

3.3.1.6 Malaria

Malaria was and still is the highest cause of clinic attendance in the country, Accounting for about 40% of all outpatient visits. During the course of the conflict, malaria mortality increased from 13.3% in 1986 to 21.5% in 1996. There is an increase in the problem of chloroquine-resistance, with 17% resistance in Montserrado County, 5% in Lofa and 38% in Grand Bassa County.

3.3.1.7 Septic Abortion and Maternal Mortality

Maternal mortality increased during the crisis. In a study done in the five major referral hospital in Monrovia, there were 27 maternal deaths out of 2,544 birth giving a hospital maternal mortality rate of 10.6%. Septic abortion was the leading cause of maternal mortality, accounting for 37%.

3.3.1.8 Tuberculosis

The problems of mass population displacement and overcrowding coupled with under-nutrition contributed to the rise in the number of cases of tuberculosis. A conservative estimate of prevalence of TB is 4/1000 in Monrovia.

3.3.1.9 Frambesia Tropica (YAWS)

Yaws, which was believed to be eradicated, surfaced during the crisis within the Southeastern Region (Maryland and Grand Kru Counties)

3.3.2 Other Health Related Problems

3.3.2.1 Population Movement

Over 900,00 persons were internally displaced and over 768,000 persons were refugees.

3.3.2.2 Rape

Many females, including girls were molested, abducted and raped.

3.3.2.3 Substance Abuse

Substance abuse, including alcohol and drugs has increased particularly among young people, many of whom are former combatants.

3.3.2.4 Teenage Pregnancy

Although statistics are not presently available, teenage pregnancy has increased with many young people out of school.

3.3.2.5 Landmine injury

Injuries from anti-personnel mines began to emerge in 1995 as civilian population began to slowly move back into their towns and villages.

3.3.2.6 Road Traffic Accidents

Road traffic accidents increased particularly following the periods of fighting in Monrovia when many vehicles were looted by fighters who did not know how to drive.

3.4 HEALTH RELIEF

The looting and destruction of health facilities especially referral hospitals, and the flight of health workers as refugees/displaced and the pull out of the UN family from Liberia in June of 1990 negatively impacted the provision and delivery of health services making outbreaks and control very difficult. During this period of nationwide fighting, health relief was provided by private individuals and the warring factions which mainly catered to their wounded fighters.

As the fighting became generalized, leading to a total collapse of private and public services, a local NGO, the Liberia Health Committee, was organized to provide services and coordinate health relief in Monrovia; whilst in other parts of the country CHAL Units and some concession hospitals remained operational not only for their employees but those afflicted. Also, some public health facilities in the rural areas remained operational despite being cut off from central support by the fighting.

With the establishment of an Interim Government for Liberia and the defactor NPRAG in Gbarnga, the UN re-established its offices in Monrovia and international NGOs began to arrive to provide health relief. Relief was provided and supported by:

- United Nations Agencies
- Medicin San Frontier (Switzerland, Holland, International Belgium, France, Luxemburg)

- Aide Medicale Internationale (AMI)
- Action Internationale Contre Faime (AICF)
- Liberian Health Committee/Medical Emergency Relief Cooperation
- Save the Children
- OXFAM
- World Vision
- CARE
- European Union
- Goal Ireland
- Concern
- Children Aide Direct
- USAID
- MERLIN
- Medicin Du Monde
- Swedish Relief, etc
- Christian Health Association of Liberia (CHALL)
- Church World Service (CWS)
- Liberia National Red Cross (LNRC)
- International Committee of the Red Cross (ICRC)
- Catholic Relief Services (CRS)
- Adventist Development and Relief Agency (ADRA), etc.

3.5 **HEALTH CARE ADMINISTRATION**

The health care delivery system of Liberia is basically divided into three levels, the Ministry level, county level and the community to which the health care is delivered. All three levels have been adversely affected by the civil war. In general, health care delivery has and still has an urban bias.

3.5.1 **The Ministry**

The Ministry which is the central point of the health care delivery system has limited qualified personnel, has a very high turnover of senior level personnel which leads to a breakdown in continuity. Inadequate and irregular payment of salary have caused the attrition of the few qualified personnel towards the private sector (NGO). The lack of an adequate structure

(space), equipment and logistics for the proper and effective functioning of the ministry are major problems. Lastly, the absence of policy guidelines regarding the operation of NGO in the health sector is yet another important issue. (Currently there are 12 international and 12 local NGOs operating within the health sector).

3.5.2 The County

The number of trained manpower at the county level, to say the least, is inadequate. Many of the county hospitals which should be referral centers are nonfunctional; even if they are functional, the system of referral is hampered because of the lack of public transport and/or the lack of logistics at the county level. Shortage of drugs and supplies and the use of a restrictive drug list (essential drugs list) which does not include specialized drugs for hospitals poses a serious problems in the health care delivery at the referral centers.

3.5.3 The Community

The civil crisis destroyed most community structures hence community empowerment programs has to be reorganized. The humanitarian community in their desire to help these communities re-establish themselves has exacerbated the dependency syndrome that had already existed.

3.6 REHABILITATION AND DEVELOPMENT ACTIONS

The rehabilitation and development of health services was the purview of mainly the UN agencies, National NGOs and the international NGOs. This was due to the fact that there was a total collapse of governmental structure. When an Interim Government was established, it did not have the necessary international recognition nor resources to carry out these activities; very importantly, the Interim Government did not have access to other parts of the country outside of ECOMOG controlled areas.

