

THE PROCESSES OF HEALTH SECTOR REFORM IN SIERRA LEONE

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ABSTRACT

Starting in September 1992, Sierra Leone embarked on a major reform of its health sector. The reform had three broad objectives: first, to make a realistic assessment of its health care delivery system; second, to develop a sector policy that would set out long-term and short-term goals and objectives; and third, to develop an action plan that would map out specific pathways through which the policy objectives could be achieved. Central to the reform process was stakeholder participation of both providers and consumers.

This study reviews the processes involved in Sierra Leone's reform through four distinct stages: (1) The organization of a national Health Sector Seminar and the development of Sierra Leone's National Health Policy, which marked the first attempt at stakeholder mobilization and dialogue; (2) The development and adoption of the National Health Action Plan (NHAP) through a participatory process, which developed a blueprint for achieving the stated objectives; (3) Adjustment of the NHAP and the development of the Core Program, a priority-setting exercise that took into consideration possible financial constraints to program implementation; and (4) A series of Donors' Meetings, at which stakeholder consensus-building was taken beyond the local community level, in order to assure mobilization of adequate resources and commitment for program implementation.

This paper provides an assessment of the overall stakeholder responses to the reform effort, and identifies the factors that contributed to the largely positive responses of stakeholders. The conclusion suggests lessons for health sector reform in other developing countries.

BACKGROUND

Sierra Leone is a small country on the west coast of Africa with a population of 4.5 million in an area of 72,000 sq. km. In early 1992, the average life expectancy was 45 years, and the infant mortality rate was 154\1000 live-births. The estimated GDP per capita in 1990\91 was US \$250. (More detailed health, economic and demographic data are provided in Table 1.) In March 1991, Sierra Leone experienced an outbreak of rebel war. The war started off as a spill-over from armed conflict in neighboring Liberia, but developed its own momentum to involve practically all of Sierra Leone outside of the capital. In April 1992, the government was overthrown in a military coup, and the regime that took over lasted a period of four years. During this four-year period Sierra Leone designed and adopted a comprehensive health reform program.

Prior to 1992, Sierra Leone made various attempts at developing strategies for health as part of broader development plans [1]:

1. The National Five Year Development Plan (1974-79)
2. The Three Year Public Investment Plan (1980-83)
3. The Three Year National Development Plan (1983-86)
4. The Sierra Leone Program for Rehabilitation and Development (1985-88)

As was the case in nearly all of Sub-Saharan Africa at the time, Sierra Leone's health sector strategy emerged primarily within an economic development package, with minimal sectoral input at the preparatory stage. This process effectively ruled out health sector responsibility for the monitoring or success of the plan. In the late 1970s, following the Alma Ata Declaration of 1978, to which Sierra Leone was a signatory, the country's Health Department started looking at ways to implement the basic principles of primary health care. The process involved a sector review in 1981, followed by the establishment of a National Steering Committee in 1984. This body organized a series of workshops in 1984 and 1985 involving district and provincial health teams. The National Operational Handbook for Primary Health Care (1990) was the eventual outcome of this exercise [1]. The main objective of the handbook was "to standardize the primary health care approach in the country in such a way that all activities will be synchronized to produce optimum results. It will be a guide not only for the Department of Health personnel but also for all agencies involved in the sector."

In 1991, the government, through the Department of Health, commissioned a joint Government\WHO\UNDP Health Sector Study. The study called for "the carrying out of a survey of activities in the sector including needs-assessment, and to propose appropriate health programs for the country." The resulting report documented serious problems in Sierra Leone's health system, as presented in the following four areas:

1. Government Health Expenditure: The health sector's share of the total government budget had fallen from 7.3% in 1986 to 3% in 1991. About 80% of the recurrent budget was committed to salaries and benefits, whilst 90% of the sector's development budget was provided by donors. The government had already committed 46% of the 1991\92

budget to debt-servicing and national defense and with an escalating war situation there was very little hope of increased health sector spending from government sources.

