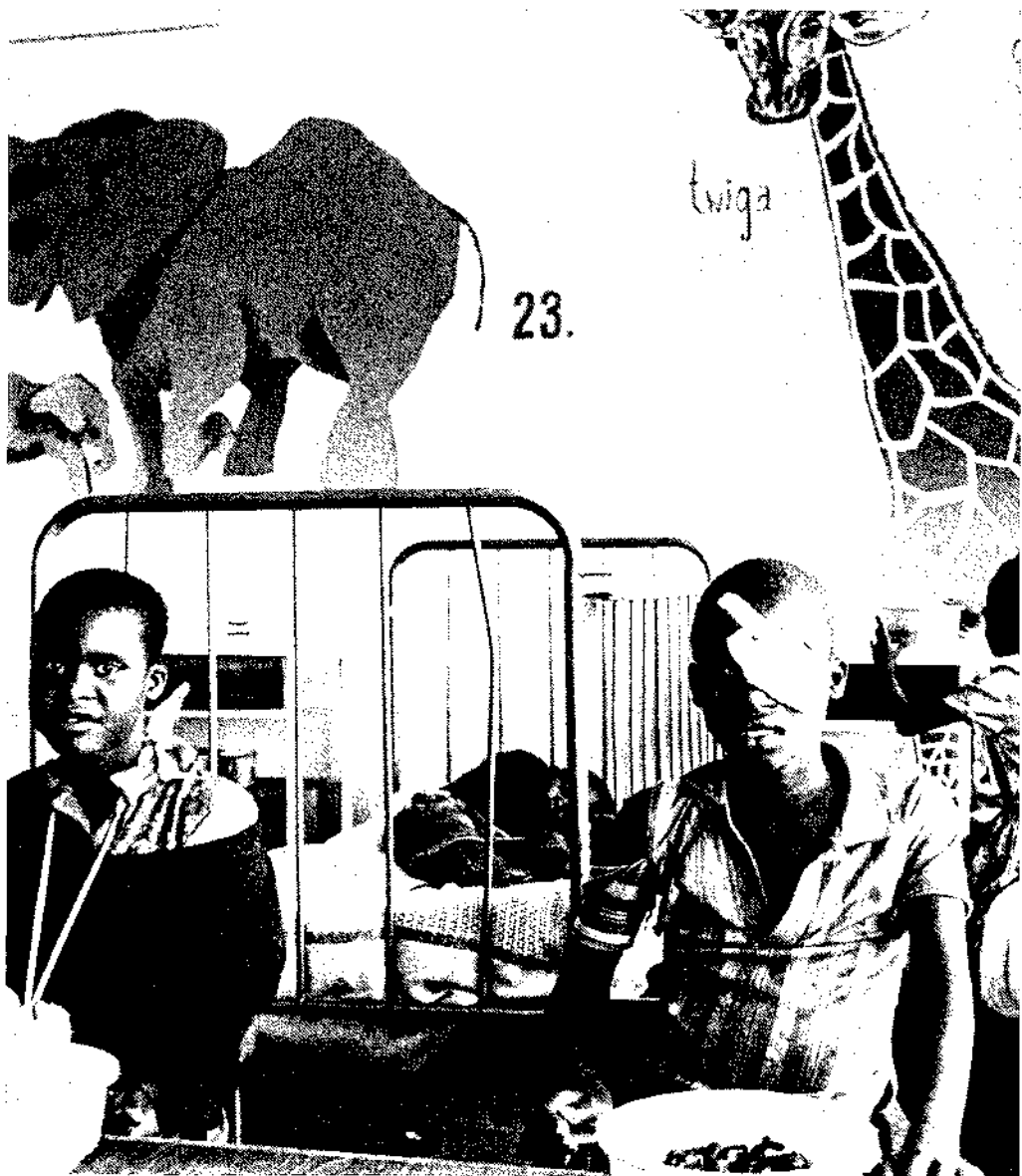
CONTEXT

will be determined to a large extent by the country's general level of development and the local conditions. In the poorest and least developed countries the problems of disease and the considerable inadequacies in primary care demand that efforts be concentrated on expanding and improving the latter – including nutrition and food supplies, drinking water and sanitation – and proper support from the higher echelons. In this context curative activities in the second echelon are of lesser importance, since they have little effect on the principal problem, infectious diseases. Also, many patient referral systems are not effective in the surrounding area for which the hospital is really intended.

In situations where the general level of development and health is already relatively high (e.g. an infant mortality rate below 70) secondary curative care will enjoy higher priority. The proportion of chronic degenerative diseases – which require more specialized treatment – will be greater and their treatment more justified in terms of cost-effectiveness, especially if the circumstances are such that patients with these diseases can be referred from a larger area than just the town or city and its immediate environs. In such cases the Netherlands will therefore be able to provide aid.

In exceptional cases where the combination of primary and secondary curative care in a project (in areas with low levels of health) may be beneficial to the acceptance and development of primary care it may be possible to provide aid.

FINDINGS



FINDINGS

Introduction

This part summarizes and analyses the findings of field studies of 25 secondary/tertiary care projects/programmes as recorded by the Operations Review Unit in ad hoc project reports between 1979 and 1985 (see Appendix 1). The projects related to the 1975-84 period.

The commitment for the activities concerned was over 170 million guilders, about 43% of total expenditure on hospital based health care during this period.

In the four most relevant Budget categories, Ia, IIIa, IIIc and IV,* over 150 hospital-oriented projects and programmes were financed. Building work, ranging from the construction of hospitals and parts of hospitals to the expansion and/or renovation of facilities (laundries, kitchens, communications equipment), featured in 40 projects relating to about the same number of hospitals. Supplies of equipment often took place on a programme basis and reached far more hospitals than the number of schemes would suggest: over 600 hospitals received equipment and instruments through Dutch development aid, with X-ray equipment forming the most important individual component.

The projects displayed great diversity as regards country, size, nature, period of commitment and implementation and stage of implementation at the time of inspection. For the sake of clarity the findings are therefore given under three headings, relating mainly to the nature of the aid: the equipping of hospitals (Chapter 6); the building/enlargement of hospitals (Chapter 7); maintenance of equipment and buildings (Chapter 8).

To improve comparability the projects under each heading are assessed in terms of background and origin, objectives, implementation, management, costs and financing, and effects. Since a lot of the projects were still in progress at the time of inspection it was not usually possible to do more than make a forecast as to the long-term effects. Some projects received more than one kind of aid; thus the same project may be described and analysed more than once.

All the projects considered here were initiated, planned and to a large extent implemented at a time when the government did not really have a well-defined sectoral policy (on health care) nor did it yet have an 'in-house' medical expert to advise on the planning and implementation of projects.

To place the projects in a broader context, the chapters containing field findings are preceded by a financial survey of Dutch bilateral aid in the field of health care from 1975 to 1984.

* The classification has since been changed.

FINDINGS

HEALTH SECTOR COMMITMENTS

As indicated in the annual reports of the Netherlands to the DAC (under Sectoral Distribution) the government committed 1,480 million guilders of bilateral aid in the health sector during the 1975-84 period. This averages out to just over 6% per annum of total bilateral ODA during that period. The percentages varied considerably from one year to another, as Table 2 shows.

Table 2

Commitments in the health sector as reported to the DAC, 1975-84

Year	Amounts (f million)	% of total bilateral aid
1975	65	5.7
1976	343	14.1
1977	142	6.4
1978	158	5.7
1979	147	5.5
1980	124	3.9
1981	151	5.7
1982	142	5.7
1983	121	4.7
1984	87	3.0
	Total 1,480	Average % 6.04

(from Reports to DAC, Ministry of Foreign Affairs)

In the figures supplied to the DAC the term 'health sector' is defined broadly: in several cases it includes activities which, although they have something to do with health, could plausibly have been included elsewhere. To obtain a more detailed idea of the types of activities financed, the Operations Review Unit ascertained how much had been committed during the period in the four main categories of bilateral aid: the findings are shown in Table 3.

FINDINGS

Table 3

*Health care commitments in the main categories of bilateral aid 1975-84
(f million)*

Category	1975	1976-78	1979-81	1981-84	Total
Ia	122	178	164	105	569
IIIa	3	53	62	47	165
IIIc	11	37	73	41	162
IIIc SEP*	-	-	3	4	7
IV (joint financing with NGO)	11	61	75	62	209
Total	147	329	377	259	1,112

* SEP = Small Embassy Projects

The commitments in the health sector amounted to over 7% of the total funds available in the categories stated during the period. Specified according to subsectors in Categories Ia, IIIa and IIIc (i.e. excluding SEP and Category IV), they break down as follows.

Table 4

*Health care commitments in selected categories by subsector 1975-84
(f million)*

Subsector	1975	1976-78	1979-81	1981-84	Total
Hospitals	76	165	107	45	393
Extramural	11	37	50	64	162
Endemic diseases	-	9	50	13	72
Medicines and vaccines	4	27	37	42	110
Family planning	12	1	16	17	46
Miscellaneous	33	29	39	12	113
Total	136	268	299	193	896

It may be concluded that

- the commitments to health care dropped during the last three years; both the annual data to the DAC and a survey of commitments in the main budget categories show this;
- the drop seems to have been caused mainly by a reduction in commitments for hospital care, which was not entirely offset by commitments for extramural activities and supplies of vaccines (although these did rise).

It is understandable that the one did not entirely offset the other since important types of extramural care (e.g. PHC) do not entail so much expenditure – and require lower commitments in the short term – than investments in buildings and equipment.

FINDINGS

EQUIPMENT

Introduction

By far the largest part of the aid the Netherlands provided to the Third World for the development of hospital-oriented health care during the past decade consisted of shipments of medical and other equipment for hospitals, laboratories and clinics. In the former category Ia (Programme Countries), for instance, 84% was committed for this purpose. The ORU has accordingly paid most attention to this aspect: 15 of the 25 schemes that were evaluated concerned shipments.