Rehabilitative and developmental actions during the emergency period included but were not limited to the following:

- Provision of essential health services to the population
- Provision of safe water to the displaced communities
- Introduction of an ambulance services and provision of first aid training;
- Establishment of mobile teams to carry the sick and war victims to referral centers;
- Simultaneous establishment of disease prevention and control teams;

- Establishment of body disposal teams to collect and provide proper burial for war casualties and those who died from contagious diseases;
- Provision of drugs, surgical and other essential supplies for functioning facilities;
- Direct cash incentive to essential workers i.e vaccinators, sanitation workers, TBAs, midlevel health workers, etc;
- Provision of mental health services and trauma counselling;
- Institutional support to medical and paramedical institutions (the Medical College and the Tubman National Institute of Medical Arts)
- Rehabilitation of pipe borne water/water trucking services
- Repairs of health facilities including referral centers
- Re-establishment of key MOH programs i.e Expanded Program of Immunization (EPI), Community Water and Sanitation (CWS), Maternal and Child Health (MCH), National AIDS Control Program (NACP), Women in Health and Development (WHD).

The process of rehabilitating essential institutions and services was hampered by repeated resurgence of conflicts in “stable areas”, which led to again, yet looting and destruction. There was therefore donor fatigue in linking relief to rehabilitation and development. In spite of repeated resurgence of hostilities, relief should be linked to rehabilitation and development.

3.7 ASSESSMENT OF ROLES, CAPACITY AND PERFORMANCE

3.7.1 PUBLIC SECTOR

The public sector played a minimal role in the provision of health care due to the inability of the existing authorities to provide logistics and funding. This sector mainly provided manpower and some infrastructure. Also, the Ministry of Health did not play a leadership role during the conflict because of lack of recognition of the government and the absence of qualified manpower. Lastly, due to the division of the country, the Ministry’s scope of activities was limited to Monrovia and its environs. There was no real health budget from 1990 - 1997.

3.7.2 **PRIVATE SECTOR**

Provision of health care by the private sector came to a virtual collapse during the emergency period because of financial hardship, the inability to import essential drugs and supplies and flight of proprietors of these facilities. Exception being some CHAL Units and Concession hospitals.

3.7.3 **NGO SECTOR, UN AGENCIES AND DONOR COMMUNITY**

The NGO activities in Liberia began as early as in late 1990 with the formation of a local NGO, the Liberia Health Committee (later became Medical Emergency and Relief Cooperative International, MERCI), to coordinate and provide health care delivery in Monrovia. This was followed by the arrival of MSF/Belgium which became the counterpart of the LHC and the return of the UN agencies. By late 1991, there was a multiplicity of NGO involved in health care delivery. These NGOs and UN agencies provided services on both sides of the divided country with the ability to move from one side to the other, a situation in which the Ministry could not get involve directly. Because of the available funding and logistics that these NGOs and UN agencies possessed, they were capable of providing health care to a larger area but not necessarily providing comprehensive and efficient services. They provided both preventive and curative services and were also able to mobilize resources for outbreaks investigations and appropriate response. The establishment of feeding centers to cater to a large number of malnourished persons especially children prevented the death of many.

During the civil crisis, the provision of emergency assistance in health was carried out by bilateral/multilateral, UN Specialized Agencies, and NGOs. Funds from appeals made by the Secretary General of the UN amounted to US\$16,532,000. Another amount of US\$16,222,365 was reported utilized by international NGOs, UN Agencies and bilateral donors. This figure does not include the cost of international health personnel. Donors included the USAID, Canada, Netherlands, Japan, Germany, EEC and Luxemburg.

External assistance, commonly termed "relief assistance," was channeled either through institutions (NGOs) or directly administered by various UN Agencies. This situation made it difficult to ascertain the exact level of external assistance provided this crisis period, especially from the international NGOs

Though the NGOs provided essential services during the emergency, there were also many shortcomings:

- a. **Staff:** Many of the expatriate staff had very little, if any, experience in dealing with local health problems. Some NGOs brought in supervisors that were less qualified than the local staff whom they were to supervise, the bringing in of less qualified persons to serve as medical coordinator or to conduct medical related training/seminars. Other NGOs provided expatriates for menial jobs that could have been handled by local contractors.
- b. **Services:** Restriction by NGOs on the number of facilities to be established regardless of the need based on the population density in a particular locale.

The resistance of some NGOs to allow others to function within “their territory” thereby limiting access to health care. Other NGOs provided their own treatment guidelines, epidemiological surveillance forms, EPI techniques, etc., disregarding national standards and guidelines.

3.7.4 **COORDINATION**

Initially, health coordination was held between the LHC and MSF/Belgium for the provision of health care services in Monrovia. Later, with the arrival of the UN agencies, the coordination became intersectoral involving the UN agencies, NGOs and Government authorities. These weekly meetings were held with UNSCOL (United Nations Special Coordinator for Liberia).

Sectoral sub-committee chairpersons reported to the UN Coordinator. This was later replaced by Health Service Coordination Committee (HSCC), co-chaired by the Ministry of Health (MOH) and the World Health Organization (WHO). The meeting provided a forum for information sharing and problem solving.

