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PHASE II SHDS PROJECT
WORLD HEALTH ORGANIZATION COMMENTS

31 March 1977

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International Health Programs

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PHASE II SHDS PROJECT
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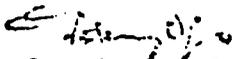
In reply please refer to: ICP SHS 013
Préciser de rappeler la référence:

31 March 1977

Dear Dr French,

... Please find attached the revised text for Phase II of the SHDS Project. The annexes and the Budget document are in principle subject to further detailed consideration. In view of the circumstances and the final date for submission to Washington, a copy is being sent direct to Dr Cross.

Yours sincerely,


Dr O. Adeniyi-Jones
Dir. of Health Services
for the Regional Director

Dr D. French
Project ICP SHS 001
c/o WHO Representative
Abidjan, Ivory Coast

Copy for information to:

Dr Cross, USAID, Washington DC

PROJECT PROPOSAL

PHASE II

STRENGTHENING HEALTH DELIVERY SYSTEMS

Submitted by:

UNDS Abidjan
16 March 1977

Reviewed by:

WHO/AFRO
21 March 1977

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OVERVIEW - SHDS PHASE II

The SHDS Project as proposed for Phase II is conceived to have a profound effect on the health and well-being of the population of Central and West Africa. As a regional project it will strengthen the national health planning and management capabilities of the individual governments, to expand and upgrade training, to create manpower resources to markedly improve health care delivery at the village level, and to develop national and regional disease surveillance resources capable of responding through innovative immunization delivery activities nationally and regionally.

To be maximally effective it is essential that the SHDS Project carry out its activities, as much as possible, through the regional mandate of WHO. At the same time it is also essential that there be maximal collaboration with bilateral health projects in the various countries, thereby increasing national benefits through complementary action, whose output would be greater than the sum total of the two acting separately. The foregoing two sentences express concisely the rationality of this regional project's approach.

With the foregoing in mind, and after numerous consultations of the Project Director and Deputy Project Director within most of the 20 countries, and assisted by other consultants as well as at the WHO Regional Office and the Regional Office of USAID, it has been decided to deliver SHDS Phase II programmatic output through eleven (11) sites of activity. Eight (8) of these are already regional activities in existence under WHO or other regional organizational mandate. All of the latter were identified as regional resources in the programme proposal for Phase I of SHDS which in turn was the output of deliberations involving the twenty (20) ministries of health, WHO Brazzaville and various doctors in the Brazzaville meeting of February 1973 and the Lagos meeting of September 1973. The remaining three (3) are extensions of other resource activities in the region which were felt to be essential for completeness in the doing of the job at hand.

The following are the six (6) WHO regional activities which we propose to strengthen through resources of funds, personnel, equipment, and supplies as well as ongoing consultation input. It is essential to recognize that all such activity is meant to reinforce the WHO programmes in existence with no intent to diminish WHO control or responsibility for these programmes. For this reason all personnel expansion or addition of any other resources is done through and in the name of WHO. By mandate and design SHDS cannot assume ongoing responsibilities which appropriately belong to WHO. The six regional projects proposed for additional SHDS input are:

- (i) Programme for National Health Planning, Programming and Management formerly African Institute of Health Planning), ICP SHS 002, Dakar Senegal.
- (ii) Post-University Teaching in Public Health, ICP HMD 008, Cotonou, Peoples Republic of Benin.
- (iii) Centre for Post-Basic Nursing Education, ICP HMD 011, Dakar, Senegal.
- (iv) Centre for Post-Basic Nursing Education, ICP HMD 012, Yaoundé United Republic of Cameroon.
- (v) Training Centre for Health Services Personnel, ICP HMD 022, Lagos Federal Republic of Nigeria.
- (vi) Training Centre for Health Services Personnel, ICP HMD 023, Lomé, Togo.

In addition there are two regional epidemiological programmes involving disease surveillance and immunization activities already in existence. These are the Organisation de Coordination et de Cooperation pour la Lutte Contre les Grandes Endemies (OCCGE) in Bobo-Dioulasso, Upper Volta and the Organisation de Coordination pour la Lutte Contre les Endemies en Afrique Centrale (OCFAC) in Yaoundé, United Republic of Cameroon. In the Brazzaville and Lagos meetings of 1973, these organizations were selected for SHDS input in the Project Proposal for Phase I. The intent was to upgrade their capability to carry out disease surveillance, immunization and epidemiological activities in the francophone members of the 20 country region. This we propose to do in Phase II by SHDS

inputs of personnel, supplies and equipment as well as ongoing consultative technical input. It is also proposed that the epidemiological surveillance team based in Accra should be similarly strengthened to function in like manner in respect of the anglophone countries in the project area.

For the sake of programmatic completeness and in particular to meet the project's charge to develop " a low-cost, effective, integrated health delivery system in one or more of the participating states," a plan has been developed to use two existing African institutional resources as developmental centres for this purpose. SHDS resources would be used to assist these institutions, one in Central Africa (CUSS) and one in West Africa (University of Liberia), to develop the capability to develop such integrated health delivery systems in their own countries as well as adjacent ones. These are new expansions of existing resources which in the case of Liberia were not previously used in the regional sense. This approach is considered to be the feasible regional approach to the development of a health delivery system developmental capability.

Finally, it is important to recognize the interdependence of the objectives mentioned at the outset of this overview and therefore the consequent necessity for careful integration of all the activities envisioned in Phase II of the SHDS Project. It is impossible to separate the need for training and creation of much-needed manpower, from the information needed relative to people and their health, and this in turn, from the task of planning and management of health services. Very careful consideration of this fundamental interdependence must be taken into account by those who must make the final decisions as to the funding and implementation of Phase II of SHDS. Significant change or elimination could well lead to programmatic emasculation or at least to considerably diminished or delayed realization of health benefits to Central and West Africa.

PART I - SUMMARY DESCRIPTION

In this Project, WHO, twenty countries and other donors will collaborate in a number of activities directed towards assisting the participating countries to strengthen health care to rural populations. The activities to be undertaken are directed toward the achievement of four major objectives. These are:

- (i) to improve national and regional health planning and management
- (ii) to increase the skills and improve the utilization of health personnel providing generalized health services at the supervisory and local levels;
- (iii) to improve regional and national disease surveillance and health demographic data systems and to integrate these systems into national health planning; delivery systems;
- (iv) low-cost (affordable) health delivery system development.

Major inputs of this project will go toward improving capabilities and extending activities of existing institutions. The institutions which will relate to this project are:

- (a) Lagos and Lome Regional Training Centres.
- (b) WHO Project on Health Management and Planning Dakar.
- (c) Centres d'Enseignement Supérieur en Soins Infirmiers, Dakar and Yaoundé (CESSI).
- (d) Organisation de Coordination et de Coopération pour la Lutte Contre les Grandes Endémies (OCCGE).
- (e) Organisation de Coordination pour la Lutte Contre les Endémies en Afrique Centrale (OCEAC).
- (f) Accra Surveillance Centre (to be developed).
- (g) Post-University Teaching Programme in Public Health, Benin.
- (h) Centre Universitaire des Sciences de la Santé (CUSS).

(i) Liberia Training Facilities

- Dogliotti Medical School
- Tubman National Institute of Medical Arts (NIMA)
- Cuttington College
- University of Liberia (School of Education).

AID, WHO, as well as other donors will provide financial and technical collaboration to:

Objectives I and II

- (i) strengthen faculties at several regional training centres.