This aid often covers a wide range of instruments, machines and other equipment, although in some cases it may be restricted to particular types of instruments. A good example of the first type was the scheme to provide all the equipment for a Urological Clinic in Egypt, from auditorium, library and hospital beds to highly specialized electrical and electronic equipment for operating rooms and intensive care wards. The extensive programme to supply provincial and district hospitals in Indonesia was of a similar kind, involving equipment for operating and X-ray rooms as well as the equipping of kitchens and laundries. The second type was represented by two schemes in Egypt, one to fit out a vaccine-producing laboratory and one to provide equipment for an anti-tuberculosis campaign.

The fifteen projects evaluated under this category were:

Country	Name	ORU Report
Egypt	Rehabilitation and training project, Cairo	1
Egypt	Rehabilitation of the handicapped	192
Kenya	Medical Programme Aid	19
Yemen Arab Rep.	Central Health Laboratory & Blood Bank	34
Yemen Arab Rep.	Medical Programme Aid	35
Mozambique	Cooperation in the Health Service (equipment)	66
Guinea Bissau	Bor Rehabilitation Centre (fitting out)	78
Jamaica	SEP 003, Mona Rehabilitation Centre	79
Sudan	Medical Programme Aid	92
Pakistan	SEP 009, Rawalpindi Hospice, equipment for rehabilitation	104
Sri Lanka	Improvement of Medical Facilities, Programme Aid	137
Egypt	Equipment for anti-TB campaign	180
Egypt	Equipment for Agouza Immunization Centre	181
Egypt	Equipment for Mansoura Urological Clinic	182
Indonesia	Renovation and Upgrading of Hospitals, Programme Aid	208

Some of these projects are also mentioned in Chapter 7 under the heading 'Building' or in Chapter 8 under 'Maintenance'.

FINDINGS

Origin and planning

Some projects and programmes had their origin in existing arrangements for long-term cooperation in the health field; others arose from ad hoc needs for equipment.

In some cases it had been decided bilaterally to make the health sector a long-term object of cooperation (Egypt, Indonesia, Sri Lanka). In one case the shipment was in response to an express ad hoc request by a country (Yemen Arab Republic). Action by Dutch firms also resulted in cooperation (Kenya). In any event it was necessary for the sake of development to ensure that the health care needs of the developing country determined the ultimate form of cooperation, not what the Netherlands was able to offer.

In fact the Netherlands did not decide unilaterally what activities to undertake or finance. The recipient country was able to shape the cooperation to a large extent in the annual policy consultations – introduced in 1975 – in which many decisions on aid were made. It sometimes happened that the Netherlands was only able to achieve its objectives if it also met certain wishes of the developing country which were largely or wholly incompatible with Dutch and/or local policy: although projects (or parts of them) were not entirely desirable, they were deemed acceptable in the light of the cooperative relationship as a whole.

The agreement in principle to supply was followed in many cases by an identification of needs or initial assessment of the proposals by special missions (Yemen Arab Republic, Mozambique, Guinea Bissau, Sri Lanka and anti-TB campaign and Mansoura in Egypt). This usually involved establishing the nature and feasibility of a potential project or programme. It was found with hindsight that these identification missions did not always guarantee that the aid was well directed: sometimes the mission's technical and/or development knowledge was inadequate (Guinea Bissau, TB & Mansoura in Egypt), or its advice, although good in itself, was overtaken by unforeseen developments, necessitating a second assessment in due course.

The general impression gained from the individual evaluation reports is that the Dutch aid officials brought an inadequate understanding of the medical issues to the discussions with the recipient country or were not able to provide sufficient counterbalance to proposals by potential suppliers to achieve the optimum project design. This situation changed gradually after a health expert was appointed to the Ministry in 1981.

Objectives

A project or programme should ideally find justification in clearly defined objectives which can be used later (at the evaluation stage) as a criterion by which to judge the effects. In at least half the schemes evaluated the objectives were not formulated explicitly (Kenya, Yemen Arab Republic, Mozambique, Guinea Bissau, Sudan). Interestingly, the projects put forward by the NGOs more often had clearly defined objectives than the bilateral projects.

FINDINGS

The objectives of specific shipments were generally easier to determine and monitor the more explicit the health care policy developed by the Netherlands and the recipient country and the more long-standing and structural the cooperation had become. For example, the existence of a long-term plan for the health service in Indonesia (Master Plan, 1967) and the long-standing nature of the cooperation not only gave the programme (as evaluated there) proper justification but also contributed to the clear formulation of the objectives. The long-term objectives formulated in Mozambique's health policy also justified Dutch support.

The objectives of the projects evaluated, while phrased differently, could essentially be classified as follows:

1. to improve the functioning of hospitals through the design, modernization or expansion of facilities;
2. to improve health care as a whole (in a particular area) from the secondary level (Kenya, Indonesia, Mozambique, Pakistan, Indonesia);
3. to improve facilities in order to attract doctors to peripheral areas and thus to improve health care there (Kenya, Indonesia).

Unclear objectives sometimes gave rise to different interpretations of agreements, with unintentional results – at least as far as the Netherlands was concerned: for example, some of the equipment the Netherlands had intended for health centres and district hospitals ended up in larger hospitals, sometimes in the capital.

This notwithstanding, a somewhat broad objective, not initially specified in detail, was sometimes very useful. In 'post-war' reconstruction situations, as in Guinea Bissau and Mozambique, detailed specifications of objectives and destinations would have been artificial. The problem, however, was that even at a later stage insufficient attention was given to details.

Implementation

As a rule the agreed supplies were delivered quickly and correctly. There was a considerable difference, however, between cases where equipment was simply supplied and those where it was also installed.

In Kenya, Sri Lanka and Sudan equipment was simply supplied; distribution and installation were the responsibility of the national government. Evaluation (based on a large sample) in one country revealed that no more than 51% of the equipment had reached the intended destination. None of the equipment intended under the agreement for the rural health centres arrived there. In another country the central stores were supposed to distribute the equipment among the hospitals but at the time of evaluation it could not be traced. In the SEP projects in Jamaica and Pakistan, which also entailed simple shipments, the equipment was found at the correct destination in good condition.

Where the equipment was to be installed, delays were common. An evaluation in 1980 in Mozambique showed that X-ray equipment had been waiting three years for installation because the supplier did not think it wise to go ahead until the technicians and other maintenance staff had been fully trained.

FINDINGS

In Guinea Bissau, Egypt (181) and Indonesia the pre-installation work had been entrusted to the local authorities, and completion was delayed by long tendering and administrative procedures, among other things.

Where equipment was supplied from Financial Aid funds the origin of the product was an important issue. In the case of 'tied aid' this was as a rule predetermined: the Netherlands. In the case of 'partially untied aid' the equipment could come from other developing (so called 'eligible source') countries. If this was not feasible, the preference was of course for Dutch products; this was almost always the case with medical equipment of a technologically sophisticated kind. The Government Purchasing Agency – which was usually involved in these transactions – was frequently obliged to look beyond the Dutch borders, however, since the equipment required was not now manufactured in the Netherlands. Supply contracts were then generally effected through a Dutch trading agency, or the foreign product was included in the range of a Dutch producer (Indonesia). This arrangement was regarded on balance as the best in terms of after-sales service and long-term maintenance.

For the sake of installation and servicing preference was usually given to larger producers rather than smaller ones, since even if the latter were cheaper, they rarely had foreign branches that could take care of installation and servicing. It was essential, moreover, for most developing countries to confine themselves to a few major brand names; a wide variety of brands and types would have made maintenance particularly difficult.

Another important point was the technological level of the equipment. Advanced, refined equipment had the disadvantages of being expensive, available to few people, difficult to use – reserved for specialists – (Egypt, Sri Lanka), costly to run (placing a permanent burden on scarce resources) and difficult to maintain (Sri Lanka). Very little simple mechanical equipment, however, was still being made in the Netherlands, nor did the developing countries ask for it. If the Netherlands insisted on installing simple equipment it was sometimes accused of paternalism, whereas advanced equipment would have made for a worse imbalance in the health service and greater dependence on foreign countries.

Costs and financing

While many of the reports found that the Dutch Department of Development Cooperation monitored its expenditure well enough, the cost of health care in general and that of using the new facilities in particular was not always taken seriously enough. A prior cost-effectiveness analysis (WHO, 1984) would have been most useful in many cases. In one country, for instance, the evaluation demonstrated clearly that the investments in improving provincial and district hospitals had caused a considerable increase in their energy consumption, never less than 100% and often more.

This was largely due to the installation of modern electric kitchens and laundries. The local (district) authorities responsible for hospitals at this level were thus

FINDINGS

forced to raise hospital charges in some cases. Even where this was not immediately necessary (in the richer districts), it could be assumed that the increased costs reduced the funds available for lower levels of health care.

Management

The individual evaluation reports dealt particularly with management on the Dutch side, but management by the developing country was sometimes mentioned as a contributory cause of reduced efficiency and effectiveness (Kenya, Yemen Arab Republic): in these cases there was also some negligence on the Dutch side, at the Embassy and/or Ministry.

Once the aid had been committed the Netherlands was able to exert only a limited influence. In none of the cases under consideration except Indonesia did a Dutch expert spend any considerable time in the developing country to maintain a dialogue on the use of equipment and ways of improving shipments. Any influence on the project thus had to come from the Embassy and/or Dutch follow-up/evaluation missions. Surprisingly little use was made of this latter possibility.

The annual policy consultations could also have provided an opportunity for at least a general influence to be exerted. Suspension of payments if a project or programme was not proceeding satisfactorily could 'have a boomerang effect and delay progress even more' in the words of one evaluation report.

The reports frequently mention the role of advisory bodies. The Department of Development Cooperation did not always seek independent advice, although there are indications that expert advice could have been useful right from the beginning: it helped to place the Dutch aid to the anti-TB campaign in Egypt (1980) on a better footing, for instance. In the case of the shipments of equipment to the Yemen Arab Republic, Sudan and Sri Lanka, where independent expert advice was not obtained, the destination of the aid was determined largely by the local health department and the supplier. Where the Dutch government effectively abdicated responsibility the projects did not progress very satisfactorily. In a few cases Dutch individuals or bodies who had been working in the country concerned, some of them in the health sector, were successfully consulted.

Results

The results of supporting hospital care by supplying equipment cannot be summed up in a single phrase; here too we must distinguish between immediate and longer-term results.