In 1995, UNHACO was mandated by the Security Council to be responsible for the coordination of humanitarian assistance. During its tenure HACO provided a central point where the NGOs, donors and UN agencies met regularly to share information and consolidate

their responses to the crisis. In its coordinating capacity, HACO also disseminated information, maintained media relations and promoted the principles of humanitarian assistance. Analytical tools such as vulnerability mapping and the maintenance of a humanitarian data base also facilitated the delivery of assistance. Following the expiration of the mandate of UNHACO, coordination continues only between the UN agencies and the NGOs.

4.0 THE POST CONFLICT PERIOD

4.1 Rehabilitation and Development Action

4.1.1 Phase I

This phase focuses on the immediate post war revitalization of the health delivery system, mainly through strategies of capacity building and institutional strengthening to provide an enabling environment to deliver health services thereby reducing the wide disparities between rural and urban, curative and preventive that have been worsened by the war.

4.1.1.1 Restoration of Health Facilities

The action is to reconstruct, re-furbish and re-equip destroyed, damaged and looted facilities. This exercise is important because it will improve the capacity for service delivery, enhance the confidence in the health services by the user, strengthen PHC initiatives as well as improve staff morale and security. The package also includes a twelve (12) months supply of drugs and supplies.

Assessment of the relevance and appropriateness of the various health facilities (health posts/clinics and health centers) in terms of geographic location, population served and quality of services offered, should be part of the assessment exercise so that under utilized, misplaced and poorly constructed facilities can be shut down. Other factors to take into consideration are the rate at which displaced persons are returning to affected areas and the preparedness of the private sector (NGOs, missions) in making some of these facilities operational so as to avoid duplication of efforts.

Trained and well motivated staff must be available to work in the renovated facilities. The health workers must be provided with realistic salaries to ensure that they remain in the facilities.

4.1.1.2 **Revitalizing Program Management**

With the destruction of all records and data base systems, data reporting is only from 4 counties. Even there, lack of equipment, manpower and logistics prevents any form of data analysis. Priority programmes such as malaria, ARI, diarrheal diseases which accounted for a high Proportion of infant mortality and morbidity were not monitored. AIDS/STDs were only monitored in the accessible areas of Monrovia despite implications of these diseases in a war torn country. Teenage pregnancy has peaked to a high level of concern.

The aim of this exercise is to restore all programs to full functionality. This support will focus on the following programmes:

1. Family Health: MCH/FP (Including reproductive health), EPI, Nutrition
2. Disease Prevention and Control. Malaria, Diarrheal Diseases, ARI, AIDS/STDs, TB/Leprosy and other endemic and epidemic diseases
3. Health Promotion and Protection. mental health, eye health, oral health, environmental health and health education.
4. Social Welfare Services: social services and rehabilitation
5. Health Information system (Epidemiology Unit)

For the immediate future, attention will be directed towards

- Re-building of a data base
- Revitalize and standardize the reporting system
- Develop reporting forms
- Build up epidemiological and disease surveillance capacity
- Train county health teams on disease surveillance and reporting so that they become trainers of the revitalized new system.
- Conduct operational research, sample and national surveys to strengthen database.

4.1.1.3 Institutional Strengthening and Capacity Building at Central Level for Policy Making

During the war, health services were provided directly by NGOs. In this regard, there is a strong presence of NGOs in the country. As Liberia moves from relief to operational and developmental phase, the normality in which the NGOs and donors operated will change. Sustainable partnership will have to be developed between NGOs and Government. Proper coordination by the Ministry of Health will strengthen such partnerships for health delivery and facilitate resource mobilization and use.

In this regard, the following actions need to be taken:

- Formation of a Top Management Team (TMT) at the central level This should comprise of the Minister of Health and Social Welfare as Chairman, deputies and assistants. There is a need to support the central level TMT through institutional strengthening and capacity building for effective planning. This package will include the following:

A. Capacity Building

- Short term training (3-12 months) in planning, leadership and managerial skills.
- In-service training workshops on the planning process for staff at central level
- Local training in computers

B. Institutional Strengthening

- Refurbishing of office building
- provision of office equipment
- Stationery
- Computers and accessories
- Manual typewriters
- Photocopying machine
- Generators

4.1.1.4 Revitalizing County Health Offices

County health offices are critical to health delivery services. The process of decentralization should be accelerated so that county health officers are given the required authority to manage and organize services in their county. The central level should transfer all county resources for control and use at their level. County health offices should be responsible for planning activities for the county, coordinating Partnerships with NGOs and resource mobilization and use for their centers.

County health offices provide supervision of health posts, clinics and health centers in addition to community health activities in a county. The county health office team needs support in institutional strengthening and capacity building to enable it carry out the following functions effectively within a decentralized framework.

- Intensified supervision with the revitalization of PHC
- Data processing of all county health information
- Disease surveillance and outbreak investigations and response.
- Conduct/supervise in-service training for health staff in county
- Stores, management and distribution of drugs in county health facilities
- Manage staff, finances and other resources for the county
- Public health and social welfare functions
- Planning activities for the county

4.1.1.5 Re-organization of the Structure and Functions of Ministry of Health and Social Welfare (MOH&SW)

The MOH&SW needs to be re-organized to eliminate the many vertical programmes and “one persons units” to an integrated functional delivery system to deliver efficient and effective services. The opportunity should also be taken to re-structure the organization and delivery of social welfare services. A proposed organogram (appendix 5) discussed at the Planning Conference is attached. However, there is a need to move away from the vertical approach (curative and preventive) to a more integrated and functional approach. It was also felt that the position of surgeon general should be replaced by an advisory council.