Objectives I, II, III

- (ii) provide consultant services to training centres and individual countries in the areas of:

- management and planning;
- curriculum design for health training institutions to meet more adequately health services needs of African countries;
- improved teaching methodologies;
- provide to regional training institutions training materials, devices, equipment and supplies;
- disease surveillance, health and demographic data collection, analysis, storage and utilization - including the establishment/strengthening of statistical units within health ministries and to strengthen the 3 subregional capabilities (i.e. OCEAC, OCCGE, Accra):

Objectives I and II

- (iii) provide improvements to physical facilities of regional training centres, to enable them to increase numbers of trainees and to improve teaching methodologies.

Objective IV

- (iv) develop two training, service, research areas - one in the Cameroon and one in Liberia for field experience in the provision of primary health care with emphasis on rural areas (low-cost health delivery system development):

Objective III

- (v) provide TA and consultant services to assist in the development of a regional surveillance system through strengthening subregional centres at OCEAC, OCCGE and in Ghana.

Objectives I and III

- (vi) assist subregional disease surveillance centres (OCEAC, OCGCF, Ghana) and to develop capabilities in conducting expanded (multi-antigen) immunization programmes. These will provide training for other countries within the subregions. Each subregion will develop a demonstration centre.

Objective III

- (vii) provide selected antigens and equipment for immunization programmes emphasizing the multiple-antigen approach.

Objective IV

- (viii) the training, service and research areas will develop systems of simple basic health services which will be integrated into the national systems in the countries in which they are located. These areas will provide field training for regional centre trainees, opportunities for continuing education for personnel responsible for primary health care, both in the host country and other countries and staffs from the centres will provide consultant services to other countries on request, to assist them in developing primary health care services.

Objective I

Through consultant services provided to participating countries in the areas enumerated earlier, administrative and management systems will be strengthened, budget allocations and personnel deployment improved.

National training programmes will be restructured to more realistically meet national health objectives.

The Project describes specific training programmes for various levels and categories of health personnel; methods of evaluation to be incorporated into the several areas of activities to be undertaken in the Project, and types of consultant services which will be available to participating countries.

PART 2 - BACKGROUND AND DETAILED DESCRIPTION

2.1 Background

In February 1973, representatives of A.I.D. met in Brazzaville with the AFRO (WHO) staff, representatives of donor organizations and of the 20 Central and West African countries which had participated in the smallpox eradication/measles control project funded by A.I.D. as a part of the WHO worldwide smallpox eradication project. The purpose of the meeting was to try to establish ways and means of reorienting A.I.D. assistance from a specific disease control activity toward one of aiding the participating countries to secure the results achieved in the smallpox/measles project and to ensure epidemiological surveillance of other communicable diseases in the framework of efficient, integrated health services operating as economically as possible.¹

Based on a critical analysis of the attack phase of the mass campaign (smallpox/measles) and the present situation in the countries of Central and West Africa, a strategy was proposed for the strengthening of health delivery systems.² The need for strengthening health delivery systems was determined to be a key problem area which had to be dealt with if African countries were to be able to achieve national health sector objectives. As a means toward solving this problem the strategy proposed encompassed the following priority aspects:

- (i) improve management and organization of ministries of health (participating countries);
- (ii) continued programmes of disease control - especially communicable diseases.
- (iii) undertaking additional programmes including health planning and delivery of services as determined by country priorities resources and needs.

¹ Report on a meeting organized by the United States Agency for International Development and WHO Regional Office for Africa, Brazzaville 21-22 Feb. 1973

² Op. cit.

As a final outcome of the meeting, A.I.D. agreed to participate in a project, in collaboration with WHO, other donors and twenty countries of Central and West Africa which would be designed to achieve the following specific objectives:

- (a) to improve public health planning and management;
- (b) to increase the skills and improve the utilization of health personnel at the local level;
- (c) to improve the regional and national disease surveillance and health/demographic data systems and integrate those systems into national health planning and delivery systems.

In order to achieve full participation in planning and in guiding activities to be undertaken in the project, a coordinating committee made up of four representatives of the participating African nations, WHO, AID and FAC was established.

As a follow-up to the February meeting at which the Coordinating Committee had been established, the Committee convened again in September 1973 after the WHO Regional Committee for Africa meeting held in Lagos. At this meeting further discussions were held regarding the development of activities and study groups were suggested to consider specific questions regarding programmes.

Although considerable planning had occurred in discussions with all concerned groups and organizations regarding the general structure of such a project, i.e. basic strategy, key problem areas, participation of organizations, etc., detailed plans for achieving objectives had to be developed. It was, therefore, determined that the project would be implemented in two phases. Phase I which would be for a two-year period, would permit time for

- (i) gathering necessary data;
- (ii) determining the activities to be undertaken in order to achieve stated objectives;
- (iii) initiating short courses at two established regional health training centres as well as at the African Institute for National Health Planning; and

(iv) other activities as follows:

- initiation, with the assistance of project-funded short-term consultants as requested, of a review of existing national health delivery systems;
- formulation or updating of national health manpower plans, based on explicit health objectives, again with short-term consultant assistance; these plans to be the basis for determining the numbers and areas of specialization of health manpower trainers who should receive supplemental training at appropriate training facilities during Phase II of the project;
- formulation of detailed plans for expanded planning/management and health manpower training programmes at appropriate regional training centres in order to improve teaching techniques in ongoing training programmes;
- consultant assistance to the Abidjan Regional Centre for activities in data collection and analysis and personnel training. It has to be noted that WHO activities at the Abidjan Centre discontinued in August 1975 and have been replaced by five operational antennae for planning and implementation of expanded immunization programmes as well as epidemiological surveillance. One of the teams is based in Accra; epidemiological surveillance activities for the whole African Region are now centred in the WHO Regional Office where five epidemiologists and a data processing unit is in operation.
- cooperation in the form of equipment and supplies to ongoing OCFAC/FAC/CDC Programmes of disease surveillance training and implementation of data systems, and a similar programme at OCCCCP
- finally, during Phase I, funding would be provided for the operation of the collaborative project coordinating mechanism, which is to direct Phase I project activities and to develop the detailed plans for Phase II activities.

Phase I Activities: Phase I of the project was approved by USAID in May 1974 and in November 1975 contracts were signed with the American Public Health Association and Boston University to carry out the project. In March 1976, the Project Director arrived in the field and the SHDS office was established in Abidjan. WHO appointed a counterpart in Brazzaville as Regional Representative and authorized their country representatives to serve as counterparts in the various participating countries.

The initial agreement between WHO, USAID and the participating countries was signed in April 1975 and ^{was} ~~has~~ to extend for a period of two years. An agreement amendment and extension was signed in June 1976 extending Phase I until the end of FY 1976,¹ and provided additional funding to cover the extending period.

During the period between April 1975 and March 1976, the Project Director explored relationships and initiated discussions with various schools and departments within the University complex in Boston to develop an approach to an assessment of current training activities in the twenty participating countries with special reference to the WHO Regional Training Centres in Lagos and Lomé (RTCs).

In May 1976, initial consultant visits in the area of training were made and final details for the training aspects of the project were developed jointly with the Director of the WHO Regional Training Centres in February 1977.