It goes without saying that the first precondition for a worthwhile effect is that the supply itself be carried out as planned. In all the cases examined the equipment was supplied and shipped from the Netherlands in good order. In only one case (Yemen Arab Republic, 35) was there some doubt as to whether it arrived complete. In some cases only part of the shipment reached the final destination; in other cases parts could not be traced (Yemen Arab Republic, 35 and Kenya, 19) or remained a long time in storage because the units were unusable (Sri Lanka) or

FINDINGS

could not be installed for the time being for technical reasons (Mozambique). Delays in installation, e.g. due to shortage of local funds and/or expertise for the 'local' part of the work, added to the cost.

The objectives listed above (p. 25) will serve as criteria for the effects on health and health care.

1. Improving the functioning of hospitals

In most cases the equipment, once installed, improved the service. Rehabilitation began for the first time or was tackled more effectively (Egypt, Guinea Bissau, Jamaica, Pakistan). Considering the numbers and qualifications of medical and other staff, examination – with better laboratory equipment, X-ray machines etc. – diagnosis and treatment were improved in the recipient hospitals.

Nevertheless the number of patients who benefited from the improved treatment was often disappointing: the new equipment did not produce as great an expansion in services as had been expected. The invalids who enjoyed better rehabilitation in Egypt and Guinea Bissau were small in number. The 50 laboratory sets for the anti-TB campaign in Egypt, on the other hand, made for a widespread improvement.

There were also problems as regards the expected longer-term effects: higher energy consumption, more spare parts and technically more complicated repairs were among the causes of higher running costs. Where repairs were not carried out there was a risk of investments being written off completely and/or a tendency to keep buying new equipment whenever funds could be obtained from a donor.

2. Improving the general level of health from the secondary level

In those cases where improving PHC was among the objectives (Kenya, Sri Lanka, Urological Clinic in Egypt), this could not really be said to have occurred. Equipment ordered for health centres ended up mainly in hospitals; that intended for district hospitals stayed in the capital. Equipment supplied for a campaign against endemic disease (bilharzia in Egypt) produced an effective clinic but failed to intensify the fight against the disease among large sections of the population.

The fact is that hospitals (let alone supplies of high-grade equipment to them) are not the best point to start improving health or health care. On the contrary, their general tendency is to concentrate exclusively on curative care. On top of this, secondary and tertiary care with their high cost deprive the primary level of funds, a state of affairs lamented both by other donors and by policy-makers in developing countries.

3. Recruiting doctors for peripheral hospitals

It is reasonable to assume that a relatively well-equipped hospital is more likely to receive applications or postings. Whether this was a decisive factor in achieving better occupation of peripheral hospitals, however, was not clear.

Where recruitment of doctors was one of the objectives (e.g. Indonesia and Kenya) such effects were not unambiguously demonstrable. In Indonesia the higher occupation of Kabupaten hospitals was attributed to better equipment supplied under

FINDINGS

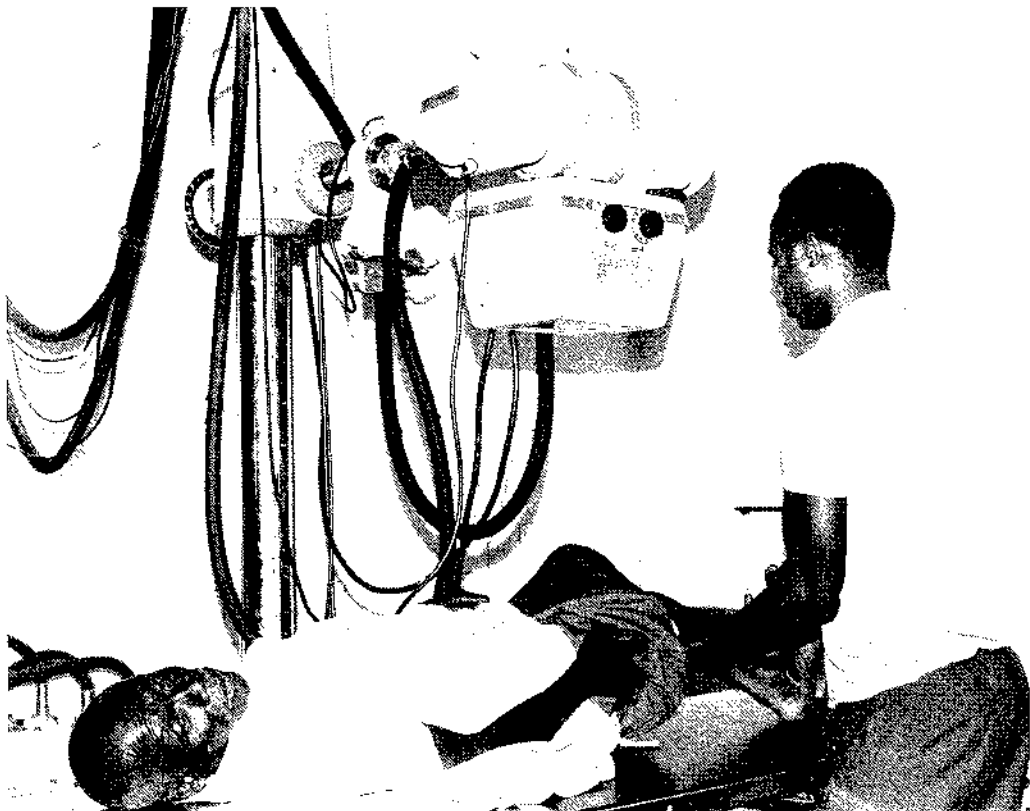
Dutch aid; in Kenya the Ministry of Health was unable to find any improvement in this respect at the time of evaluation.

Conclusion

The new equipment usually benefited the curative function of hospitals and rehabilitation centres, at least in the short term, for a limited number of patients. The expansion of curative services was disappointing in the cases examined, as was the improvement in community health care.

Given the constant demand for equipment – sometimes stimulated from the Netherlands – and the fact that a good deal of equipment was supplied by the Netherlands, the effect on Dutch industry and trade was favourable.

Those supplies that stimulated preparatory or supplementary activities also had worthwhile effects on local industry; even then it sometimes happened (Egypt, Indonesia) that articles that were (or could have been) made locally were rejected in favour of ready-made items imported from the Netherlands, e.g. chairs, cupboards and other furniture.



FINDINGS

HOSPITAL-BUILDING AND EXPANSION PROJECTS

Introduction

In the case of aid to hospitals, supply of equipment and building work are usually interrelated: the one often leads to the other. Equipment that has been ordered must be installed somewhere and there is not much point in financing buildings unless at least basic equipment is supplied.

This chapter deals mainly with those projects where the building component was of more than average importance. Although the financing of building work did decrease during the 1975-84 period, the ten projects still represented a value of some 15 million guilders, or 9% of the total value of the 25 projects considered in this report.

The ten 'building projects' have been divided into two groups: three funded from government to government (government-funded projects) and seven funded by NGOs. The first three were extensive building and/or expansion projects; the seven mainly involved the construction of specialist clinics (mother and child, prenatal, maternity), training facilities and housing for staff.

Bilateral projects

	<i>Report No.</i>
Kenya, Hola District Hospital	20
Kenya, Kapenguria Hospital	21
Guinea Bissau, Bor Rehabilitation Centre	78

NGO financed projects

Cameroon, Ndoungué Hospital	52
Indonesia, Mardi Santosa Maternity Clinic	60
Indonesia, Pematang Siantar Health Project	62
India, St Stephen's Hospital	72
Pakistan, Kunri RHCP	95
Rwanda, EPR Medical Activities	163
India, Ellen Thoburn Hospital	172

Origin and planning

The two projects in Kenya were the result of a visit by the Dutch Minister for Development Cooperation in 1974. Both the Hola Health Centre, as it then was (with 53 beds) and Kapenguria Hospital (65 beds) were overcrowded and poorly equipped. On top of this, the inhabitants of the West Pokot district (one of the Kapenguria target groups) were a deprived nomadic tribe, and the Netherlands wanted to support Kenyan health policy, which included having a functioning hospital in every district in the country. These were good reasons in themselves for 'doing something' in the areas the Minister visited.

FINDINGS

The Kenyan authorities were not entirely prepared for the Dutch aid, however. For this and other reasons it took two and a half years before building plans were produced. Independent expert advice given to the Dutch Government during the planning stage (to spend more on the periphery in Hola; a new hospital was not necessary) was not followed. The projects eventually resulted in the construction of two new hospitals and a few health centres in the surrounding areas.

At the request of Guinea Bissau's first government following independence it was decided in 1975 to provide aid for the rehabilitation of war victims. In practice this involved building an orthopaedic workshop and converting existing facilities into a rehabilitation centre. A Dutch advisory group was asked to produce detailed plans. The identification team sent out by the group had a good knowledge of rehabilitation but underestimated many other problems that are likely to occur in connection with development assistance. It drew up an over-ambitious plan which by its tenth year would have been using up over 10% of the country's health budget; thus the project was on the 'wrong track' right from the start. The programme involved the building and equipping of an orthopaedic workshop with physiotherapy and work therapy departments and assistance with the implementation of a ten-year rehabilitation plan for the whole country.

NGO projects were usually incorporated in an existing cooperative relationship in the medical field or elsewhere. The hospital management in the country concerned 'knew the way' and asked the NGOs for help to solve its problems. Moreover Dutch staff were already working in some of the existing hospitals (Cameroon, Indonesia, Rwanda). The quality of identification and planning was generally good, for one thing because the NGOs employed their own medical advisors at an early stage.

Objectives

The immediate objectives differed depending on the prospective function of the buildings. In essence, however, the ORU found the same types of objective for building projects as for those involving the supply of equipment:

- a. to improve community health in a particular area;
- b. to improve the service provided by the hospital to the periphery;
- c. to provide the staff with better working facilities in the hope that they would continue to want to work in remote locations.

In projects involving the building of training facilities and staff houses additional objectives were set:

- d. to improve training facilities at the hospitals;
- e. to reduce living costs (and thus hospital running costs).

FINDINGS

Again, the objectives of the building projects were not always clearly defined. Because of the approval requirements applied to the NGOs their objectives, as already noted, were usually more clearly formulated than those in bilateral projects; in the latter the ORU sometimes had to deduce the objectives from the budget category in which the project had been placed (Guinea Bissau).