4.1.1.6 Decentralization

This should be an important aspect of the restructuring process, so that the authority manage resources and supervise services delivery will be the responsibility of a strengthened county

health team. The central level will be able to concentrate on matters of policy formulation, planning, monitoring and evaluation. A proposed organogram is attached (appendix 6).

4.1.2 Phase II Revitalizing Health Care Delivery

The second phase focuses on Sectoral Reforms and Strategies that will address the many weaknesses of the health delivery system to institute effective policies and a restructured organizational management and delivery system from which efficient and effective services will be provided.

4.1.2.1 Revitalizing Primary Health Care (PHC)

Currently access to health care services is estimated at a low 10% or less. Previous attempts to introduce primary health care (PHC) meet varied degree of success. Identified problems included lack of funds, drugs and poor supervision. Further attempts to expand PHC were aborted by the onset of the war.

The current situation provides an excellent opportunity for PHC introduction. Access to health services is low. Infants and maternal mortality rates are high particularly in the rural areas. Poor road and negative cultural practices limit access to health services. Disparities between rural and urban, curative and preventive have widened. Resources are also scarce. Trained manpower are in short supply and drugs and supplies are also scarce.

Introduction of PHC however must take place in a systematic manner. The organization, management and linkages must be clearly defined. The Bamako Initiative provides an opportunity for revitalizing PHC within a sustainable environment that promotes community participation cost sharing and ownership.

PHC also provides an opportunity to integrate community-based rehabilitation programs and other activities that address the plight of the handicap.

4.1.2.2 Strengthening County Hospitals

Currently only 4 hospitals are functional. Even prior to the war, majority of the hospitals were plagued with shortages of equipment, drugs supplies and maintenance problems. Under the rehabilitation component, 11 of the non-functional hospitals will be addressed. This component is to ensure that the currently 4 operational hospitals function optimally.

4.1.2.3 Strengthening the Tertiary Level (JFK)

John F. Kennedy Medical Center is the specialist referral hospital. It consumes 30% of allocated health resource. Previous management studies here identified over staffing, lack of management information system, poor financial planning and inefficient use of resources as some of the problems. In addition, lack of maintenance provisions have allowed the buildings and equipment to deteriorate to appreciable levels of disrepair. The sectoral reforms proposed will provide a sound basis for the future development of JFK.

A corporate plan is essential for the future development of JFK to improve on its management structure and shed off the activities that may be best managed by private actors, allowing it concentrate on the other important matters that it can best control.

In the interim, there is an urgent need for an infusion of technical assistance on a bilateral basis to improve capacity to handle referred safe motherhood and childhood cases.

4.1.2.4 Human Resources Development

The immediate re-training and re-deployment exercise will only solve manpower problems in the short run. For future developments in the health sector, a human resources policy should be developed in conjunction with a 5 year manpower development plan. This should take into account demand and supply of all categories of health personnel for both private and public sectors. This should be followed by the development of a training plan (in and out of country). Prior to the war, Liberia had a network of training institutions that to a large extent met the needs of trained personnel to work in the health services. However, currently, only four training institutions are in operation, one medical school and three paramedical schools.

In the short run to operationalize all the county hospital and meet part of the JFK, there will be a need for a massive infusion of technical assistance in the form of doctors, nurses, pharmacists, laboratory technicians and technologists and medical specialists.

With the revitalization of the PHC and the rationalization of the secondary level of service delivery, there will be the need to review the effectiveness and efficiency of the present health cadres of vaccinators, and nurse aids so that appropriate polyvalent workers can be trained.

4.1.2 5 Revitalizing Support Services

A revitalized support services is essential for health service delivery. Key support services include the revitalization of the national public health laboratory services and the management of transport, personnel, communications and maintenance services.

A strengthened national laboratory services will ensure that critical screening programs continue thereby ensuring that blood transfusion services nationwide are free from contamination.

A policy on maintenance will ensure that the required financial provision, technical skills, maintenance, tools and equipment are made available.

A communication policy will ensure the provision of network communication system that will enhance speedy communication between various levels of service delivery particularly for attending to referrals.

4.1.2 6 Resource Mobilization and Use

Current financing of the health sector is from government allocation, private sector (NGOs, Mission) and external aid. During the war and upto present, over 80% of health sector services are financed by external aid mostly through NGOs. In the majority of facilities, a fee for service scheme operates. Fees collected are used to subsidize salary whilst a small percentage is sent to the county health team to support supervision. Collection mechanisms need to be strengthened. The RDF is not in operation. There is an urgent need to broaden the research base.

JFK which consumes 30% of all health services must be allowed to operate without any strings so that potential resources can be raised, in addition to cost containment and cost effective strategies. This will free government resources for PHC.

Donor and NGO coordination and collaboration is also important to ensure proper resource mobilization to prevent duplication and wastage.

The RDF when operational, will be another source for resource mobilization

The Bamako Initiative provides another opportunity for cost sharing, community financing and provision of sustainable health services.