In September 1976, the third meeting of the Coordinating Committee was held in Kampala in conjunction with the Conference on Health Coordination and Cooperation in Africa - Report of the first meeting of the Steering Committee, Kampala 16 September WHO Document AFR/PHA/130). At this meeting the Project Director reported on activities which had been undertaken to date in connection with Phase I. These included:

- (i) The continued support of short courses on new concepts in health system planning and management at the Regional Centre in Dakar.
- (ii) The formulation and updating of national health manpower plans based on national health objectives.
- (iii) Consultative assistance to the Abidjan Regional Epidemiological Centre with regard to data collection and analysis of personnel training.
- (iv) Provision of equipment and supplies to CCFAC and consultation to OCCE for ongoing programmes of disease surveillance training and data analysis.

¹ Change in U.S. fiscal year from July 1 to Oct. 1

- (v) Initial training assessments of the Centres at Lagos, Lomé and Abidjan.
- (vi) Preliminary planning for a three-phased approach to health manpower development for the various countries, including preparation of plans for a workshop on national health manpower planning.
- (vii) Research for a thermostable measles vaccine.

At the Kampala meeting also, UNICEF reported on the study undertaken regarding transport. This study had been requested at the 1973 Lagos meeting of the Coordinating Committee; specific recommendations were made regarding the creation within governments of transport maintenance organizations (T.M.O.'s).

The report indicated that UNICEF has already made some progress in the development of T.M.O.'s in Central and West African countries. They are presently assisting 13 countries in T.M.O. projects and additional countries have shown interest in UNICEF in creating a T.M.O.

The most serious problems facing all T.M.O.'s in the Africa area are:

- shortage of qualified technical and management personnel
- insufficient budget allocation from government for the purchase of spare parts, lubricants and other costs connected with running of workshops and operation of mobile units.

Provision by UNICEF might include the following, depending on country needs:

- transport consultants to assist with in-service training and/or training aspects of management and technical personnel
- provision of spare parts, tires and batteries for UNICEF contributed vehicles;
- reimbursable procurement of spare parts, tires and batteries for other government vehicles;
- regional cooperation of transport Management Organizations (T.M.O.'s).

Additional activities have been initiated since the Kampala meeting and some have been completed. Others will be completed by the end of the fiscal year.

Summary of Activities to be Completed by the end of Phase I (FY 1977)

- (a) Curriculum for Dakar Centre for Health Planning and Management.
- (b) Further assessment by consultants of the effectiveness of efficiency of graduates of Health Planning and Management course by follow-up in their countries. Data obtained will be fed back to Centre for curriculum modification and revision.
- (c) Continued development of plans with UNICEF on S.M.O.'s and regional purchasing mechanism (This will not be completed by end of Phase I).
- (d) Completed plans for two low cost health delivery systems (LCHDS) service and research areas - for francophone and one for anglophone countries.
- (e) Phase II proposed activities reviewed and approved by participating countries.
- (f) Finalization of plans for development and integration of surveillance and data systems activities of three subregional centres i.e. OCEAC OCCGE and Accra.
- (g) Plans for multiple antigen demonstration/training programmes in Cameroon Ivory Coast and one anglophone country will be completed.
- (h) Continuation of vaccine distribution - develop plans for 1977 distribution.
- (i) Completed development of training programmes for OCCGE and OCEAC.
- (j) Preliminary assessment visits by SHDS Abidjan staff and/or consultants to all countries not previously visited by Project staff.
- (k) Investigation of requests made by countries to SHDS re project assistance - i.e. Mauritania, Congo Brazzaville, Niger etc.
- (l) Engineering design studies for upgrading facilities at Lagos and Lome completed.
- (m) Seminar at OCEAC on Epidemiology in Communicable Disease Surveillance and the Planning and Evaluation of Vaccination Programmes in Central Africa (May 1977)
- (n) Consultants to Liberia to develop plan for strengthening training institutions for subregional activity.
- (o) Continued planning for regional training service, research centre (Mano River area - Liberia) including post-basic nursing activities.

2.2 Detailed Description

Introduction: Many of the activities initiated in Phase I will be continued during Phase II such as curricula evaluation and development for the Lagos/Lome Centres, the CESSI's, the Dakar WHO Project for Management and Planning post-graduate school of public health in Cotonou (Benin), continuation of collaboration to countries in health planning, four intercountry health planning workshops, additional nursing workshops for CESSI graduates.

Various training programmes described are concerned with senior-level health personnel ("A" level), intermediate level personnel ("B" level), and peripheral or primary health care workers ("C" level), strengthening and coordinating of activities among OCEAC, OCCGE and the surveillance resource in Accra, expansion of multiple antigen immunization programmes, training courses at OCEAC, OCCGE and Accra, consultant services to countries .

The specific Project purpose is to develop the capability to plan, implement, and manage effective and economically feasible health delivery systems. To achieve this purpose, this project proposes to

- (i) improve health planning and management capabilities.
- (ii) increase the skills and improve the utilization of personnel at the supervisory level and at the local level in order to provide effective generalized health services at the local level, and
- (iii) improve the effectiveness of national and regional disease surveillance, health and demographic data collection, analysis and utilization to integrate these data systems into national health services structures.

Interrelationship of objectives: Though the four major areas of activities will be discussed separately, they are interrelated and are all essential parts in the solution of the problem addressed in this project namely the inadequacies of basic health services infrastructures.

Relationship of Inputs to Outputs to Achieve Objectives: The consultants will have the expertise to collaborate with the participating institutions and organizations in curriculum development, training evaluations and modifications of programmes as may be required.

The plan proposed for providing faculty consultant services to participating countries to

- (a) evaluate returned trainee effectiveness,
- (b) contribute in upgrading national training institutions and government planning, and
- (c) promote feedback to strengthen linkages among the participating countries and improve the project outputs.

Through modifications of curricula and teaching methodologies and development and provision of training materials, supplies and devices training institutions will be upgraded.

End of project status: By the end of the project life, several specific goals will have been achieved:

- (i) a trained core of senior health personnel capable of developing national health plans in each country;
- (ii) management/planning and techniques of supervision incorporated in national training programmes.
- (iii) middle-level supervisors (physicians, nurses, midwives) trained in management/planning techniques;
- (iv) trainers, capable of training deliverers of primary health care in each country
- (v) curricula and teaching methodology in national institutions upgraded;
- (vi) two rural training, service and research centres developed;
- (vii) disease surveillance and data collection systems in participating countries and the subregional network of communications improved;
- (viii) expanded immunization programmes established;
- (ix) national training programme for primary care workers established;
- (x) a resource for developing teaching packages will have been established in Lome Centre.

Assumptions: The assumptions made for Phase II remain the same as stated in Phase I of this project, namely:

- cooperative relationships maintained among participating organizations (AID, WHO, FAC, etc), and between those organizations and ministries of health;
- all parties retain the development of low-cost, effective health delivery systems as a top health priority.

Potential problems: Several potential problems may arise during the course of Phase II and these are discussed below:

(a) Number of trainees

Efforts will have to be made to familiarize the participating countries with the restructured curricula and practical aspects of the new training programmes to meet their needs.

(b) Coordination

The Project Director will have to develop a system for continuing exchange of information and coordinated planning. Some mechanisms of coordination are already established; however, as activities broaden and increase, additional channels will be needed.

(c) Contractor selection

The contracting organization should be conversant with the types of problems likely to be encountered in implementing this type of project in Africa. The contractor must also be able to provide technicians with competency in the French language and in Portuguese or Spanish if Spanish or Portuguese-speaking countries join the project.

(d) Other donor inputs

As this project is one with a financial input well beyond those currently envisioned by AID, other donor contributions will be required throughout the life of the project.