2. *Health Manpower:* A manpower survey carried out in 1986 showed gross shortage as well as maldistribution and underutilization. About 66% of doctors, nurses and midwives were in the Western Area, serving 10% of the population. This study also showed the doctor\population ratio ranging from 18.8 per 100,000 people in the Western Area to 0.54 per 100,000 in parts of the Northern Province.

3. *Health Facilities:* The study showed that Sierra Leone's health facilities were unevenly distributed, with 37% of the rural populace having little or no access to basic health care. Most of the government's health institutions were in such a state of disrepair and lacking in basic equipment that they were incapable of providing service.

4. *Organization of the Health System:* The Department of Health was highly centralized, with all major decisions regarding policy and resource allocation being taken at the national level. There was very little recent information on health and population status in the country, and there was no formal link between decision-makers and the providers of the little information that existed. The result of all this was that planning had become a purely theoretical exercise.

THE FOUR STAGES OF REFORM

Sierra Leone's Health Sector Reform started in mid 1992 and moved through four distinct stages:

1. The Health Sector Seminar and the development of the National Health Policy
2. The development and adoption of the National Health Action Plan (NHAP)
3. Adjustment of the NHAP and the development of the Core Program
4. The Social Sectors Donors Meetings

The process and outcome of each of these stages are examined next.

Stage 1: The Health Sector Seminar and the National Health Policy.

The deteriorated situation of the health sector in Sierra Leone made the decision to undertake a major reform a relatively easy one. The new government in 1992 recognized the serious problems in Sierra Leone's health system, and the need for reform. The next question was to decide how to involve key stakeholders throughout the reform process. To start off, a one-week sector seminar was held from 21-25 September 1992, with the theme "Towards Developing a Health Policy for Sierra Leone" [3]. The participants included staff members of the Department of Health, representatives of other government departments, country representatives of international organizations, representatives of

NGOs, private care providers, representatives of various consumer groups, and the general public.

Whilst health care providers formed an easily identifiable group, and hence could be targeted for participation, this was not the case with the more diffuse and diverse group of consumers. Attempts were made to encourage individual and group participation, through the targeted invitation of representatives of local authorities, religious groups, and trade unions. Details of the seminar were also publicized in the local print and broadcast media. A liaison unit was set up in the Department of Health that received input from members of the public who could not participate in the meeting but had a point to make.

A major deficiency in this process was that it failed to attract the poorest and most vulnerable group in the population. As a result, a Beneficiary Assessment Survey was undertaken after the seminar, focusing on this population group, in an attempt to determine their perceived health problems, understand the pattern of provider preference and reasons for it, and explore what they perceived as the most effective actions to be taken by individuals, households, communities and government. The findings of this survey were used later in a priority-setting exercise and the development of the Core Program.

The seminar provided an open forum for dialogue. Health policy areas were highlighted by health sector presentations and by subsequent plenary and small group discussions. At the end, the meeting put together a working group that considered its deliberations, conclusions and recommendations, together with input from other sources, and produced a draft health policy that was submitted to government for consideration. The final document, *The National Health Policy for Sierra Leone* [3], was announced in June 1993 and represented a major accomplishment in the reform process.

The health policy document had two parts. First was the situation analysis, which covered prevailing conditions in the sector and their causes, in the following 13 areas:

1. Administration
2. Finance
3. Infrastructure and Logistics
4. Primary, Secondary and Tertiary Health Care
5. Private Practice
6. Manpower Development and Health Infrastructure
7. Drugs and Medical Supplies
8. Information Systems and Management
9. Control of Communicable Diseases
10. Maternal and Child Health
11. Health Education
12. Ethics, Medical Research, and Health Legislation
13. International Health Activities

The second part of the health policy document under the broad heading “Policy,” examined each of these areas and set out broad goals and priorities for reform. For example, under manpower development, the document stated:

MANPOWER DEVELOPMENT

Goal: To provide adequate manpower both in number and quality for the effective delivery of health care services throughout the country.