To enhance the coordination of resources, mobilization and use, the Planning Division at the central level, should be strengthened to provide a framework for a more structured approach to ensure better utilization of resources. In this regard, the following actions should be taken.

1. The planning unit should prepare a two year rolling plan of activities with a detailed first year plan.
2. The MOH&SW must enter into a memorandum of understanding (MU) with NGOs based upon the area of interest. The MU should state the following:
 - a. Roles and responsibilities of the MOH&SW
 - b. Roles and responsibilities of the NGO
 - c. NGOs to confirm to MOH&SW standards for service delivery
 - d. Joint supervision and monitoring visits by MOH&SW and NGOs
 - e. Annual review meetings between MOH&SW and NGO at central and county levels to assess progress and take remedial actions.
 - f. Biannual or annual reports by NGOs.

4.1.2 7 **Consolidation of Drugs/Supplies**

currently, there is no drug policy. The Pharmacy Board lacks the necessary authority to enforce regulations controlling the importation and prescription of drugs. This state of affairs has led to the proliferation of faked drugs in system which cannot be addressed in the absence of a quality control laboratory.

A drug policy will consolidate the gains to ensure the availability of a reliable drugs supply. The drug policy will address areas of drugs procurement, the rationale use of drugs, drug storage, management and distribution, drug information and quality control.

In this connection, the Essential Drug Program should be revitalized.

5.0 CHALLENGES AND CRITICAL ISSUES

The immediate challenge of Liberia's health sector is to rehabilitate services to pre 1990 levels. Many of the health facilities and services nation-wide have not been re-commissioned. Rehabilitation, however, should not restore all of the order. Rehabilitation should seize the opportunity of addressing the fundamental imbalances and inefficiencies of the system. As such, rehabilitation should be innovative and comprehensive. Although rehabilitation may assume a gradual approach, the process must not lose focus and direction. And although flexibility will be required, structural adjustments must not compromise vision and mission.

Within the context of the global challenges facing Liberia's health sector, several critical issues need to be addressed.

5.1 Security Issues

Although the general security situation in the country has improved during the post conflict period, there are reported human rights abuses that may deter potential investors and derail the prevailing peace and tranquility that the country now enjoys. Instability in Sierra Leone could affect the security situation and the health system in Liberia.

5.2 Lifeline System

Lifeline system such as water supply, electricity, communications, etc. are very inadequate. Only a small section of the Capital Monrovia has pipe borne water. Virtually there is no electricity in the City.

In the towns and villages, hand pumps were looted from wells providing safe water to communities. Most of these are yet to be replaced. Electricity is non-existent.

5.3 Hesitation of Donors Regarding Development/Long Term Activities

To win donor confidence to provide funds for developmental activities is an important issue. Many donors are adopting a wait and see attitude towards rehabilitation and development probably because of human rights abuses in the country.

5.4 Non-Flexibility of Donors for Activities

Donor funds are usually not flexible enough in terms of linking relief to development. It is either relief or development. However, the line of demarcation between relief and development is very thin if relief is put into proper perspective. Therefore, donor policy should be flexible to allow the linking of relief with development

5.5 Planning, Guidelines/Policies/Coordination

There are now many partners in the health sector providing services. There are no guidelines and policies yet to guide the operations of the many partners based on their interests. The activities of these partners need to be coordinated to avoid duplication of efforts. Proper planning in terms of policies and guidelines which define the roles and responsibilities of the partners including the Ministry of Health need to be elaborated. Joint supervision and monitoring must be an integral part of memoranda of understanding.

5.6 Decentralization at County and Community Levels

Decentralization of the health system is still in the embryonic stage. It needs to be supported in terms of reviewing existing decentralization guidelines to reflect current realities providing the required manpower giving responsibilities and authority to the county providing financial resources, technical support, etc.

5.7 Community Involvement

Community structures were negatively affected by the crisis. In some communities, community structures have to be re-established and community empowerment to deal with situations on the ground. Community involvement and empowerment in health and other community related issues are paramount.

5.8 Health budget

During the crisis, for all practical purposes, a health budget did not exist. National government needs to allocate a substantial proportion of the national budget to health and health related activities such as water and sanitation

5.9 **Internally Displaced**

Although there has been no fighting in the country for over one year, displaced persons have not all returned to their original places of residence. The care of displaced persons is clearly the responsibility of the government, which at present does not have the resources for their resettlement.

5.10 **Group with Special Needs**

Many heads of households or family heads were killed. Sometimes both parents were killed leaving behind the children. Many children have become heads of families, a responsibility for which they are not prepared.

There are many unaccompanied children, those who got lost from their parents, abandoned children and child fighters that have been refused by their families. Those children need to be cared for.

Many persons have become handicapped either as a result of active fighting, mine injuries or atrocities by fighters. Compounding this problem is the presence of handicapped Sierra Leonean refugees who are victims of combatant atrocities in their own country.

5.11 **Maternal and Child Health/EPI/Nutrition**

Given the high maternal and infant mortality rates before and during the conflict, it is essential to strengthen these programs to provide safer health. EPI activities should be provided at all MCH facilities as well as other facilities. Information on proper nutrition should also be made available.