Several other donors have already made specific commitments to development activities which bear a direct relation to this project. These include:

- (i) The World Bank commitment to the construction of rural facilities in association with the development of the University Centre for Health Sciences in Cameroon;
- (ii) WHO continued support of the RTCs and Post-graduate Nursing Training Centres (CFSSIs);
- (iii) FID commitment for construction of training facility for primary care workers at Cuttington College in Liberia.
- (iv) UNICEF in the development of transportation maintenance organizations, and the purchase of vaccines;

Other donors have expressed interest in various aspects of the project, i.e. the African Development Bank, CIDA. Efforts will be made to secure specific commitments during the remainder of Phase I.

Relation to other AID-funded projects: Section V D. of the Phase I Project Paper discusses the relation of this project to other AID-funded projects which were ongoing at that time. Since that time however additional projects have been implemented with which a close liaison must be established if maximum benefits are to be realized by both the ongoing bilateral or multilateral projects and the SHDS projects. Opportunities exist in Ghana, Liberia, Senegal, Niger and in relation to other country programmes as they develop.

As stated in the Phase I PP, Section V, D. pg. 56, for effective coordination, "it is strongly suggested that officials from USAID bilateral missions and Area Development Offices in West and Central Africa meet periodically with the SHDS Project Manager during Phase I of the project to review the relationships among the activities of the various AID health/population projects and to suggest ways in which this project can be more relevant to the health needs of their particular constituencies." WHO, as secretariat of the Steering Committee of the SHDS project should participate in these meetings.

2.3 Elaboration of specific objectives

Objective I - To improve national and regional health planning and management

During the life of this project, it is proposed to strengthen and expand the capability of the WHO project for national health planning at Dakar in order to achieve this; the faculty will be increased, facilities will be improved, curricula and teaching methodologies upgraded.

The general plan encompasses the addition to the faculty of consultants in the following fields: health sector economy, demography statistics, epidemiology, sociology as well as administrative and supportive staff, fellowships, supplies and equipment and miscellaneous expenditure.

The activities of the Centre at Dakar will include:

- (i) six week workshop seminars in planning and management for top and middle level health sector officials: doctors, planners, economists, etc;
- (ii) three week refresher courses for middle level management and administrative personnel;
- (iii) resident internships for health sector planners and senior managers. These resident interns will be trained in a variety of health sector consultancy activities by actually working with the Institute staff on problems or projects proposed by participating countries;
- (iv) a series of four intercountry workshops to serve senior health officials who are unable to attend the WHO project courses;
- (v) consultant services to participating countries as a follow-up on trainees and to assist in developing planning units as may be requested.

By the end of this project (five years) it is anticipated that a core of management/planners will have been trained for each of the participating countries.

Courses (workshops) are conducted for both French speaking and English speaking participants. During the life of this project, it is proposed that the workshops will be conducted as follows:

- 1977 - Health planning for Senior Health staff, 20 participants - six weeks
 - 1978 - Health Planning for Senior Health Staff, 20 participants - six weeks
 - Administration of Health Services in Regional Health Services - 20 participants - two weeks
 - Health Services Management - 20 participants - three weeks
 - Objectives of ICP SMS 002, WHO Document.
 - 1979 Health Planning for Senior Health Staff, 20 participants - six weeks
 - Health Planning for Intermediate Staff, 20 participants - three weeks
 - Administration of Health Services in Regional Health Services, 20 participants - two weeks
 - Health Services Management, 20 participants - three weeks.
- 1980 and 1981 same as 1979.

Specific dates for the workshops are now being developed.

Over the life of the project participants trained at the Dakar Project will be as follows:

- 100 Senior Health Planners
- 60 Intermediate level Health Planners
- 80 Regional Health Services Administrators
- 80 Health Services Managers at regional and district level.

It should be noted that in addition to the higher level courses provided at the Dakar facilities, courses in Health Planning and Management are included in the curricula at the two CESSIs and at Lagos and Lome. Thus a stratified effect is achieved extending from the Ministry level to the level of personnel directly responsible for planning, managing and supervising personnel delivering primary health care.

Objective II - Increase the skills and improve the utilization of health personnel providing generalized health services at the supervisory and local levels

In order to achieve this objective, the Lagos and Lome training centre facilities will be expanded to accommodate more students. The CESSI centres at Dakar and Yaounde will be utilized to provide post basic training for nurses in

- (a) national health planning;
- (b) planning and administration of public health nursing care and obstetrics;
- (c) planning and implementation of training programmes.

Consultant services will be provided to the newly developing post-graduate School of Public Health in Benin in the area of curriculum development.

In addition to strengthening the Regional Health Training Centres as indicated above, faculty members will, on request, provide consultation to national training institutions to:

- (i) follow up on Regional Training Centre graduates;
- (ii) collaborate in improving curricula and training methodologies; and
- (iii) participate in establishing national training programmes.

To provide opportunities for practical experience in planning and managing rural health services and in training personnel to provide primary health care, two low-cost health delivery system field research and training areas will be developed. One, to be in Cameroon, in association with CUSS, and one in Liberia related to the Mano River Development area to be associated with the University of Liberia Medical School, the Ministry of Health and the Tubman National Institute of Medical Arts.

In both the Lome and Lagos Regional Training Centres, faculties are already predominantly African. Currently, African nurses are receiving advanced training under WHO fellowships to qualify them to teach in the CESSI institutions. It is anticipated that by the end of the project, all of these institutions including the two low-cost delivery system research and training areas will be completely staffed by Africans.

Both top-level and middle-level health personnel will receive didactic training, field experience and consultant follow-up in both management/planning aspects and training methodologies - thus providing the necessary linkages for achieving Objectives I and II, and contributing toward the attainment of the overall project goal.

Expansion of Activities of the WHO Regional Training Centres in Lome and Lagos - Goals and Specific Activity Objectives :

The overall goal of the plan is to increase the capacity of the Centres to respond to changing needs for health manpower training as the health care systems in Africa continue to evolve. The highest priority at this time is accorded to preparing polyvalent physicians and nurses so as to reinforce primary health care delivery practices in ongoing national health programmes.

Physicians and nurses participating in the recyclage courses are selected by their national governments. As in the past, there may be variability in the selection criteria and procedures among the participating countries.

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An effort will be made to encourage governments to adopt selection procedures which assign an important weight to:

- (a) the likelihood that the candidate selected will occupy a position directly or indirectly related to implementing a system for the delivery of primary health care on a community basis particularly involving rural areas;
- (b) the likelihood that upon completing the course, the candidate will be either directly or indirectly involved in the training of primary health care workers.

Additional consultant or part-time staff needs for each Training Centre (Lagos and Lome)

Public Health Administrator (Physician), Instructors, Nurse Educator, Specialist in Education, Specialist in Management and Sanitarian or Health Inspector. Curriculum design specialist

- epidemiology
- management.

All staff will be recruited and employed by WHO as short-term consultants, salaries to be funded by AID. They will be provided by the contracting organization, in agreement with WHO, from the US or from participating African countries.

Beginning in year one of the project, three courses per year will be held at each centre with 20 participants in each course for physicians and 40 participants in each course for nurses, midwives and other health professionals.

In 1978 or 1979, efforts will be made to start in-country strengthening of national training programmes in two countries where there are a sufficient number of trainers who have been previously trained at the WHO Centres. Further in-country training programmes will be developed during this phase.