Priorities:

1. Training of various categories of health personnel.
2. Effective deployment and utilization of personnel.
3. Improvement in conditions of service.
4. Provision of continuing education.
5. Provision of adequate resources for training institutions.
6. Development of appropriate career structure.
7. Strengthening collaboration and linkages between training institutions and the Department of Health.

Stage 2: The Development and Adoption of the National Health Action Plan

Following the adoption of the National Health Policy, the government obtained funds in July 1993 from the Japanese government through a technical assistance grant held in trust by the World Bank. These funds supported a series of participative workshops and specific consultancies necessary for the development of the National Health Action Plan (NHAP).

The first workshop was held in October 1993, with the aim of developing a full draft of the NHAP. Preliminary work involved preparing cost estimates of current health activities, and appointing consultants for Institutional Assessment, Financial Management, Manpower Survey, and Health Prioritization. Participants in the workshop were selected to represent a broad sample of stakeholders within the constraint of thirty persons, to assure effective participation and outcomes.

The workshop used an objective-oriented methodology, building on the situation analysis in the policy document. Participants identified eight major health problems in the country:

1. Deplorable child health
2. Poor nutritional status
3. High level of communicable diseases and common ailments
4. Poor maternal health
5. High level of injuries and handicap
6. Unsatisfactory living conditions
7. High level of drug and alcohol abuse

8. High level of food contamination
- 9.

For each problem, the NHAP defined a health objective and identified specific output indicators for the target date of 1999 (see Table 2).

At the end of this workshop, a draft National Health Action Plan [14] was produced. This document described a five-year program to achieve agreed-upon health objectives through 8 Technical Programs to deliver health services directly, and 5 Support Programs that would contribute to the effectiveness of the Technical Programs. Each program outlined the range of services to be provided and specific output indicators for each service. Table 3 presents the Technical Program for maternal and child health, as an example.

Cost estimates were also provided for each program area. These estimates were based on current data for government and donor expenditures in the sector. Household expenditure was not taken into account due to the lack of reliable data. The document also made proposals for further study and discussion regarding the institutional structure and manpower required for program implementation. The NHAP [14] was approved as an official government document in February 1994.

Stage 3: The Core Program

The development of the NHAP showed that the existing level of financial resources from government and other sources were not sufficient for full program implementation within the proposed five-year time frame. This gap in available resources led to a decision to rank interventions in order of priority, and develop a subset of core programs to be implemented first. This priority-setting exercise would assure that the reform would achieve a significant part of its impact. The five priority interventions were:

1. Improvement in Maternal And Child Health
2. Prevention and Control of Communicable Diseases
3. Nutrition
4. Improvement in Water and Sanitation
5. Health Information, Education, and Communication

In order to improve delivery and accountability, the following issues were identified for immediate action:

- a) Strengthening and Expansion of Peripheral Health Units
- b) Community Involvement in Health Service Planning, Implementation, and Evaluation
- c) Decentralization of Operational Management and Budgetary Control
- d) Improved Revenue Collection from Drug Distribution and User-fees

The Core Program was developed on the basis of the highest priority programs in the NHAP, and the overall cost was approximately one-half that of the full NHAP (Table 4).

Stage 4: The Donors Meetings

The processes of stakeholders mobilization, participation, and consensus building were moved ahead to involve the international donor community through two meetings held in Sierra Leone in May 1994 and October 1995.

The Social Sectors Roundtable Meeting of May 1994.

This meeting brought together representatives of government, local stakeholders, and the international community. At the meeting, the Department of Health presented Sierra Leone's National Health Policy, the National Health Action Plan, the Core Program, and detailed financial plans for the NHAP and the Core Program [4], together with a proposed Implementation Program.