5.12 **Control of Communicable Diseases**

A proper surveillance system needs to be established to monitor disease patterns in the country. Bilateral agreements will be needed for cross border disease surveillance where these communicable diseases are detected along border towns and villages.

5.13 **Water and Sanitation**

The issue of safe drinking water and proper sanitation methods for the entire country will have a major impact on reversing the trend of disease burdens. In this regard, the government should make the revitalization of the urban and rural water and sanitation

programs a priority for the immediate future. The present collaboration with the EU should be re-visited for expansion.

5.14 Gender Issues

Since the issue of gender equality became a priority of the UN, the Government of Liberia established a Women and Children Coordination Affairs Unit at the Ministry of Planning and Economic Affairs. This Unit is charged with the responsibility of coordinating gender activities, mainstreaming gender issues in policies and programs and influencing policy reforms for gender equality and equity. Women Desk Officers have been established in some Ministries including health social welfare to strengthen the unit's operations in close collaboration with the women and Youth NGO Forum in which the women Family Health Division serves as a member.

5.15 Reversing Sector Biases

Liberia's health care delivery system is fundamentally weak in three respects. a) it favors fixed facilities although these facilities are under-utilized; b) it is curative services bias although most of the major causes of morbidity are preventable; and c) it is urban bias although most of the population live in rural communities where the bulk of the diseases originate. These situations must be reversed

5.16 Enhancing financial Support

The financial support of Government must be increased and be made available in a reliable, consistent manner. Revitalization of the national economy is crucial in this regard. Perhaps the feasibility of a national health insurance scheme ought to be investigated. Further, allocations within the system must be judiciously rationalized within the context of Liberia's PHC strategy.

The FFS and RDF schemes must be restarted and/or strengthened in terms of record keeping and cash management; they help to restore confidence in the sector by making services and drugs available.

5.17 Redeployment of Health Workers/Training

Liberia's public health sector workers will require retraining and redeployment from fixed, facility based curative services to community based, prevention services, especially in rural

communities where the bulk of the population lives. Reorientation will be the easier part of this challenges; finding the appropriate mix of financial and other incentives sufficient to reduce and maintain health workers in rural communities will be more difficult. Currently the salaries of public health workers are low in both absolute and real terms. Training institutions need to be revitalized and manned by qualified trainers. Communication and logistics are also lacking.

5.18 Strengthening Supervision at Lower Level

Capacity building in Liberia takes a long period of time. The installation and maintenance of decentralized support systems within the sector must be continuously pursued. Maintaining standards and motivating workers require good monitoring.

Supervision within the system must be intensified in frequency, duration and focus. Supervision becomes useful when the supervisor take on a helping role of facilitating, training, and carrying out joint planning and following up on plans with subordinates

A comprehensive supervisory system (including in-service education) which is ongoing and regular in an integral part of the PHC system. Without adequate supervision, health workers skills deteriorate. The workers learn no new skills and soon develop habits incompatible with their training and functions. Lack of personal contact adds to the health workers sense of isolation and abandonment. Supervision is important not only to ensure competence and responsibility, but also to provide CHW with a sense of playing an important role in the system. Supervision which should provide support and encourage team-work involving CHW themselves and the community should be encouraged.

5.19 Ensuring Drugs and Essential Supplies

The continued availability of drugs and essential medical supplies within the system is vital to the rehabilitation and future development of the system. The availability of drugs and essential supplies is the most important factor that gives confidence in the sector. As such, the perennial problem of lack of foreign exchange to purchase drugs must be addressed. In addition, the present weak supporting systems that should enhance delivery must be addressed.

5.20 Strengthening Support System

The lack of transport, poor communication systems, lack of laboratory and radiological facilities and equipment and inadequate provision for equipment and building maintenance have all contributed in providing a poor environment and low staff morale for providing effective services. Consideration should be given in developing policies to address all components of the support systems

5.21 Shortening the Referral Chain

The referral of patients from the rural communities to the county hospital was difficult because of the distance, bad road conditions and the unavailability of transport. Consequently, many patients died before reaching these hospitals. It is our hope to shorten this referral chain through the establishment of health centers, nearer to these communities, that would provide intervention for life threatening conditions and diseases.

TITLE OF IN-DEPTH STUDY

DEFINING HEALTH SECTOR POLICY AND GUIDELINES IN POST CONFLICT LIBERIA

RECOMMENDATION

1.0 PRE-CONFLICT

Many of the conflicts that occur today in the world are armed conflicts which do not develop overnight. It takes many years of suppression, political or otherwise by governments of their "people." Very often these suppressors regimes are supported in one way or the other by external interests. It is better to prevent conflicts than to provide relief.

It is therefore recommended that the international community concentrates its efforts more on conflict prevention than relief and conflict resolution.