Development and Expansion of National Training Programmes: The SHDS Project will assist in the development and expansion of national training networks for the preparation of primary health workers through support and technical assistance provided by SHDS which will enable the WHO Regional Training Centres at Lome and Lagos to prepare trainers of primary health workers, and to provide in-country follow-up consultation to graduates of the programme including:

development of appropriate instructional materials as they initiate courses for C level health personnel in their home countries. In order to increase national self reliance and acceptance of responsibility for the programme and because of limitation of resources, in-country cooperation will be limited both in extent and in scope.

Each year, beginning with year one, at least two countries will be selected to participate in the in-country programme so that a total of at least 10 countries will be involved over the five-year period. Each participating country will be required to meet criteria established by WHO and SHDS. These should include:

- (a) the existence of an infrastructure for health manpower training which will provide training in primary health care;
- (b) an agreement by the national government to cover all non-developmental costs. These include facilities for training, regular teaching staff, and student-related costs; however those expenses could be met by funds obtained by the government from other external sources;
- (c) a commitment to continue and extend the prototype training courses which are initiated with the assistance of SHDS.

Once a country has been selected a preliminary phase will be initiated which will continue for a period of approximately one year. During this phase the following steps will be taken:

- (a) a national health manpower institute or other appropriate training agency will be designated as the focus for the training of trainers in primary health care;
- (b) two co-directors for the project will be named by the institute. During the preliminary phase, they will
 - participate in the course for trainers given at one of the WHO regional training centres.
 - conduct a task analysis of functions assigned to A, B and C level health personnel.
 - collaborate with the WHO Regional Training Centre in the development of curricula and instructional package for the training of A level and C level workers.
 - develop a plan for implementing the training programme
- (c) support for the efforts of the co-directors will be provided by the WHO regional training centres and by SHDS directly through this component of the project.

After the preliminary phase has been completed, the courses developed will be field-tested, revised and extended in accordance with a time-table developed at the outset. The WHO Regional Training Centre and SHES will continue to provide consultant services up to two years following completion of the preliminary phase at a decreased rate. It is anticipated that by the time WHO and SHES involvement terminates the in-country programme will be viable and self-sustaining.

It is anticipated that the courses will be based to a large extent on pre-packaged instructional materials. This will decrease the need for each instructor to develop a curriculum and associated teaching materials "de novo". It is unlikely that all instructors will have the capability, time or resources to do this adequately. The use of pre-packaged materials will insure a higher degree of standardization of courses and at the same time free the instructor from the major tasks of curriculum development and production of instructional materials. The packages will be developed at the WHO Regional Training Centres in collaboration with the selected in-country training programmes. The centres will develop prototypes for application in all countries. Each country will then adapt the prototypes in terms of local needs and constraint.

End of project status: It is anticipated that by the end of the project

- (a) at least 10 countries will have initiated training programmes for primary care level health workers and for recycling of A level personnel to prepare them for expanded duty;
- (b) pre-packaged instructional materials for the training of A and C level personnel will have been developed, field-tested and revised for use by national training programmes;
- (c) initial courses will have been extended in accordance with a time-table specified at the time each country joins the project;
- (d) a network for collaboration and mutual assistance among participating countries will have been established. This will involve the good offices of the WHO Regional Training Centres, WHO Representatives and Coordinators as well as multinational channels for sharing expertise and experience.

Centres for Post-basic Nursing Education (CESSI)
Dakar and Yaounde

Background information and situation in Dakar, Senegal: An intercountry project, CESSI (Centre d'Enseignement Supérieur Soins Infirmières) was created in Dakar, the Republic of Senegal, in 1968 under the auspices of the World Health Organization (WHO) and by agreement with the Senegalese Government and the United Nations Children's Fund (UNICEF).

The goal of the centre is to ensure the training of nurses, midwives and obstetric/nurses for leadership roles in the teaching and administration of nursing and obstetrical care, and to fill important positions in the multidisciplinary health teams participating in the development of health services in the French-speaking regions of Africa.

The administration of CESSI/Dakar is organized by a Board of Directors, a Technical Council, and a Disciplinary Council. The Board of Directors consist of a representative of the Ministry of Health, two representatives of the University of Dakar, a representative of UNICEF, the resident representative for WHO in Senegal, the Director of the CESSI Programme and a student representative. The board's duties include the general administration of CESSI, the determination of admission and examination criteria, the maintenance of buildings and equipment, the recruitment of faculty and staff, the determination of the institutional rules, and the development of the other necessary administrative boards.

The technical council consists of a representative of the University of Dakar, a WHO physician, the teaching team leaders, and a representative of the CESSI consultant professors. The council's duties involve the selection of student candidates and recommendation regarding the development, revision and evaluation of programmes.

The Disciplinary Council consists of a CESSI professor, a nurse instructor, the director, the CESSI business administrator and a student representative. Its duties consist of examining infractions of institutional rules and determining any disciplinary action to recommend to the Board of Directors.

Since June 23, 1976, the CESSI graduation diploma has been presented under the seal of the University of Dakar.

The capacity of CESSI has been determined as twenty-five in each of the first and second year of the programme - a total of fifty students per academic year.

The faculty is made up of teacher-nurses employed on a full-time basis by WHO as well as selected consultant professors from the University of Senegal, the United Nations and WHO.

A Students' Committee, elected by the students of the two classes, acts as liaison between the director and the students of CESSI.

The two-year teaching programme consists of three sections:

Section A - National Health Planning

Section B - Planning and Administration of Nursing and Obstetrical Care

Section C - Planning and Implementation of Teaching Programmes.

Practice settings include University Hospital centres, urban and rural health centres and district health centres.

At the end of the second year each student must present a scholarly work on a nursing or obstetrical research subject, and an examination committee determine the technical and publishing value of this document.

Candidates admitted to CESSI are sponsored by their national governments and must meet the following criteria:

- must be no more than forty years of age before December 31 of the year of admission

- must hold a BEPC diploma or the equivalent (four years of high school)
- must be licensed by their government in nursing or midwifery
- must have worked for at least two years in a health programme as a licensed practitioner.

Staffing of CESSI, Dakar, Senegal

- 1975: 1 WHO Director; 4 WHO Nurse Tutors 1 Business Administrator
1 Secretary
- 1976: 1 WHO Director; 3 WHO Nurse Tutors; 1 Business Administrator
1 Secretary
- 1977: 1 WHO Nurse Director; 2 WHO Nurse Tutors 1 WHO Business
Administrator; 1 Secretary.

A Senegalese CESSI graduate, Mlle Pelligrin, will complete a masters programme in education at the University of Montreal in June 1977 and will return to the CESSI staff as director in October 1977. The present WHO director is due to leave in December 1977.

- Jan - Dec 1978: 1 Director (Senegal); 2 WHO Nurse Tutors
- Jan - June 1979: 1 Director (Senegal); 2 Nurse Tutors (Senegal)
1 WHO Nurse Tutor
- Oct - Dec 1979: 1 Director (Senegal); 2 Nurse Tutors (Senegal)
1 WHO Nurse Tutor
- Jan 1980: 1 Director (Senegal) 2 Tutors (Senegal).

Background Information and Situation in Yaoundé, Cameroon

The organizational structure, purposes, objectives, curriculum, student selection, and teaching programmes of CESSI Yaoundé are the same as those of CESSI, Dakar, with a significant exception - CESSI, Yaoundé is attached to CUSS, Centre universitaire des Sciences de la Santé. The Republic of Cameroon, WHO and UNICEF agreed to support the development of CESSI and the programme was

begun in 1972. Dr G. L. Monkosso, dean of the Faculty of Medicine at CUSS, is also chairman of CESSI, Administrative Council.