The presentation included specific proposals for implementing the reform:

- a) The adoption of a consistent and common approach to program management.
- b) Management of the NHAP through the Department of Health's permanent organizational structure rather than through separate project implementation units.
- c) In accordance with the overall management approach, line managers would be responsible for program monitoring.
- d) The establishment of an NGO Liaison Office, responsible for improving coordination with NGOs, international organizations, and the private sector.
- e) Health facilities and services regardless of ownership and source of funds will operate within a common framework of service delivery. Clear policies and service standards will be established in consultation with other service providers.
- f) Provider options for assistance can be through support to specific program or geographical area, or to the NHAP in general.

At the end of discussions and deliberations, which lasted a period of three days, donors and NGOs, agreed inter alia [13] to:

- a) Work exclusively within the framework of the NHAP using common implementation modalities as much as possible.
- b) Participate with government in joint review and planning.
- c) Meet the estimated funding gap required to fund the Core Program initially.
- d) Adapt the scope and modalities of their development assistance to fit in with the needs of the NHAP.

At the same meeting, the government of Sierra Leone agreed to prepare detailed implementation plans for each component of the program, and to develop guidelines on the use of technical assistance to best promote local capacity development. The

government agreed to meet again with donors within 18 months, for a systematic program review of implementation.

The Social Sectors Meeting of October 1995

This meeting took the same format as the one 18 months earlier, and allowed participants to review progress in the reform's implementation and set the agenda for work over the next year. The Department of Health presented various documents at the meeting, including the Western Area Development Plan for 1996-97 [10], the Central Level Program Planning for Fiscal Year 1995-96 [7], and Estimates of Total Resource Requirement to Implement Core program Activities for Fiscal Year 1996-97 [11].

At the end of this meeting, agreement was reached on the following issues [14]:

- a) The acceptance of the proposed program of work for the next year.
- b) The provision of the necessary resources required for program implementation.
- c) Annual review of work .

THE RESPONSES OF STAKEHOLDERS

A critical factor in the success of a reform is the level of stakeholder commitment. A look at stakeholder responses in the early stages could provide an indication of their acceptance of both the content and process of the reform. The responses in Sierra Leone from government, donors, NGOs, the private sector, professional bodies, and training institutions are considered below.

The Government

Various arms of the government were active players in the reform effort right from the start, mainly through the participation of technical and administrative staff of different departments in the development of the Health Policy and Action Plan. The policy-making body of government, after extensive debate and input, finally adopted these documents as blueprints for health sector development in Sierra Leone. Once these documents were adopted, work started on creating an enabling environment for implementation, through:

1. Enhancement of the legislative framework
2. Manpower and institutional changes
3. Changes in financial management and budget allocation

Enhancement of the Legislative Framework

The NHAP called for a review of all health legislation, so that laws would reflect the new direction within the health care delivery system. As a result, the Medical and Dental Act and the Community Health Officers Act were passed by the legislature. These established guidelines for medical and community health practice in Sierra Leone. For the first time since Independence in 1961, the government started work to review all Public Health Acts. The Sierra Leone Medical and Dental Council was established as an independent institution made up of representatives of the Sierra Leone Medical and Dental

Association, government, and various consumer groups, with responsibility for monitoring professional and ethical standards in medical practice and given disciplinary authority.

Manpower and Institutional Changes

In early 1994, two studies were started using external consultants under the direction of the Department of Health. The first of these was an institutional assessment study [16] that focused on the departmental and sectoral structures and their ability to implement the NHAP, whilst the second looked at human resources [16]. The reports from these studies were used as working documents in two workshops that discussed and analyzed their findings, and then developed a new organizational structure in the Department of Health [9] and its manpower development plan. Participants were from both central and peripheral institutions in the department. By early 1996, most of the organizational changes in these documents had been implemented.

Changes in Financial Management and Budget Allocation

Prior to the development of the NHAP, the financial management structure in the department was a replica of the situation in all other government departments in Sierra Leone. The departmental accounts were managed by staff sent from the Department of Finance and the yearly budget was prepared by a small team made up of the departmental vote-controller, the professional head, and the accountant. The budget was then submitted to the Department of Finance, which had the final say on the quantity and area of expenditures, based on a standardized line-item budget format. This rigid and restrictive budgetary procedure resulted in an over-centralization of authority for expenditure, which could only be approved by the vote-controller, with little or no variation in the patterns of allocation and expenditure in the budget. The NHAP called for drastic changes in this system, including:

- a) The introduction of budgetary and program control within the department.
- b) Decentralization of decision-making including budgetary control to district level.
- c) Restructuring of the financial management system in the department to cope with and reflect this new direction.
- d) Improve resource allocation to and within the department.