The bilateral aid for hospital-building in Kenya was provided with the implicit intention of helping to implement the national health plan objective of one hospital with standard facilities and 150 beds in every district. In the case of Kapenguria an increase in the number of beds (which was below the national average) was an explicit objective.

The Guinea Bissau government wanted to repay a kind of political debt to the war-wounded (some 150 ex-guerillas); not until good care had been taken of them would the other invalids be dealt with.

In the case of NGO projects two kinds of objectives could be found. The first was expansion or improvement of the main activity; general curative care, mother-and-child care, obstetrics etc. (Cameroon, Indonesia, Mardi Santosa, St Stephen's in India). The improvement might be to an existing area of work or involve the introduction of new approaches (Cameroon, Indonesia, Siantar, Pakistan, India, Thoburn).

The second objective was to create or expand training facilities and staff accommodation. New housing for staff was designed not only to make recruitment easier and provide them with better accommodation but also to make the hospitals more self-sufficient. This was a particularly urgent need in the private hospitals, since the flow of funds for hospital facilities from donor countries was beginning to decline, obliging them to rely increasingly on their own income.

Implementation

In all the cases under consideration the building work was carried out by local contractors, thus having the beneficial side-effect of stimulating local industry. The design and tendering phase of the bilateral projects took some considerable time (1½ years for Hola, Kenya; 2½ years for Kapenguria, Kenya; 2½ years for Guinea Bissau) because there were no operational plans at the time the commitment was made. Construction itself took much longer than expected, both in Kenya and in Guinea Bissau.

In the case of NGOs, which submitted their proposals complete with specifications and budgets, matters proceeded more or less according to plan: once the contract had been signed the buildings were completed in two years on average. The differences in speed of implementation were attributable to various factors. The NGOs had the advantage as regards planning, acquaintance with project staff and simplicity of decision-making procedures. The decisive factor in the speed of

FINDINGS

building as such was the fact that the counterparts of the NGOs were their own project managers (for one thing because they themselves had a good deal of know-how) without complicated contracting and subcontracting arrangements. As regards the complexity of the works there was little difference between the government-funded and jointly financed projects, other than that the counterparts preferred to use local materials, in more than one case manufactured on their own premises by a missionary organization.

Both the bilateral and NGO projects sometimes used a 'standard design': Kenya, for instance, used the 'Makweni design' for the Hola and Kapenguria district hospitals, and the maternity clinic in Cameroon was built following the 'T-model' first used by Albert Schweitzer in Lambarene. The standard design had one disadvantage in Hola: the complex was too large for the effective demand in the thinly populated area.

The quality of the work as such (insofar as this could be ascertained at the time of inspection: some buildings were not yet completed) was usually reasonable to good, except for the housing in Bor (Guinea Bissau).*

Costs and financing

The construction component of the 'mainly building' projects inspected accounted for the following amounts (to the nearest 100,000 guilders):

Bilateral projects

Hola District Hospital, Kenya	2,200,000
Kapenguria Hospital, Kenya	3,300,000
Bor Rehabilitation Centre, Guinea Bissau	1,000,000

NGO projects

Ndoundgué Hospital, Cameroon	1,200,000
Mardi Santosa Maternity Clinic, Indonesia	1,200,000
Pematang Siantar Health Project, Indonesia	600,000
St Stephen's Hospital, India	1,800,000
Kunri RHCP, Pakistan	1,500,000
EPR Medical Activities, Rwanda	1,500,000
Ellen Thoburn Hospital, India	100,000
	<hr/>
	14,400,000

It was agreed as regards both the bilateral projects in Kenya that two-thirds could be spent on local costs and one-third on imports from the Netherlands.

* In those cases where there were subsequent complaints concerning the state of the buildings (e.g. in Kenya) this was due more to improper use and/or poor maintenance.

FINDINGS

The rule regarding NGO projects until 1977 was that the NGOs overseas partner had to contribute 25% of the cost. These contributions often consisted of land and services; sometimes they were donated by third parties.

The average price rise for locally contracted building work was 20%, a cost overrun that could in practice not be recovered from the contractors.

The overall conclusion was that the buildings were constructed well and at relatively low cost, especially by the NGOs.

Both the building and expansion projects resulted in higher or additional running costs. This was a problem for the partners of the NGOs, most of which had to be self-financing. This sometimes caused difficulties with admissions: as the external aid decreased and the costs rose, more than one of the hospitals/clinics were forced to impose higher charges.

To maintain a service to the poor these hospitals applied the 'Robin Hood approach' (Pakistan, Indonesia, Rwanda): the better-off paid higher charges so that there was still room financially to care for the poor, who paid little or nothing. Despite this the increasing financial constraints reduced the care available to the poor (Pakistan) and clearly impeded the initiation or improvement of extramural activities (India).

As well as paying patients, benefactors from various quarters and in many cases entirely unpaid staff, these private hospitals had other sources of income or ways of saving money, e.g. trainee nurses who provided cheap labour. The main reason for starting training courses was naturally to produce well-trained and motivated nurses, but the side-effect was welcome. Consequently, many of the NGO projects evaluated, had such training courses (Cameroon, Indonesia, India and Rwanda). A new means of local financing was beginning to take shape in Indonesia (Siantar) in the form of a health insurance scheme (as yet a small one at the time of evaluation).

Management

Building projects evidently received most attention from the donor (Dutch government/NGO) during the planning phase. Once the contract had been signed the reports on the progress of the building work and the financial transactions were considered to be of primary importance.

In both the bilateral projects in Kenya some supervision was exercised by the Embassy and by the respective regional section of the Ministry through the Embassy. Prior to evaluation by the ORU (1979) there had been no field visit or evaluation, although a lot of time was spent on solving various problems that arose in connection with Hola and Kapenguria. These official efforts, however, were unable to avert sharp price rises and serious overrunning of time limits.

Outside help with management was not necessarily the solution. In Guinea Bissau a steering group was formed from members of the various identification missions; later, however, it was given executive powers as well, especially once the original

FINDINGS

advisory group had stood down (1976), thus more or less depriving the Netherlands of any influence. A steering group with executive powers and a large measure of independence turned out in this case to be an unsatisfactory arrangement. The ORU found that there had been considerable delays (1980), and that the building had been made too elegant and too large, the equipment installed was too expensive and too little had been done to train counterparts. The subsequently instituted field team had accordingly lost confidence in the steering group in 1979. In the circumstances the ORU advised the Dutch government to take over management of the project once more and complete it in four years, with the local authority providing a lifelong guarantee of rehabilitation for the patients and the Netherlands concentrating on training counterparts.

Following generally good planning, the NGOs confined their supervision of projects to reading progress reports and in particular financial reports. The project officer or medical advisor included new projects in his timetable for field visits where possible.

Neither the bilateral nor the jointly financed projects were given final evaluations once they had been completed to establish whether the original objectives had been achieved. In a final or ex-post evaluation questions of a more general nature could have been asked, e.g. what improvement the improved facilities made to the level of health in the area or what happened to the nurses once they had been trained. Feedback of this kind would have been useful for future policy.

Results

In the case of Hola (intended completion date November 1979) and Kapenguria (intended completion date September 1978) there was no apparent effect on health care in the area at the time of evaluation because the buildings had not yet been completed (March 1979). There was, however, evident stagnation in the building and equipping of the planned health centres in both cases. Staffing was also likely to be a problem given the rapid turnover of staff found in both hospitals.

Some 150 war-wounded were treated in Guinea Bissau, and at the time of evaluation (1980) 46 civilian invalids had gained access to the facilities. For the two groups together 185 artificial limbs and surgical appliances had been made and 151 repaired. All the raw materials for them were imported from the Netherlands, which brought the cost to an average of 1,500 guilders and did not help to make the facility self-sufficient as intended. The new orthopaedic workshop was 70% complete in April 1980. The ORU consequently regarded the project as ineffective so far: the target group was too small and the facilities were much too expensive. The causes of the poor outcome seemed to lie mainly in a weak and overambitious design, management that was too centralized (steering group) and failure to modify the project approach as necessity arose.

FINDINGS

The newly built (and equipped) maternity clinic, under-five clinic and two auxiliary hospitals in Cameroon produced an improvement in curative and preventive care. Good treatment was given at relatively low cost in both clinics. The more distant objective of developing real preventive work through the hospital clinics, the auxiliary hospitals and the mobile mother and child protection teams turned out to be much more elusive. These changes needed to be sought in more public participation and preventive care geared more to the domestic situation.

In Indonesia (Mardi Santosa) the newly built (and equipped) service building, kitchen and maternity ward improved the existing pattern of services, which was in fact already good, but did not change it. There was the problem, however, that the new equipment (especially laundry and kitchen equipment) entailed higher running costs for the hospital. It effectively made staff redundant, but they were not dismissed for other reasons. At the same time the energy bill rose.

The expansion of Harapan Hospital in Siantar was rapid but, in spite of the objectives, it contributed to a further improvement of curative care – which was already excellent – rather than an extension of community health care. This was due partly to the government ban on private organizations performing health centre functions. The fact that the hospital had to be self-financing resulted in (for many patients) excessive charges for admission and medicines against the hospital's wishes. The health insurance pilot scheme mentioned above should relieve this problem to some extent.

A similar problem of charges and selection of patients occurred at St Stephen's Hospital in New Delhi (India). The assessment of the rapid construction of 76 staff housing units was in itself favourable, but they were intended mainly for hospital staff rather than other workers (e.g. community health workers). There were savings in living and travelling costs and a more pleasant working environment for staff, but the hospital continued to play a limited role in providing curative – let alone preventive – care for the poor in the area.

The Kunri project in Pakistan experienced similar problems. The new maternity clinic and housing units plus aid for five year's running costs resulted in an entrenchment of the existing approach, which suffered from essential defects from the point of view of developing community health. The care available was not geared to the essential needs of the population: a qualified eye specialist carried out 1,000 operations a year but the establishment of health centres and the training of village health workers and traditional midwives was unsuccessful.