The staff consists of a WHO director, two WHO nurse tutors, and instructional support from members of the Canadian Aid team (CIDA), the Harvard team, and the public health section of CUSS. However, the CIDA team is leaving in July 1977 and the Harvard team plans to leave in about two years. There are also two Cameroonian secretaries provided by the Government. In the years 1973, 1974 and 1975, three WHO nurse tutors as well as a WHO director were supported by WHO.

Planned Staffing CESSI, Yaoundé

Jan - Aug 1977: 1 WHO Nurse Director; 2 WHO Nurse Tutors

Aug 1977-June 1979: 1 Cameroonian Director; 1 Cameroonian Nurse Tutor;
2 WHO Nurse Tutors.

Two Cameroonians were sent to North America on WHO fellowships. One, Mme Ebangue, has finished her master's degree programme at the University of Montreal and is expected to assume the position as Director of CESSI in October 1977. Another, Mme Nasah, is scheduled to return in the fall of 1977, having finished her master's degree programme at Boston University. Two Cameroonian graduates of CESSI have been selected to serve as teacher's assistants on the staff in the academic year of 1977/78 and then to go to the University of Montreal for graduate work. The year of apprenticeship not only relieves faculty needs at CESSI but also allows time for the graduates to determine their educational needs and objectives.

Clinical practice settings consist of a suburban dispensary, a rural community centre, a basic school of nursing, and practice teaching of first-year medical and technical students of CUSS. Previously used settings in Douala and western Cameroon had to be discontinued because of lack of funds.

Needs Specific to CESSI, Dakar

- (a) Additional faculty member skilled in teaching of nursing research.
- (b) Need for a secretary/librarian
- (c) Need for duplicating equipment.

Needs Specific to CESSI, Yaoundé

- (a) Additional faculty member for teacher training section of programme.
- (b) Inadequate library space.
- (c) A.W. Comble or vehicle to transport students to practice sites.

Specific Objectives of the Five-Year Project for the 2 CESSIs

- (i) Provide an ongoing programme in continuing education that is responsive to the needs of the CESSI graduates.
- (ii) Provide cooperation to the faculty in curriculum development which is relevant to the nursing needs of Francophone Africa.
- (iii) Introduce a systematic ongoing evaluation process to determine the outcomes of the CESSI programmes in relation to students, graduates, curriculum, faculty, faculties and resources.
- (iv) Collaborate in the development of a CESSI consultation service to serve all categories and levels of nursing personnel in the Francophone African countries.
- (v) Strengthening the research component within the curriculum and the faculty activities.
- (vi) Implement a plan to prepare nationals to assume total responsibility for each of the CESSI programmes at the end of the five years.

The faculty coordinator will plan and implement workshops and mini-courses that will meet the needs of CESSI graduates as identified in the needs assessment. Workshops will be conducted by consultants from the WHO regional training centres at Lagos and Lomé, from the African Institute for Health Planning, from the two Primary Health Care Field Research and Training Institutes and from other institutions in Africa, United States or elsewhere.

Output: An ongoing continuing education programme for CISSI graduates.

Inputs: The continuing education programme will be conducted in response to the Phase I preliminary needs assessment of graduates. Since some areas of need have already been identified, continuing education programmes in the following areas will be planned:

- (a) Nursing in Primary Health Care - Fall, 1977.
- (b) Principles and Research in Public Health and Public Health Nursing - Spring 1978
- (c) Principles and Methods of Consultation - Fall 1978.

Objective III - To improve regional and national disease surveillance and health/demographic data systems and to integrate these systems into National Health Planning/Delivery Systems

Phase II of this aspect of the project proposes to build upon the achievements of the smallpox eradication/measles control project which was terminated in 1972. Responding to the priorities established by the countries participating in the Brazzaville conference of February 1973, the following activities will be undertaken in Phase II (some activities already started in Phase I): Programmes with disease surveillance and expanded (multi-antigen) vaccination activities were planned collaboratively with WHO, OCEAC, OCCGE, CDC and various ministries of health, starting with Ghana, where WHO has developed with Ghana Government research in EPI (Cape Coast and Tamale) and in community participation (Kintampo). As expanded (multi-antigen) programmes are initiated in other countries, necessary consultations will be undertaken. Additional activities are underway in training, immunizations, and publishing of the newsletter.

The major goal to be achieved under this aspect of the project is:

To regularize surveillance, data gathering and training through a sub-regional approach. This is to be effected by undertaking the following specific activities:

- (1) Expansion of immunization activities (multiple antigens);
- (2) Development of regional training capabilities;
- (3) Development of capability to gather information (data) necessary for health planning;
- (4) Development of a coordinated laboratory system to provide necessary backup services to the disease surveillance and control system.

The expanded immunization (multiple antigen) programme will be started in three demonstration areas. These demonstration areas will be gradually expanded within the host country and they will also serve as training and demonstration areas for health personnel from other countries. Consultants from the training centres, will be provided to the participating countries to establish training and expanded immunization programmes (EPI). This will permit gradual expansion of the multiple antigen programme throughout the 30 countries of the Region as resources become available.

Major aspects of training in disease surveillance and control will be conducted at the Lagos and Lomé centres as a part of the regular courses. Practical field experiences will be provided through the demonstration projects. In addition, these centres will conduct special training programmes for selected individuals and groups on technical, operations and research matters. The sub-regional demonstration activity for OCECE will be in the Ivory Coast; the one for OCEAC in Yaoundé, and the third for anglophone countries could be Ghana, but remains to be selected. Logistical support, consultant services and coordination will be provided initially through the UNICEF office in Abidjan with WHO collaboration. Gradually, these tasks will be taken over by WHO/AFRO. To effect coordination, annual conferences will be convened.

The courses will be developed for the three levels of personnel, i.e. A, B and C, as described in the other Lagos and Lomé programmes. Consultants will provide follow-up of trainees and collaborate with participating countries to plan, implement EPI and to up-date and improve training in national disease surveillance/data gathering. Disease surveillance and control will thus be a regular function of the polyvalent health workers and a part of the integrated generalized health services.

Without reliable data, health planning and manpower development become meaningless exercises and other aspects of the entire system can only be carried out on a chaotic basis - resources are wasted, personnel deployed ineffectively and the potential achievement of health sector goals becomes a hopeless dream. In the African countries, systems of data collection must be structured based upon the realities of existing conditions. Approximately 80% of the population lives in rural areas, often in widely separated villages where road accessibility is often very difficult and sometimes non-existent. Though most countries have conducted censuses within the past few years, few have established mechanisms for collecting continuing demographic and health data. Because health services at the peripheral level will often be dependent upon utilizing village health workers, some who may be illiterate, devices for information gathering and record keeping at this level must be extremely simple. As one moves up the structural hierarchy to the trained health personnel, more complex data can be obtained.

As a part of the training programmes at the Lagos and Lomé centres, at Dakar and the CESSI's, methods of data collection will be included in the curricula. As a part of applied research activities of the field training, services and research centres, various methodologies will be tested and information fed back to the training centres.