By early 1996, the government had responded to the proposals in the NHAP by making the following changes:

- a) Reorganizing the departmental financial management system except for two pending key appointments.
- b) Allocating the budget in line with the proposals to meet cost of program implementation for the fiscal year.
- c) Making budget preparation more broadly-based to involve central level program directors as well as heads of district management teams [7].
- d) Changing the format from line-item to program budgeting, and ensuring adequate allocation to the various program areas [8].
- e) Agreeing on a pattern of decentralization of expenditure authority which will be gradually expanded over the coming years.

The Donors

An assessment of the responses from donors could be made from two meetings; the first of which was held from 17-20 May 1994 [13]. At the end of this meeting, donors

congratulated the Sierra Leone government on its initiative for holding the first-ever Roundtable Meeting on the social sectors. The meeting endorsed the highly participatory process used in formulating and prioritizing the Action Plan and the strong local ownership and commitment that resulted. The sector program approach was commended for its potential to harmonize sectoral development and enable donors to provide their assistance to specific components, geographic areas, as well as broader program support. They also agreed to redirect some existing project funds and to finance some sharply focused technical assistance as well to work within the framework of the NHAP. Pledges were made to cover the funding shortfall for addressing the Core Program. They also agreed to review with the government, on a regular basis, the progress and content of the program. At the next meeting in November 1995, donors reviewed the performance of the program and reaffirmed their support and commitment to the reform.

The Private Sector

The private sector's involvement in health care delivery had largely been on an ad hoc basis, with individuals or small groups providing private medical consultations or facilities for in-patient care. The level of interaction between these providers and the government had been purely regulatory, rather than as a team with a common overall objective. In 1994, for the first time ever, representatives of the private sector became involved in the planning and development process leading to the formulation of the NHAP. The government was also able to grant a very long lease to one private organization to develop and use one of its hospitals for the provision of high-quality tertiary care. This agreement was considered a significant first step in improving government-private sector cooperation, which was expected to trigger more interest in private institutions being involved in health care provision. This move also allowed government to reallocate resources previously earmarked for the construction of a new tertiary care hospital to other programs in the NHAP.

Professional Bodies and Training Institutions

Included in this group are: The Sierra Leone Medical and Dental Association (SLMDA), The Pharmaceutical Society, The College of Medicine and Allied Health Sciences, and The Schools of Nursing and Midwifery. Each of these groups were involved in the development of the NHAP through delegated representation in the various workshops and planning programs. The SLMDA and the Pharmaceutical Society on separate occasions made the National Health Policy and the National Health Action Plan the central theme of their annual conferences, thereby promoting further discussion, and taking a position which their respective delegates carried forward into the various workshops and discussions. These organizations also made significant contributions in the development of the final manpower report, which proposed far-reaching changes in manpower training and utilization.

The Public

The Joint Government\UNDP\WHO Report on the Health Sector of 1991, and various other studies had all pointed to a public perception in Sierra Leone of a sector in disarray, and incapable of addressing their health problems, leading to a severe erosion of

public confidence in the health system. This public perception contributed to a gross underutilization of government facilities and services, and at the same time contributed to a growing trend to self-medication and the use of alternate care such as traditional medicine and herbalists.

An indication of a positive change away from public skepticism came when the Department of Health won the “Heroes Day Award” in 1994. This award was initiated by the local press, and was based on an opinion poll to assess the public’s views on various facets of activities in both the public and private sectors. The Department of Health was the only government department to win this award, and amongst the reasons given was “the pursuit and pioneering of the National Health Policy and the National Health Action Plan.”