This was more successful in Kirinda (Rwanda), where the ICCDP (Inter-Church Coordination Committee for Development Projects) provided aid towards the construction of a nurses' college, a hydroelectric power station, a health centre and a new outpatients' department. The building work was carried out smoothly and the hospital maintained its large range of services and improved its mother and child care. The project also developed an extensive PHC programme employing over 250 village health workers.

FINDINGS

The newly built and equipped health station plus housing within the radius serviced by the Ellen Thoburn Hospital (India) enhanced the non-profit-making organization's community health work but kept it within the limits of a hospital structure. The organization did not foresee spending more than 1% of its budget on community health work in the near future.

Conclusion

The aid provided for the hospital/clinic construction/expansion projects under consideration enhanced curative care and/or rehabilitation work, at least in the short term, albeit for a relatively small number of people. The favourable effect was more apparent in the projects supported by NGOs than in those initiated and managed directly by the Dutch government.

The explicit or implicit goal of improving extramural care, however, turned out to be elusive in all the projects.



FINDINGS

MAINTENANCE OF FACILITIES AND EQUIPMENT

Introduction

The financing of buildings and equipment as discussed above can be a major first step in improving hospital care, but it is not the end of the story: proper use and good maintenance are at least as important.

Whereas expenditure on buildings and equipment may be a one-off investment, in many cases financed largely by external donors, expenditure on use and maintenance falls under the recurrent running costs usually borne by the recipient country.

Maintenance was a matter of importance in one way or another in all the projects under consideration, always in terms of budgeting for parts and wage costs, and often in terms of attitudes to modern equipment, management, know-how and centralization versus decentralization.

The Netherlands does not as a rule finance running costs, the general idea being that the local institutions should be capable of maintaining the hospital to which Dutch aid was provided on an incidental basis.

In several cases the Netherlands did pay for spare parts for equipment, either in response to a subsequent application or because they were regarded as forming part of the original main supply, a tendency which has become more prevalent over the years.

This chapter is concerned mainly with those projects where the Netherlands went a step further by providing financial and/or technical (e.g. manpower) assistance towards the creation, reorganization and training of maintenance services. Three of the projects inspected were bilateral and one was jointly financed through NGOs (JFO/SNV):

Report No.

Service centre, Mozambique	66
Technical support, Sri Lanka	137
Central Workshop, Indonesia	208
Mobile service team, Tanzania (NGO)	159

Origin and planning

As a rule the motive behind attempts to improve maintenance lay in the frequent observation that maintenance was generally poor in public (usually government) hospitals (including clinics etc.), in contrast to those run by NGO counterparts, where it was usually good.

Surprisingly, the Netherlands was more often the initiator of attempts to improve maintenance than the partner countries. One of the reasons would seem to be that recipient countries assumed – usually correctly – that ordinary maintenance was their own responsibility. There seems to be another factor as well, however,

FINDINGS

sometimes referred to as a 'culturally defined' attitude to technical matters: machines either work or do not work, and if they stop working, they have to be replaced.

In the three bilateral projects (Mozambique, Sri Lanka, Indonesia) assistance towards maintenance was part of a wider programme including earlier supply of equipment.

The preparations for the Mozambique project were very time-consuming: one identification mission and two planning missions (starting in 1975) eventually led to the posting of experts in the second half of 1979. The long incubation period was to some extent due to the fact that reconstruction aid, initially in the form of emergency aid, started only in 1975: everything had to be rebuilt at the same time. At the risk of self-contradiction it might be said that everything had equal priority.

The identification mission (1978) whose task was to prepare the supply of equipment to Sri Lanka also recommended supplying equipment and tools for the central repair shop. On several occasions the Netherlands offered technical support for the maintenance service but did not receive any positive response.

Along with the equipment needed to upgrade the hospitals in Indonesia tools were supplied for repair shops. These, however, were unable to perform more than some preventive maintenance and a few simple repairs to the fairly complex new equipment. It was therefore suggested that a central workshop be set up in Surabaya, following the example of other parts of Java (Bandung and Semarang). Technicians of the Teaching Hospital in Rotterdam advised in the planning of this project.

The SNV/ICCDP project in Tanzania involved strengthening of one provincial maintenance department following the example of a DANIDA project elsewhere. On completion of the latter a local SNV volunteer initiated a similar project in Mbeya, supported by the nine hospitals in the province, which even set up a special organization for the purpose.

Objectives

The aim of the three bilateral maintenance projects was not always stated precisely. One way or another they were all intended to increase maintenance capacity. In Mozambique it was found that the colonial administration had left behind a lot of equipment, some of it sophisticated; some had evidently been rendered inoperative. The existing maintenance service was highly centralized and poorly staffed. The aim here was to organize it, improve the equipment and raise the level of technical skills.

In Sri Lanka it was found that the capital aid in the form of equipment created permanent and growing dependence on foreign countries, as shown, for instance, by the increasing need for spare parts, which could be offset by better maintenance.

FINDINGS

nance. Here again the existing maintenance service was poor and centralized. In this case there was no favourable response to the Netherlands' plan of reducing long-term dependence by means of short-term technical aid. There seemed to be greater interest in supplies than in maintenance.

Previous experience of the upgrading of hospitals in Indonesia had shown that local workshops could not meet all the maintenance requirements; also, maintenance staff needed additional training. Although the supplier provided two years' maintenance after delivery, the need was felt for a central workshop for complicated repairs and training for technicians.

The aim in Tanzania was to establish the means for maintenance and quick repairs in the nine hospitals in the Mbeya Region and to give on-the-job training to local technicians.

Implementation

Three technicians were deployed at the central workshop in Mozambique in 1979, one to look after the stores and two service engineers. Spare parts and maintenance equipment were also purchased. By 1980 a certain amount of order had been created in the 'chaos' and parts of broken machines had been used to repair others.

Tools were supplied to Sri Lanka along with spare parts. A technician employed by the supplier worked for a year at the central workshop; the idea was that he would also provide training for the local technicians.

A technician has been deployed since summer 1985 in the central workshop at Surabaya (Indonesia). The idea is that equipment from the regional Kabupaten hospitals will be 'referred' to this workshop for the more difficult repairs. Training for technicians is also to be provided there.

In the SNV project in Tanzania a volunteer had been visiting the nine hospitals regularly with a mobile repair unit (donated by ICCDP) since 1979 and repairing 'everything that was not working' – no small feat. The proposed training course had still not got under way properly by 1983, however. Even with the assistance of a second volunteer for eighteen months there was not enough time to provide counterpart training as well as doing the repairs. Nevertheless it was fully acknowledged that training was of the utmost importance for 'sustainability'.

Costs and financing

The Netherlands allocated over 2,500,000 guilders for maintenance in Mozambique from 1979 to 1983. In Sri Lanka the cost of improving the maintenance service was included in the cost of supplying equipment.

A total of 1,800,000 guilders was loaned to Indonesia for the central workshop at Surabaya in 1980 and 1982. In Tanzania the SNV spent 370,000 guilders during the 1979-83 period (on manpower) and ICCDP donated 90,000 for the repair unit and for petty cash.

FINDINGS

There is little precise information on the ratio between the amounts of Dutch aid and the contributions made by counterparts. The existing maintenance system could be regarded as a counterpart contribution in Mozambique, Sri Lanka and Indonesia, but there was no mention of specific project-related contributions anywhere. The nine hospitals in Tanzania paid a monthly sum into the organization, some of which the volunteers used as working capital to purchase spare parts.

The projects evaluated illustrate that to set up or improve a national or provincial maintenance service takes a good deal of time and money, both one-off investments in workshops and running costs for staff and spare parts. In this type of development 'aid' the counterpart must have the right priorities and sufficient interest and stamina if supplies of equipment or grants towards construction are to have the desired long-term effect.

Management

Improving maintenance services was found to be a more complex matter than supplying equipment. It demands careful planning and sometimes systematic back-stopping from the Netherlands, with consequent adjustments from time to time if necessary.

The back-stopping for the Mozambique project, which had been properly identified and planned, was good but insufficient. The head of the maintenance department of a teaching hospital in the Netherlands was able to spend about one day a week on it: this was not enough and did not enhance the progress of the project. In Sri Lanka a basic precondition for success was missing, interest on the part of the recipients. Since the project never really got under way it would be pointless to comment on the management.

The Indonesian project had just got under way at the time of evaluation – very belatedly, since the needs had been identified as early as 1980-81 and the new equipment was meanwhile being installed in the Kabupaten hospitals. There was little to be said about support and management as such at the time of evaluation (late 1985).

In Tanzania the SNV volunteers received support particularly from the local SNV field office, and quarterly consultations were held in the organization set up specially for joint maintenance.

Results and effects

In Mozambique the first modest results were seen in 1980. The central repair shop began its operation, actually carrying out repairs. The workshop and the spare parts stores were well organized, tidy, clearly laid out and usable. This instilled initial confidence in the hospitals dependent on the workshop for their repairs. At that time the service was confined to Maputo and its immediate environs. The

FINDINGS

training of clerical and technical counterparts had begun.

There was no noticeable effect in Sri Lanka, nor was this surprising, given that the national government did not really support the project.

In Indonesia the central workshop (at Surabaya) had been fitted out and the Dutch technician was to arrive shortly. There were no apparent effects as yet. The Kabupaten hospitals were however wondering whether they would be able to send their equipment to Surabaya (whether transport facilities would be provided or paid for), and if so, whether it would be dealt with reasonably quickly. The training in the central workshop seemed to have a reasonable chance of success.

In Tanzania the volunteer had managed to ensure that no equipment was out of order for long from 1980 to 1983 (evaluation in 1983). The project was extended for three years in 1983 to give the training component a better chance.