The data as they are developed nationally will be provided to National Planning Units, then those aspects pertinent for surveillance, to the sub-regional surveillance centres and from there to WHO/AFRO so that a regional data bank will be developed. Having such data available will permit more efficient planning at all levels. Surveillance data gathered will be sent on a monthly basis to WHO/AFRO which has the capability for collating,

analyzing and storing data. Through use of newsletters, such as now prepared at OCEIC and through WHO communications, the participating countries will be kept informed of health and disease information coming in from the entire Central and West Africa region. Through these mechanisms, it will be possible to develop and maintain a continuous regional surveillance system. Any outbreak of a reportable disease or catastrophic occurrence can be reported immediately and steps can be initiated at once to institute required control measures.

To support the surveillance and disease control system, the existing network of laboratories will be coordinated in regard to the establishment and maintenance of standards. Presently laboratories which will provide services for the regional activities are located in OCEIC, OCEIC, Nigeria and Ghana. To develop standards for these activities and any necessary technical capability, consultant services will be provided by CDC, Atlanta. The Atlanta facility in collaboration with SHDS, will also provide occasional backup assistance when any rare or exotic disease might be encountered. Again, initial coordination activities will be undertaken jointly by WHO/AFRO and SHDS Abidjan. At the end of this project, full responsibility for coordination will be assumed by WHO on the sub-regional basis, while each country will have improved its capability for the surveillance and data gathering at country level.

Objective IV - Low-Cost (Affordable) Health Delivery System Development

The Phase I project paper identifies the "Establishment of a low-cost, effective, integrated health delivery system in one or more of the participating states", as one of the activities to be undertaken in Phase II. Since then, the Primary Health Care (PHC) approach, as well as appropriate technology including traditional medicine, has been accepted by the international community

The approach is based on the use of already established basic resources which, coupled with organizational, administrative and professional capability, will result in basic functioning health delivery systems. In association with WHO/AFRO, two educational complexes will be utilized as developmental research and training centres from which health delivery systems can be elaborated nationally within the host country as well as in neighbouring countries.

Selected for this purpose are the University Centre for Health Sciences (CUSS) in the Cameroon, for one, and the Dogliotti Medical School, Tubman National Institute of Medical Arts (TNIMA) and Cuttington College in Liberia for the other. Planning is already underway with the CUSS and following some success and experience there, plans will be further developed for initiating activities in Liberia. These are expected to be operational in late 1978 or early 1979.

CUS Institute of Postgraduate Studies, Yaoundé: At the CUSS centre, there is under development an Institute for postgraduate studies. A brief description of the Institute, and its collaborative role with this project's development of integrated health delivery systems, follows.

The Institute for Postgraduate Studies is being developed as the third stage in the evolution of the CUSS integrated teaching, training, and clinical care delivery activities having already been initiated. The goal of the Institute would be to participate in the current international effort to ensure more rapid African socio-economic development by eliciting the

collaboration of African medical scientists and health workers in service-oriented training and research activities designed to help African populations, especially in the rural areas, attain the maximum improvement of their health at minimum cost and in the shortest possible time. The Institute will be created by an Act of the Cameroon Government in collaboration with WHO. It will be administered by an international board of governors and will seek support of multilateral and bilateral assistance agencies, foundations and other institutions in Africa and other parts of the world.

Although the Institute for Postgraduate Studies is under development as a unit of the CUSS which is an institution of the Government of the Cameroon and has a broad total mission, it is planned that this project will collaborate with this Institute for the specific programmatic purpose of low-cost, effective health delivery system development. The input from the project would be to provide short-term consultations designed to add to existing epidemiological, statistical, laboratory and clinical expertise in relation to endemic tropical disease problems. Such expertise would be provided in relation to operational research in endemic diseases - i.e. prevention, control and treatment. Outputs from operational research activities would be provided to other participating countries by the communications system developed through the disease surveillance systems network and to adjacent countries by in-country consultations from the Institute. Outputs also would be reflected in the training programmes of the various WHO regional training institutions.

Already the World Bank has committed itself to construct a good portion of the facilities needed for the CUSS Institute. Instead of an elaborate organization with a very large staff, a relatively small resident staff and large visiting staff with associated consultants, research workers and

students, sponsored by collaborating countries, agencies and foundations, is envisaged. They will collaborate with the resident staff in health manpower training, delivery system planning, and development, a well-defined research programme, as well as in the health care of selected rural populations. The three major areas of concentration will be:

- Health Sciences Education: emphasis on educational methodology. Also to include basic training, retraining and upgrading health personnel at all levels.
- Community Health Services: emphasis on primary health care.
- Biomedical Research: emphasis on endemic disease and health delivery system research.

Structurally, the Institute associated with the CUSS will consist of a central or principal unit and 3 peripheral units. The principal unit will house a small technical unit including laboratory, administer the operation of the "Institute" and coordinate associated small but critical clinical activities derived from affiliated hospitals and health centres. Currently, discussion is underway with the African Development Bank for the creation of the principal unit at the CUSS. The three peripheral units to be funded by the World Bank will each be teaching health centres situated in a rural community serving a surrounding group of 15 to 20 villages. Each unit will be manned by an integrated rural health delivery team (service, teaching and research) with very active involvement of the communities concerned.

Emanating from the above "Institute" through SHDS assistance from this project will be a delivery, training and research capability to be intimately involved in developing and improving the health delivery system of Cameroon. In addition, this "Institute" is to serve similar needs for health delivery system development in nearby countries again with SHDS input. Togo, Chad

and Central African Empire have indicated interest in such input. The "Institute" staff would consult with appropriate ministry officials upon a country's request proceeding to develop a plan, train personnel from that country, and collaborate in the institution and evaluation of the programme; again as part of an SHDS supported activity.

Building on the initial experience with the CUSS Institute for Postgraduate Studies and making use of support from the CUSS programme, a similar project would be developed in Monrovia, Liberia. The Dogliotti Medical School, the Tubman Institute and the Cuttington College would be institutional bases for similar programme delivery and assistance focusing on Liberia and the other two nearby anglophone countries of Sierra Leone and Gambia.

The first activity to be undertaken by CUSS in collaboration with the SHDS project will be a workshop on primary health care, to be held at the beginning of Phase II. This will become an annual activity.

The objective of this Project in supporting these two Institutes for postgraduate education is to encourage the creation of a set of viable institutions which will contribute to the social development of participating countries and will continue to be supported by the participating countries following phase-out of international donor programmes.

While the populations to be served by the Institutes have not yet been fully established, and while the continuing operating budgets of each Institute after the five-year project period cannot be known precisely at this time, one can say as a preliminary estimate that if 50 million persons are to be served by the Francophone area Institute, and that if the operating budget of the Institute can be set at the order of about \$1 000 000 per year,

then the continuing cost of running the Institutes will equal approximately two cents per person per year, possibly ultimately within the budgetary capability of the participating countries.

Included in the emphasis on training are 18 fellowships, together with the objective of close collaboration with existing and future training institutions in Central and West Africa. Consultants are intended only to contribute in the planning, organization, and initial evaluation stages of the Institutes, and to fill temporary positions only while permanent staff are being trained.

The real budgetary constraints will be realized not in continued operation of the Institutes themselves, but in the critical continuation and expansion of the primary health zones the field teams have aided in a number of countries as part of the Institutes' programmes. The long-range overall objective of the Institutes will be to research and identify modes of low-cost health care delivery, which can be extended to national systems within the countries of Central and West Africa, and which also will be within the budgetary capabilities of the countries themselves. This will be the real test of the success or failure of Primary Health Care in Africa, particularly as primary health care approach is oriented towards self-reliance of each community to solve its health problems through locally developed appropriate technology (including traditional medical practices, utilization of local material for basic sanitary measures, utilization and development of local expertise among the development workers, etc.), and only problems or cases which cannot be solved locally to be referred to the higher level of the national health system.