DISCUSSION

The health reform in Sierra Leone won widespread stakeholder acceptance for both its content and its process. This high support can be attributed to four key factors: policy design, discretionary funding, commitment to change, and built-in transparency and accountability.

Policy Design

The active participation of stakeholders was a prime consideration in the design of the reform process. The series of meetings and ongoing dialogue helped to identify common grounds that could be agreed upon and significant differences that needed to be negotiated to reach a consensus. Stakeholder mobilization was designed as open-ended, allowing critical groups to remain on the sidelines at the outset, and permitting them to take a “wait and see” stance and decide to commit themselves after some progress. In addition, all aspects of the policy were available to discussion and negotiation, to give flexibility in persuading stakeholders to support the reform process.

Discretionary Funding

At a time of declining budget allocation to the health sector, it was extremely difficult for the government to commit the necessary financial resources required for development of the reform platform. The availability of supplementary funds from donor sources allowed the reform proponents to pursue the reform process in a way that accumulated evidence on important issues and support from diverse groups. The discretionary funds also provided a positive signal to the government and other organizations to contribute financially to the overall program development.

Willingness to Change

Various groups showed a willingness to change, as demonstrated by their actions. Trade-offs were required by many stakeholders, and were recognized as such. Prior to the start of dialogue and consensus building, justifiable entrenched positions existed for different groups. These positions were taken for a variety of reasons, including the group’s

perception of its traditional role in the sector, and for international organizations, the added factor of addressing their global mandate at country level. The subsequent movement away from entrenched positions and willingness to accept trade-offs was an important manifestation of commitment. The various groups were also able to provide mutual support and reinforcement when representatives have to sell difficult decisions to their different constituencies.

Built-in Transparency and Accountability

Transparency and accountability were introduced into all aspects of the reform, right from its inception. Dialogue was established not only between different groups but within groups. Decision-making was no longer relegated to a few individuals, but involved all major players. Progress in the reform process was assessed by highly visible output indicators that were applied to public sector, NGO and private sector activities.

LESSONS

1. It is possible to undertake sectoral reform even when the context is far from ideal. The prevailing situation at the onset of the reform process in Sierra Leone was an example of this. Amongst the many factors present were, the dismal socio-economic situation, an on-going rebel war and a new military government; any of these could have been used as an excuse for not starting a widespread sectoral reform program. One needs to factor in the circumstances at the time in developing the reform package, but the context should not be a deterrent to making a start.
2. Reform takes time and commitment and is likely to be sustainable if a broadly-based participatory process is developed. It is also a very dynamic process, therefore at any point in time there may some players leaving and new ones coming in. A broad-based stakeholder participation is likely to cushion the effects of these changes and keep the process on track. This approach is particularly true for Sub-Saharan Africa, as it is estimated that the average tenure of office of political heads of Ministries of Health is less than 18 months.
3. In policy development, what are perceived as small sectoral changes can have very widespread ripple effects in other sectors. Competition for scarce resources could lead to the development of strong opposition groups. This should be anticipated and strategies developed to manage such situations as and when they occur.
4. Whilst reform effort should be focused, there must be resilience in program design which will allow for getting things back on course when they start to stray as they are very likely to do.

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Table 1- Demographic and Socio-economic Indicators