Conclusion

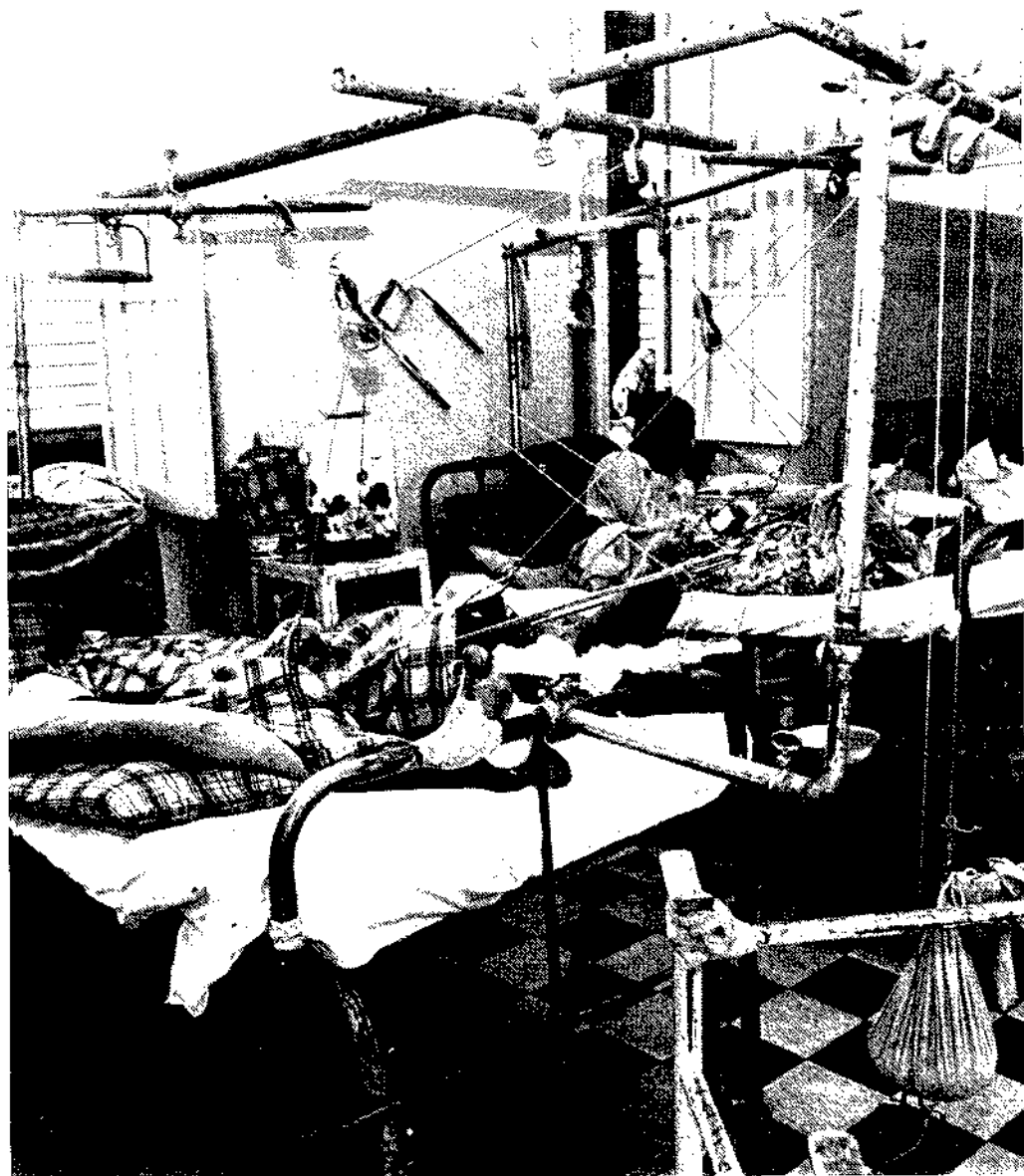
It is undeniable that the practical value of hospital facilities and equipment – whether or not financed under the Dutch development programme – rapidly diminishes if there is a lack of preventive and ‘curative’ maintenance. The question, for both donor and recipient, is who is to pay for and carry out the maintenance.

The idea that the Netherlands should ‘of course’ take permanent responsibility for maintenance once buildings have been constructed and equipment supplied is rather simplistic, for various reasons. This does not mean that the donor should confine himself to supplying equipment if the chances of reasonable maintenance are small.

Over the years the inclusion of spare parts with equipment and after-sales service clauses in supply contracts have become more and more common, and this would seem to be a step in the right direction. But even these provisions have to be paid for in one way or another, and continuity cannot be expected if there is no properly trained maintenance service. Attempts by the Netherlands to set up services of this kind have met with varying success so far.

Clearly, there are no ready-made solutions to the various problems; measures have to be taken in consultation to meet each particular situation. Nevertheless it would seem that more energy should be put into maintenance than purchasing equipment and prematurely replacing faulty equipment.

GENERAL COMMENTARY AND ASSESSMENT



SUMMARY AND CONCLUSIONS

The state of health in low and medium-income countries cannot be described in a few sentences since the chances of a reasonable degree of health differ widely, not only between one country and another but also by social class, sex, age group, employment and place of abode within a country. Direct observation and statistics indicate, however, that the health of hundreds of millions of people is poor, both by their own and by international standards (e.g. as laid down by the WHO). Not only is this deplorable for humanitarian reasons, it also has adverse political, economic and cultural effects on humanity as a whole and especially on the countries concerned.

Every country or community in the world has its own 'system' of health care, usually containing a mixture of traditional and modern approaches, both of which comprise empirical (sometimes scientific) and 'magical' elements. The general trend in the Third World is towards an ever increasing reliance on the empirical scientific and technological approach.

Historically there has been more stress on a one-sided curative approach than on an integrated (preventive and curative, centralized and decentralized) fight against disease and premature death. This has also been the case with international cooperation, which really got under way after World War II. Healing was particularly associated with hospitals, often differentiated as to location, size and type of care (secondary and tertiary) and origin, e.g. publicly or privately founded.

To bring some order to the wide variety of subject matter under discussion, this evaluative summary has divided it into three overlapping types of aid: the supply and installation of medical and other equipment, the building of facilities (e.g. hospitals, wings and wards, clinics and staff housing) and the maintenance of both.

In each case the report has reviewed the findings of the evaluation in respect of origin, planning, objectives, implementation, management, financing and the outcome of the projects.

Having evaluated (and drawn up detailed reports on) some projects in this field selected 'at random', the ORU tried to pinpoint the main positive and negative aspects of these attempts to improve community health in a number of countries.*

* See Appendix 1. The projects and programmes evaluated took place during the 1975-84 period.

I. SUPPLY OF EQUIPMENT

Positive findings

1. The supply of equipment as such met with virtually no problems.
2. Thanks partly to the services provided by the Government Purchasing Agency the equipment itself was usually of good quality and reasonably priced. The potential drawbacks of involving a variety of large and small suppliers were usually avoided by appointing one main supplier for each project.
3. Although preference was given to Dutch products, the rules relating to tied Financial Aid were if necessary applied leniently so as to accommodate the specifications, e.g. suitability for tropical conditions.
4. As a rule the new equipment helped to improve existing services to patients and the temporarily and permanently handicapped.

Negative findings

1. The equipment was often too sophisticated, given the training of the users and maintenance staff; in some cases it was somewhat extravagant or partly superfluous (see 5).
2. The objectives were frequently too general and often based on over-optimistic expectations. The reasons for disappointing results often lay not only in the 'objective' circumstances of the project but also in inadequate planning in terms of assessment of the real needs, arrangements for distribution in the recipient country, physical limitations on installation, use made of independent advisory bodies and/or uncritical acceptance of a list of needs formulated by the recipient country (in some cases suggested by the prospective supplier).
3. Given the constant lack of funds in the recipient country, increases in running costs inevitably resulted in cuts in the already limited budgets for primary health care.
4. With some exceptions, the supply of equipment rarely resulted in an expansion of services.
5. On several occasions articles were supplied which could have been made locally.
6. Installation was frequently delayed (especially where this was regarded as a local responsibility) with the result that in several cases equipment remained in

storage for long periods, where it was not always properly looked after.

7. Few if any on-going evaluations were made of equipment supply projects: they were generally regarded as one-off transactions which needed no follow-up from the Netherlands.

II. BUILDING PROJECTS

Positive findings

1. Building projects, whether new buildings, annexes or extensions, were almost always justified given the need felt for hospital capacity. Considering the sometimes difficult circumstances in which the work had to be carried out, the quality was generally reasonable to good.
2. NGO projects in particular were generally well organized and completed rapidly (within two years on average) at relatively low cost with the local NGO making a substantial contribution at virtually every stage of the work.,
3. An improvement in the care of outpatients or inpatients was either apparent or – in view of the pitiful state of the old facilities – to be expected.
4. The extent to which projects were tailored to the local policy on the distribution of hospitals was excellent in some cases and reasonable in others.
5. Virtually everywhere a favourable short-term effect on local employment and industry occurred.

Negative findings

1. The objectives were often too general and too optimistic as regards effects on the overall health care in the area (including basic care) and on the distribution of staff throughout the country including remote areas.
2. Delays occurred and budgets were exceeded in the case of public hospitals and clinics, even where standard designs were used, for reasons including bad timetabling and/or bureaucratic problems. The average delay was two years.
3. Rises in running costs resulted (in the case of public hospitals) in neglect of buildings, cuts in the budget for basic health care, higher charges for patients (also in the case of NGOs) and consequently in some cases a reduction in services to the poor, despite the fact that these had been mentioned as the target group.
4. The increase in the number of patients reached was often disappointing.

III. MAINTENANCE

Positive findings

1. The Netherlands usually took the initiative in maintenance schemes; the problems of post-construction/delivery maintenance were broadly acknowledged; there was a growing tendency to supply spare parts with new equipment and to include after-sales service in supply contracts.
2. The justification for those maintenance projects that were instigated was rightly found in avoiding writing off capital investments, sustainment of benefits once Dutch aid ceased and the internal logic of supplies (in for a penny, in for a pound).
3. The projects included training components, in some cases in specially equipped workshops or central stores. The prospects of at least two projects were reasonably good. In one project the results achieved in nine hospitals of an entire province were, albeit geographically limited, good in the circumstances.

Negative findings

1. There was a strong preference for buying new equipment, particularly in public (government-managed) hospitals: attitudes to maintenance, the low priority accorded it – reflected in inadequate maintenance budgets – and the low level of technical knowledge had a bad influence. Where there was an existing maintenance service it was usually too centralized and bureaucratic. At the time of evaluation the results of Dutch attempts to improve and enlarge these services were found to be limited as yet.
2. Maintenance of imported equipment increased running costs considerably, and this in a sector already under pressure from economic stagnation.
3. Training programmes were also difficult to implement; where they were reasonably successful it turned out to be difficult to keep trained staff at medical institutions – because of an overall shortage of technicians they tended to move on to other employers.