APPENDIX 1

**INPATIENT STATISTICS FROM EXAMINATION
OF CAUSE-SPECIFIC MORTALITY RATES
FOR SIX MAJOR DISEASES, 1986 AND 1996
(1993 - 1996)**

CAUSES	CAUSE-SPECIFIC DEATH RATES	
	1986	1996
1. Malaria	13.3%	(21.15)%
2. Cholera/Diarrhoea	9.3%	8.3%
3. Acute Respiratory Infections	29.7%	17.6%
4. Malnutrition	27.2%	8.9%
5. Measles	1.0%	(9.1)%
6. Neonatal Tetanus	8.2%	3.7%

APPENDIX 2

TYPES AND GEOGRAPHICAL DISTRIBUTION
OF PUBLIC HEALTH FACILITIES, 1989 AND CURRENT ACTIVE, 1997
MINISTRY OF HEALTH AND SOCIAL WELFARE

COUNTY	KINDS OF HEALTH FACILITY					
	HOSPITALS		HEALTH CENTERS		CLINICS	
	Pre-War	Current Active	Pre-War	Current Active	Pre-War	Current Active
Bomi	1	-0-	-0-	-0-	7	4
Bong	1	1	3	3	27	6
Grand Bassa	1	1	1	1	10	8
Grand Cape Mount	1	-0-	1	-0-	10	4
Grand Gedeh	1	-0-	4	-0-	9	1
Grand Kru	-0-	-0-	1	-0-	9	-0-
Lofa	3	-0-	3	-0-	21	8
Margibi	1	-0-	1	-0-	6	4
Maryland	1	-0-	1	-0-	7	-0-
Montserrado	2	2	3	2	42	15
Nimba	1	-0-	4	2	21	6
Rivercess	-0-	-0-	2	-0-	3	-0-
Sinoe	1	-0-	3	-0-	21	-0-
TOTALS	14	4	27	8	193	56

Source: Ministry of Health and Social Welfare

APPENDIX 3**PUBLIC HEALTH SECTOR PERSONNEL
MINISTRY OF HEALTH AND SOCIAL WELFARE, LIBERIA**

	CATEGORY	1986	1997
1.	Medical Doctors	82	32
2.	Registered Nurses	301	185
3.	Physician Assistants	185	120
4	Certified Midwives	209	135
5.	Licensed Practical Nurses	215	95
6.	Laboratory Technicians	84	43
7	X-Ray Technicians	36	5
8.	Nurse Aids	406	194
9	Dressers	70	28
10.	Health Technicians	85	141
11	Others (Adm./Support Staff	1,290	717
12	Other Health Workers	563	111
	Total	3,526	1,806

Source: Ministry of Health and Social Welfare

APPENDIX 4

LIST OF HEALTH PROBLEMS ALONG THE COURSE OF THE CONFLICT

- Massive Population Movement
- Violence
- Trauma and Wounds
- Rape
- Drug Abuse
- Epidemics (measles/cholera/hemorrhagic fevers)
- Malnutrition
- STD/AIDS
- Malaria, Diarrheal Diseases
- Skin Diseases
- ARI (Acute Respiratory Infection)
- Road Traffic Accident
- Tuberculosis
- Yaws
- Septic Abortion
- Land Mine Injury
- Increased number of vaccine preventable diseases