A GENERAL	YEAR	SIERRA	AFRICA
Area (sq. km.)	1991	71,470	30,305,000
Population size (in million)	1991	4.2	661
Sex ratio (/100 female)	1991	96.1	99
Population under fifteen years (%)	1991	44	45
Population sixty-five years and above (%)	1991	3	3
Urban population (%)	1991	32	34
Population density (per km. sq.)	1991	58	21
Annual population growth (%)	1991	2.5	3
Urban population growth (%)	1991	5.0	5.0
GNP per capita (USD)	1990	250	600
Annual growth of GNP (%)	1989-90	2.3	3.4
B. HEALTH INDICATORS			
Life expectancy at birth (years) -Total	1990	45	52
-Male		43	-
-Female		47	-
Crude death rate (per 1000 population)	1992	23	15
Infant mortality rate (per 1000 live-births)	1991	154	114
Under-five mortality rate (per 1000)	1991	261	167
Maternal mortality rate (per 100,000 live-births)	1991	980	630
Crude birth rate (per 1000 population)	1992	48	44
Total fertility rate	1992	6.5	6.2
Proportion of women using contraceptive (%)	1985	4	18
Population per physician	1991	17300	
Population per hospital bed	1991	963	
Access to safe water (%)	1988-90	43	
Average per capita caloric intake	1986	1855	2328
Average per capita spending on health (USD)	1990	5	22
C. EDUCATION INDICATORS			
Adult literacy rate -Total	1990	21	51
- Female		11	35
Gross enrollment ratio			
Primary school - Total		48	
- Female		39	
Secondary school - Total		16	
- Female		12	

Source:

World Development Report, World Bank, 1993

Sub-Saharan Africa from crisis to sustainable growth, World Bank, 1989.

World Demographic Estimates and Prospects, UN, 1988

The State of World Population 1991, UNFPA

Africa Recovery No.3, 1991 UN.

Table 2 -Output Indicators

Health Objectives	Indicators (Target date 1999)
1. Improve child health	Reduce Infant Mortality for 150 to 70 per 1000 live-births. Reduce Under-five Mortality from 360 to 150 per 1000 live-births. Reduce Low Birth-weight from 17% to 8.5% of all deliveries.
2. Improve maternal health	Reduce Maternal Mortality from 980 to 500 per 100,000 live-births.
3. Reduce incidence and prevalence of communicable and common ailments	Cause and age-specific mortality rates for sentinel conditions (diarrhea, malaria, tuberculosis, tetanus AIDS and injuries).
4. Reduce mental illness	Prevalence to be determined.
5. Reduce injuries and handicap	Incidence to be determined.
6. Ensure satisfactory nutritional status	Reduce childhood prevalence of low weight for age from 33% to 25%.
7. Reduce drug abuse	Prevalence of use and disability due to alcohol and specific drugs to be determined.
8. Improve living conditions	Increase proportion of household with safe drinking water from 43% to 66%.

Source: Sierra Leone National Health Action Plan, 1994.

Table 3 Technical Program 1 - Maternal and Child Health

Service	Output Indicators (1999)
1. Ante-natal Care, Safe Delivery, and Postnatal Care	a) 60% of pregnant women attend ante-natal clinic at least three times during each pregnancy. b) All pregnant patients attending clinic receive iron and folic acid supplements. c) 95% coverage of tetanus immunization. d) 70% of all deliveries are supervised. e) At least 20% of all deliveries take place in a hospital or health centre. f) 80% of all women with complicated deliveries attend postnatal clinic at least once.
2. Family Planning	Increase contraceptive from 4% to 10%.
3. School Health Services	50% of all primary schools should be able to provide school health services.
4. Oral Rehydration Therapy	This should be available for at least 80% of all cases of diarrheal diseases.
5. Growth Monitoring and Promotion	a) 50% of all children under the age of three would be monitored for growth. b) 500 community-based growth monitoring groups must have been established in the rural areas.
6. Breastfeeding	50% of all newborns should be exclusively breastfed during their first four months of life.

Source: Sierra Leone National Health Action Plan, 1994.

Table 4- Program Costs of NHAP and Core Program

	Estimates (Constant Prices)	Price and Physical Contingencies (15%)	Total
Projected Expenditure	85,965,000		85,965,000
Costs: Full NHAP Core Program	234,661,000 128,696,000	35,199,000 19,304,000	269,860,000 148,000,000
Financing Gap: Full NHAP Core Program			183,895,000 62,035,000
Source of Funds: Government Donors Households			21,000,000 36,000,000 4,600,000

note: All figures are in US dollars

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Source: Towards Better Health for Sierra Leone - A Proposal for Financial Assistance, 1994.