RECOMMENDATIONS

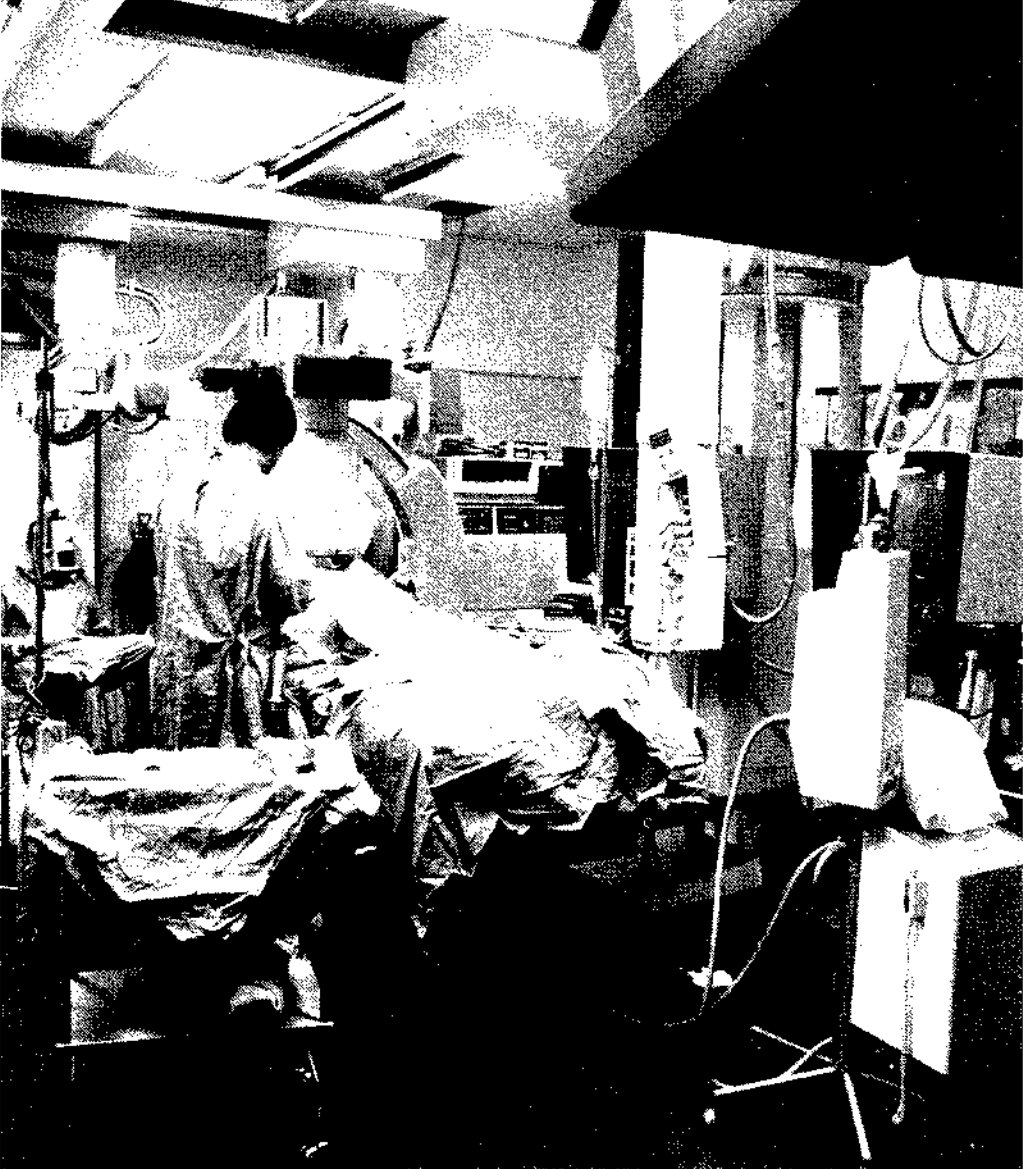
1. Since the beneficial effects of hospitals on the general health of the community are limited, the Netherlands should be wary of financing buildings and supplies of equipment, particularly to large hospitals with a lot of complicated and sophisticated equipment.

GENERAL COMMENTARY AND ASSESSMENT

Aid of this kind may be considered under certain conditions, viz. in the case of small simple hospitals:

- (a) which fit into an effective or evolving referral system for patients from the primary level;
 - (b) which are open to all without high financial thresholds;
 - (c) where the recurrent costs of use and maintenance – which are likely to increase – are guaranteed to be financed from local budgets.
2. The quality and durability of the results of building or supply projects (as described here) benefit from:
 - (a) the use of independent experts in identification, assessment, planning and implementation;
 - (b) standardization of equipment;
 - (c) the selection of suppliers who can provide good after-sales service, either themselves or through local agents;
 - (d) supply contracts including clauses concerning the installation and handing over of equipment, the training of local operating and maintenance staff, the provision of maintenance manuals (in the appropriate language) and at least a minimum set of spare parts;
 - (e) continuing use of the Government Purchasing Agency.
 3. Given the poor returns on previous investments and the chronic lack of foreign exchange in many countries, aid towards the creation or improvement of maintenance services is desirable. This should if possible cover the whole process from analysing the existing or proposed system to strengthening the institutions and providing organizational and technical training.
 4. While taking account of policy developments in the country concerned, the Netherlands should direct its aid mainly towards the diversification of hospital functions to include prevention as well as treatment and cure and to stimulate PHC, e.g. by training paramedical staff, as well as supervising it.
 5. To be effective, cooperation in hospital care sometimes has to be long-term; in any event it must involve more than one-off supplies of equipment and/or funding of ad hoc courses.
 6. Cooperation is usually more effective when well thought-out, realistic, concrete goals and responsibilities are put to the partners right at the beginning. It should include good monitoring and periodic evaluation – with suitable adjustments where necessary.

APPENDICES



Hospital-Based Health Care Projects Evaluated ORU-Report

No.	Year	Year of Ist commitment	Cat.	Country	Project	Dutch contribution
1	1978	1976	I	Egypt	Cairo Rehabilitation and Training Project	875,000
19	1979	1973	I	Kenya	Medical Programme Aid	6,810,738
20	1979	1976	I	Kenya	Hola District Hospital	5,500,000
21	1979	1974	I	Kenya	Kapenguria	7,300,000
34	1979	1977	I	Yemen Arab Republic	Central Health Laboratory and Blood Bank	712,573
35	1979	1976	I	Yemen Arab Republic	Medical Programme Aid	1,003,890
52	1979	1967	V	Cameroun	Ndounghé Protestant Hospital (ICCDP)	1,232,192
60	1979	1973	V	Indonesia	Mardi Santosa (ICCDP)	1,249,519
62	1979	1974	V	Indonesia	Pematang Siantar (CAJFDP)	595,024
66	1980	1975	I	Mozambique	Cooperation in Health Care	5,500,000
			III	Mozambique	Cooperation in Health Care	8,150,000
72	1980	1976	V	India	St Stephen's Hospital (ICCDP)	1,821,408
78	1980	1975	III	Guinea Bissau	Bor Rehabilitation Centre	3,600,000
79	1979	1977	III	Jamaica	SEP 003, Mona Rehabilitation Centre	10,000
92	1980	1976	I	Sudan	Supply of Medical Equipment	4,197,545
95	1980	1976	V	Pakistan	RHCP, Kunri (ICCDP)	1,763,830
104	1980	1979	III	Pakistan	SEP 009, St Joseph's Hospice, Rawalpindi	14,490
137	1981	1976	I	Sri Lanka	Improvement of Medical Facilities	14,530,003
159	1983	1979	V	Tanzania	Mbeya Mobile Hospital (ICCDP/SNV)	650,000
163	1983	1969	V	Rwanda	EPR Medical Activities (ICCDP) excl. PHC	1,464,332
172	1983	1977	V	India	Ellen Thoburn Hospital (ICCDP)	66,308
180	1983	1977	I	Egypt	Anti-TB Campaign	3,500,000
181	1983	1977	I	Egypt	Agouza Immunization Centre	8,400,000
182	1983	1978	I	Egypt	Mansoura Urological Centre	8,181,263
192	1983	1976	I	Egypt	Rehabilitation of the Handicapped	11,050,000
208	1984	1974	I	Indonesia	Renovation of Hospitals	72,479,000
				Total		170,657,115

CAJFDP = Central Agency for Joint Financing of Development Programmes

ICCDP = Inter-Church Coordination Committee for Development Projects

Dutch Health Workers in the Third World

1975-84

No. of postings

Supplementation experts	303
Dutch-funded supplementation doctors*	177
Bilateral experts	201
PITDCG+ doctors	487
Associate experts	32
SNV volunteers	482
	<hr/>
	1682**

* Known as 'SANO doctors' until 1978

+ Private Initiative Tropical Doctors Consultative Group

** 78 to Latin America, 1,525 to Africa and 79 to Asia

Health Care Projects in Programme Countries, Category Ia, 1975-84

Country	No. of health projects	Hospital-oriented projects	Health sector commitments (f 1,000)	Total allocation (f million)	% to health sector
Bangladesh	12	0	55,016	903.1	6.1
Burkina Faso	2	0	125	354	0.04
Colombia	12	4	35,081	189	18.6
Cuba	3	2	47,768	55.7	85.8
Egypt	18	9	43,347	263	16.5
India	4	3	3,116	1,849	0.2
Indonesia	26	9	135,835	1,784	7.6
Jamaica	1	0	5,575	92	6.1
Kenya	13	5	55,903	523.4	10.7
Nigeria	6	0	1,082*	—	—
Yemen Arab Republic	5	4	53,356	303.5	17.6
Pakistan	9	1	21,017	560	3.8
Peru	9	6	18,698	130	14.4
Sri Lanka	9	5	11,673	402	2.9
Sudan	7	3	30,812	401	7.7
Tanzania	5	2	10,364	894.2	1.2
Tunisia	5	3	4,465	58	7.7
Zambia	2	1	806	1471	0.5
Total	148	57	534,039**	8,908.9	6.0
Commitments by continent	Health care (f 1,000)	%	Total allocations (f million)	%	% to health sector
Africa	146,904	27.5	2,640.6	29.6	5.6
Asia	280,013	52.4	5,801.6	65.1	4.8
South America	107,122	20.1	466.7	5.2	23.0
Total	534,039**	100	8,908.9	100	6.0

* Reallocated from period prior to 1975. ** Excluding over f 34.6 million committed for joint financing, development-related export transactions and non-country-specific activities financed under Category Ia.