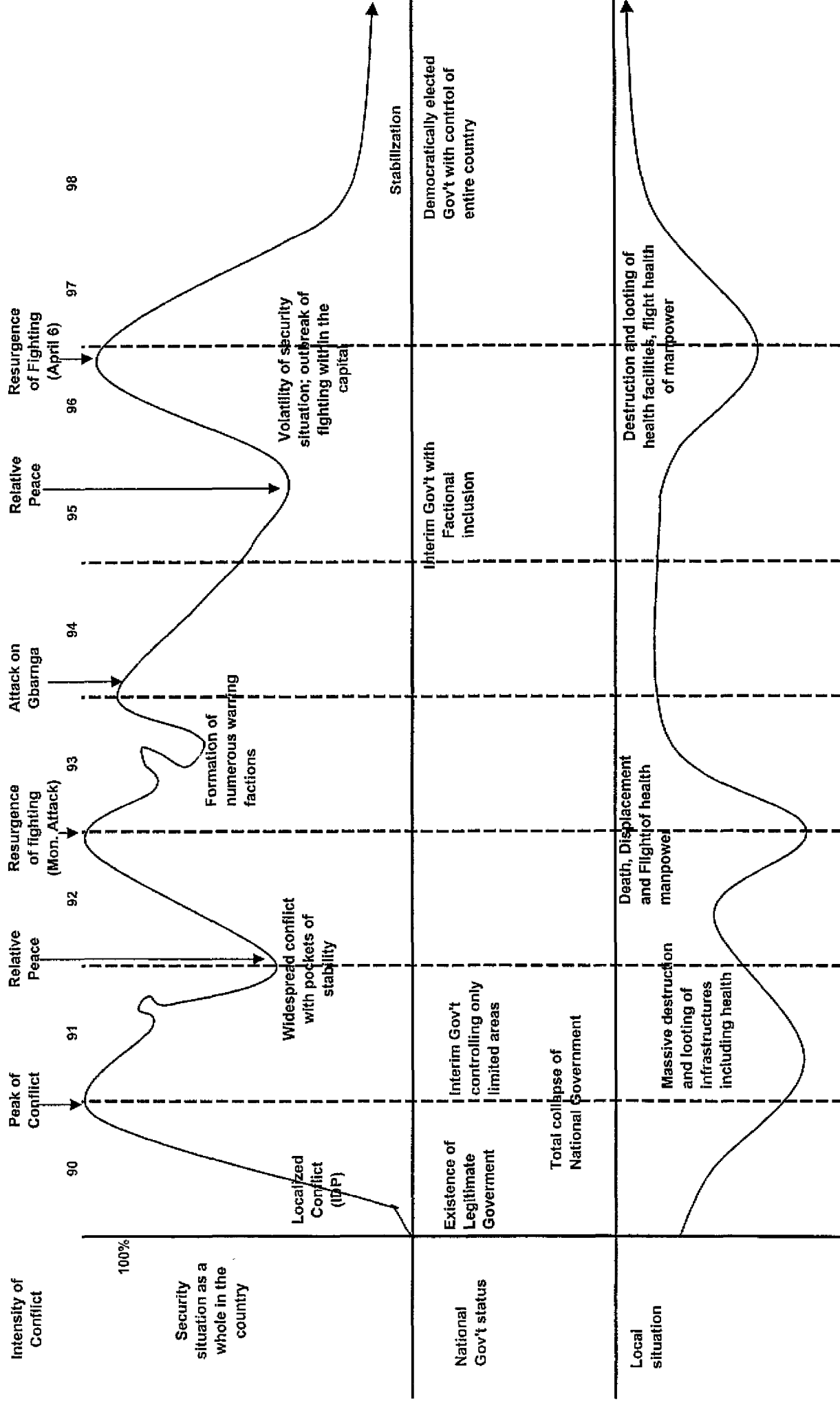
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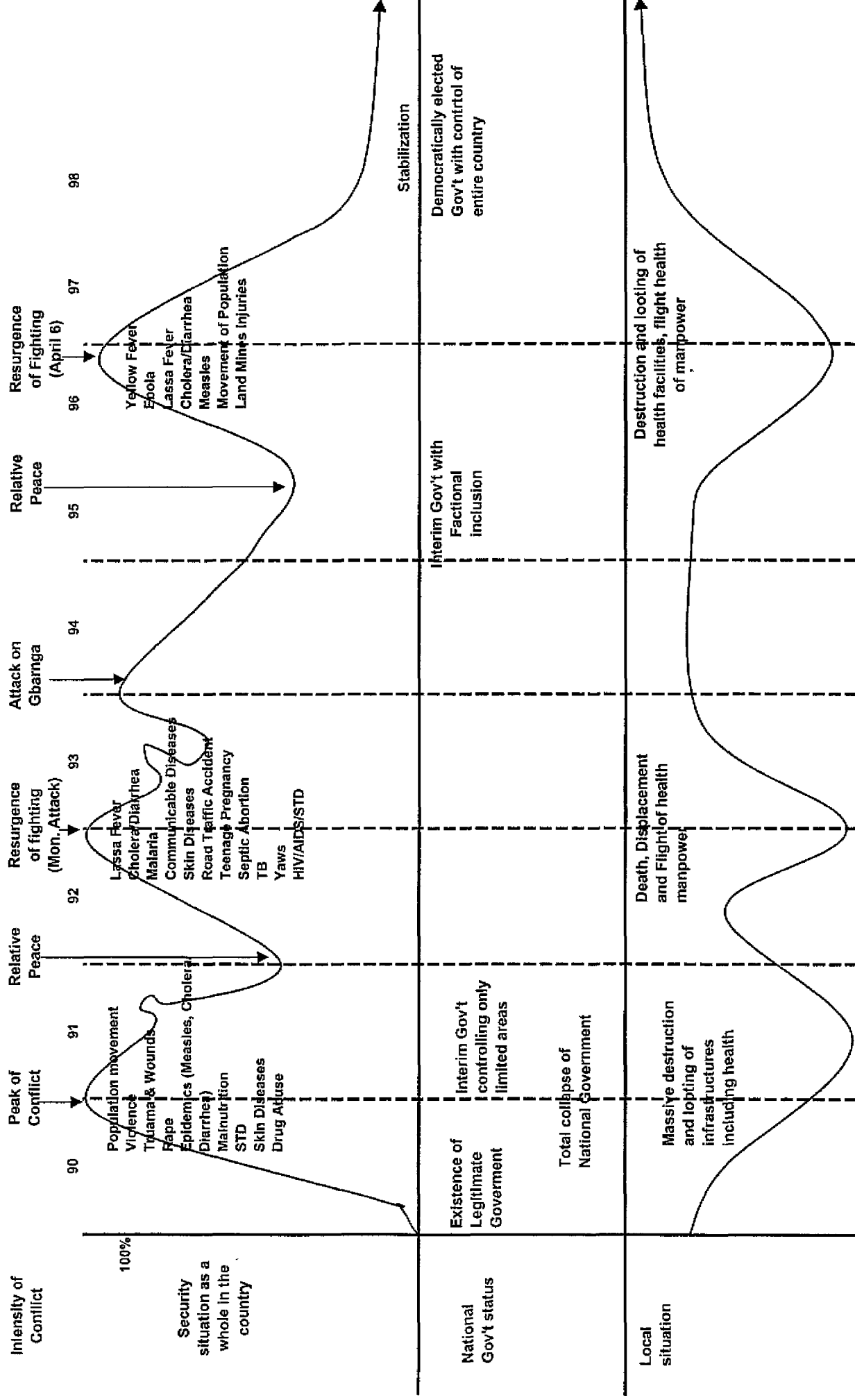
CRISIS ENVIRONMENT MODEL LIBERIA

APPENDIX: 5



CRISIS ENVIRONMENT MODEL LIBERIA

APPENDIX: 6



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