Category Ia, Subsectors as a Proportion of Total Health Sector Commitments, 1975-84

Sub-sector	1975			1976-78			1979-1981			1982-84			total		
	No.	f 1,000	%	No.	f 1,000	%	No.	f 1,000	%	No.	f 1,000	%	No.	f 1,000	%
1	9	6,239.40	5.10	10	16,948.2	9.5	14	10,910.0	6.6	11	37,162.7	35.4	44	71,260.30	12.500
2	21	71,066.35	58.50	50	133,046.9	74.7	42	95,448.3	58.1	23	35,005.1	33.4	136	334,566.65	58.800
3	9	6,501.30	5.40	19	13,288.1	7.5	15	30,012.0	18.3	5	7,340.0	7.0	48	57,141.40	10.000
4	5	23,132.80	19.00	4	3,142.0	1.8	2	400.0	0.2	1	80.0	0.1	12	26,754.80	4.700
5.1	6	12,447.70	10.20	2	1,350.0	0.8	5	14,500.0	8.8	2	11,500.0	11.0	15	39,797.70	7.000
5.2	4	1,660.40	1.40	6	880.0	0.5	-	-	-	-	-	-	10	2,540.40	0.400
5.3	4	132.50	0.10	7	477.5	0.3	5	778.8	0.5	-	-	-	16	1,388.80	0.200
5.4	2	284.10	0.20	6	3,210.6	1.8	4	4,960.0	3.0	7	12,800.1	12.2	19	21,254.80	3.700
5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.6	2	17.35	0.01	-	-	-	-	-	-	-	-	-	2	17.35	0.003
6	-	-	-	6	5,690.0	3.2	7	7,250.0	4.4	1	1,000.0	1.0	14	13,940.00	2.500
Total	62	121,481.90	100.-	110	178,033.3	100.-	94	164,259.1	100.-	50	104,887.9	100.-	316	568,662.20	100.-

Subsectors 1-6

1. Primary health care
2. Hospital Care
3. Medical training
4. Medical research
5. Other activities:
 - 5.1 Family planning
 - 5.2 Health planning
 - 5.3 Identification/evaluation
 - 5.4 Pharmaceutical industry
 - 5.5 Health insurance
 - 5.6 Conferences/workshops
6. Campaigns against endemic diseases

Health Sector, Category Ia, Types of Aid and Subsectors as a Proportion of Total Health Sector Commitments, 1975-84 (f1,000)

Sub-sector	1975			1976-78			1979-81			1982-84			total		
	FA-L	FA-G	TA	FA-L	FA-G	TA	FA-L	FA-G	TA	FA-L	FA-G	TA	FA-L	FA-G	TA
1	5,200	-	1,039.40	650	11,240	5,058.2	-	2,925	7,985.0	-68	15,240	21,990.7	5,782	29,405	36,073.30
2	60,695	3,183	7,188.35	84,524	26,907	21,615.9	29,651	55,517	10,280.3	12,953	5,268	16,784.1	187,823	90,875	55,868.65
3	-	-	6,501.30	1,950	3,810	7,528.1	10,800	15,457	3,755.0	-	5,370	1,970	12,750	24,637	19,754.40
4	-	-	23,132.80	-	-	3,142.0	-	-	400.0	-	-	80	-	-	26,754.80
5.1	-	7,000	5,447.70	-	-	1,350.0	8,000	6,000	500.0	11,500	-	-	19,500	13,000	7,297.70
5.2	-	-	1,660.40	-	-	880.0	-	-	-	-	-	-	-	-	2,540.00
5.3	-	-	132.50	-	-	477.5	-	-	778.8	-	-	-	-	-	1,388.80
5.4	-	-	284.10	1,205	500	1,505.6	-	160	4,800.0	-	11,400	1,400.1	1,205	12,060	7,989.80
5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.6	-	-	17.35	-	-	-	-	-	-	-	-	-	-	-	17.35
6	-	-	-	2,905	2,600	185.0	-	7,150	100.0	-	1,000	-	2,905	10,750	285.00
Total	65,895	10,183	45,403.9	91,234	45,057	41,742.3	48,451	87,209	28,599	24,385	38,278	42,224.9	229,965	180,727	157,970.20
	Total: 121,481.9			178,033.3			164,259.1			104,887.9			Grand total: 568,662.2		

FA-L = Financial Aid (loan)

FA-G = Financial Aid (grant)

TA = Technical Assistance

Subsectors 1-6

1. Primary health care
2. Hospital care
3. Medical training
4. Medical research
5. Other activities:
 - 5.1 Family planning
 - 5.2 Health planning
 - 5.3 Identification/evaluation
 - 5.4 Pharmaceutical industry
 - 5.5 Health insurance
 - 5.6 Conference/workshops
6. Campaigns against endemic diseases

APPENDIX 6

**Category IIIa, Health Sector, 1975-84, Annual Budgets and Commitments
 (f1,000)**

<i>Year</i>	<i>Budget (Cat. IIIa)</i>	<i>Health sector commitments</i>	<i>% to health sector</i>
1975	120,000	2,668	2.2
1976	220,000	13,800	6.3
1977	203,000	30,091	14.8
1978	211,600	8,759	4.1
1979	347,300	6,200	1.8
1980	375,300	15,936	4.2
1981	359,800	39,958	11.1
1982	321,000	12,756	4.0
1983	278,000	20,327	7.3
1984	252,500	13,879	5.5
	<u>2,688,500</u>	<u>164,374</u>	<u>6.1</u>

APPENDIX 7

Category IIIa, Health Sector, Subsector as a Proportion of Total Commitments, 1975-84

Sub-sector	1975		1976-78		1979-81		1982-84		total	
	f 1,000	%	f 1,000	%	f 1,000	%	f 1,000	%	f 1,000	%
1	-	-	4,298.2	8.20	4,590.0	7.40	10,443.4	22.20	19,331.6	11.80
2	-	-	22,104.5	42.00	2,970.1	4.80	6,948.1	14.80	32,022.7	19.50
3	-	-	10,027.5	19.00	3,635.0	5.80	-	-	13,662.5	8.30
4	-	-	-	-	-	-	-	-	-	-
5.1	-	-	-	-	-	-	-	-	-	-
5.2	-	-	-	-	-	-	-	-	-	-
5.3	17.6	0.7	21.6	0.04	27.-	0.04	26.-	0.06	92.2	0.06
5.4	2,650.0	99.3	16,197.7	30.80	26,621.6	42.90	29,545.1	63.90	75,014.4	45.60
5.5	-	-	-	-	-	-	-	-	-	-
5.6	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	24,250.-	39.10	-	-	24,250.-	14.80
Total	2,667.6	100.00	52,649.5	100.00	62,093.7	100.00	46,962.6	100.00	164,373.4	100.00

Subsectors 1-6

1. Primary health care
2. Hospital care
3. Medical training
4. Medical research
5. Other activities:
 - 5.1 Family planning
 - 5.2 Health planning
 - 5.3 Identification/evaluation
 - 5.4 Pharmaceutical industry
 - 5.5 Health insurance
 - 5.6 Conferences/workshops
6. Campaigns against endemic diseases

APPENDIX 8

Category IIIc, Health Care, 1975-84, Social and Economic Emergencies Among Groups (Excl. SEP Programme), Annual Budgets and Commitments (f 1,000)

<i>Year</i>	<i>Budget (Cat. IIIc)</i>	<i>Health sector commitments</i>	<i>% to health sector</i>
1975	26,900	11,320	42.1
1976	40,000	6,541	16.4
1977	45,534	13,222	29.0
1978	47,891	17,447	36.4
1979	56,287	16,387	29.1
1980	85,030	28,781	33.8
1981	81,720	27,952	34.2
1982	81,016	9,595	11.8
1983	84,398	20,528	24.3
1984	71,489	10,536	14.7
Total	620,265	162,309	26.2

**Category IIIc, Health Sector, Subsectors as a Proportion of Total Commitments
(Excl. SEP Programme), 1975-84**

Sub-sector	1975		1976-78		1979-81		1982-84		total	
	f 1,000	%	f 1,000	%	f 1,000	%	f 1,000	%	f 1,000	%
1	5,060	44.7	15,829.10	42.5	34,158.90	46.7	17,252.80	42.4	72,300.8	44.5
2	5,255	46.4	10,188.20	27.4	9,081.85	12.4	2,896.43	7.1	27,421.5	16.9
3	-	-	1,584.30	4.3	1,759.80	2.4	2,432.10	6.0	5,776.2	3.6
4	405	3.6	-	-	-	-	-	-	405.0	0.2
5.1	-	-	-	-	1,100.00	1.5	5,250.00	12.9	635.0	3.9
5.2	-	-	-	-	1,540.10	2.1	-	-	1,540.1	0.9
5.3	-	-	-	-	-	-	-	-	-	-
5.4	600	5.3	6,787.62	18.2	6,334.30	8.7	416.00	1.0	14,137.9	8.7
5.5	-	-	-	-	-	-	-	-	-	-
5.6	-	-	-	-	-	-	-	-	-	-
6	-	-	2,820.10	7.6	19,145.00	26.2	12,411.30	30.5	34,376.4	21.2
Total	11,320	100.0	37,209.32	100.0	73,119.95	100.0	40,658.63	100.0	162,307.9	100.0

Subsectors: 1-6

1. Primary health care
2. Hospital care
3. Medical training
4. Medical research
5. Other activities:
 - 5.1 Family planning
 - 5.2 Health planning
 - 5.3 Identification/evaluation
 - 5.4 Pharmaceutical industry
 - 5.5 Health insurance
 - 5.6 Conferences/workshops
6. Campaigns against endemic diseases