PART 3 - PROJECT ANALYSES

3.1 Technical analysis including environmental assessment

Thorough assessment of the regional training facilities have been made by consultant teams in collaboration with WHO personnel and faculties of the various facilities. Those training centres assessed include:

- (i) The WHO project for Health Planning and Management at Dakar.
- (ii) The Centres for postgraduate nursing at Dakar (Senegal) and Yaoundé (Cameroon).
- (iii) The Regional Training Centres at Lagos and Lomé.
- (iv) The School of Public Health at Cotonou, Benin.
- (v) The CUSS.

In each instance, a careful study of objectives, selection of students, curriculum teaching methodologies, faculty, equipment and facilities, was made. Specific deficiencies, in each area which require strengthening and/or upgrading if these institutions are to meet the needs of the countries they are designed to serve, have been delineated.

It has not been possible to determine if the output of trainees in the Lagos and Lomé schools will meet the specific needs of the participating countries. Most data available with regard to projected health personnel requirements had to be obtained from health plans, which in many instances, are now out of date. However, during early stages of Phase II as consultants provide services to countries for a follow-up of trainees from the WHO project for Health Planning and Management, more accurate and current data will be generated. Table II shows the requirements projected which were obtained from presently available sources.

The constraints to achieving improved health care in Africa have been documented on numerous occasions by WHO and other health organizations who

have laboured long in the health vineyard in Africa. All have expounded on the magnitude of the problems, the unsatisfactory training of personnel, the limitations of resources and the ineffectiveness of currently operative health systems. These systems, for the most part, are directed toward urban and curative services rather than preventive and rural services, thus only reaching approximately 10% - 40% of their populations. Countries, therefore, have begun to realize that priorities must be reordered if the major portions of their populations are to be provided with economically feasible basic health services.

Taking into consideration these constraints, the most economically feasible and realistic approach to meeting the expressed needs of the concerned countries would appear to be one which develops regional or subregional institutions and can provide responses to some of the common basic needs of several countries such as development of health personnel. Another argument that is in favour of the regional approach is the unquestioned necessity for intercountry collaboration and cooperation in communicable disease surveillance and control.

The collaborative approach used in the smallpox eradication project provided the framework for the design of this project which is intended to achieve further improvements in the health systems of the participating countries. The overall design of the infrastructures for the systems have been determined by the countries concerned and the project directs its interventions toward attacking the key problems which the countries have defined, i.e., management and planning, training of health personnel, disease surveillance and health/demographic data systems development. The specific technical inputs and the steps to be taken to achieve: Project purposes, how these measures relate to each other and to the overall goal are described in Section under the Objectives, titled "Interrelationship of Objectives".

Details of technical analysis - Cooperative arrangements for implementation

Regional training centres: The regional training centres which are of particular relevance to this project have been assisted by WHO over a number of years. Initially, faculties were composed principally of non-Africans. Gradually, it has been possible in the Lagos and Lome Centres to phase out most of the non-African faculties, replacing them with qualified Africans. This philosophy behind WHO support is that complete staffing and support will gradually be assumed by the country in which the facility is located and by those countries benefiting from its programmes. For example, the Government of Nigeria is now building a new training centre at Igbo-Ora near Ibadan to replace the presently inadequate facility at Lagos. The new facility will still provide training for other English-speaking countries. WHO and the SIDS project will, however, continue to provide fellowships for training additional faculty, etc. A similar plan is under consideration for the Centres for Higher Education in Nursing Care (CESSI) at Dakar and Yaoundé.

One of the major emphases in this Project is to reorient the system of training in these centres to make them more relevant to African needs - both in content and in methodology. U.S. specialists in health and educational methodology will collaborate with faculties of these centres in redesigning curricula, and in developing appropriate field training components for the various categories of personnel being trained. The whole concept of developing health personnel to deliver primary health care, with an emphasis on disease prevention, which is an elaboration of the concept of developing systems of generalized basic health services, has not yet gained widespread acceptance and implementation. Existing systems of health services delivery including the use of specialized mobile teams have proven to be extremely costly and inefficient. Therefore, new approaches which will produce at the primary level,

both village level and/or health post level health workers who are capable of interacting with the community and of relating to other health staff as team members are required. This is the philosophy which will underpin the training areas.

The two regional training, service, research centres will provide examples of appropriate health delivery systems which various countries may use as models, making necessary adaptations to meet local needs. As in all other aspects of the project, teaching staff from the centres will assist participating countries in developing these services when requested.

Through the provision of consultants going from the training centres into individual countries to assist in the reorientation of national training institutions, the basis for producing a new type of health worker will be broadened significantly. The type of training envisioned will permit more effective deployment of personnel and will contribute to the development of a more coordinated approach to the delivery of health services within the countries and the region.

Disease surveillance - Health and demographic data systems: Major activities in this area of the project will be conducted in cooperation with the two existing regional organizations for the French-speaking countries - OCSCE and OCEAC - and a third sub-regional activity will be developed in Accra in cooperation with the Ministry of Health in order to provide a resource for the English-speaking countries.

As in the case of the regional training centres, training will be provided to reorient participants in the administration of multiple antigens. In addition, training will be provided in relation to disease surveillance techniques, health and demographic data collection and communicable disease control measures.

These services will be operated from fixed facilities, thus integrating this sector of the programme into the basic health services system. This will make it possible to establish a continuing system of surveillance and control.

Again, consultants will be provided to countries to contribute in integrating this personnel into the national health system, and in developing systems for data collection, storage and analysis so that data collected can be fed upward into the system to be used for planning, and downward to peripheral facilities to be used for improving services.

The involvement of seven different sites for the implementation of this project has numerous advantages. First, the institutions involved, with the exception of the centre in Accra and the regional field training centre to be developed in Liberia, are existing, ongoing institutions.

This regional approach to dealing with the three major problem areas described does not imply that appropriate bilateral activities should not be undertaken. Rather, the SHDS project can serve to reinforce or expand ongoing bilateral activities.

Environmental assessment: As national health services in the participating countries are extended and generalized services provided, environmental conditions in these countries may be expected to improve to a considerable degree. Specifically, the Project will, in the various field training areas, produce a marked improvement in the surrounding areas by developing sanitary sewage disposal methods, improved water supplies, disease vector control, etc. These areas may well become models for extension of these environmental improvement activities as health service systems are extended.

As the project contains little in the way of construction or other major types of activities which could produce deleterious effects on the environment, it is anticipated that most of the impacts will be of a positive nature.

3.2 Social analysis

The major goal of the project is to strengthen and expand rural health delivery systems. As stated, the three major objectives of the project are interrelated. Consequently, the impact of various socio-cultural aspects within the 20 country project area are also interrelated.

Socio-cultural factors affecting health are similar in Central and West Africa. The vast majority of the population live in rural areas where the development process is conditioned by complex factors which perpetuate the vicious cycle of poverty. This cycle is fed by lack of education, limited resources, insufficient or faulty food intake, inadequate hygiene, socio-cultural patterns that are unfavourable to development and inadequate health services. The rates of mortality and morbidity are increased due to inter-related unfavourable conditions: malnutrition, the high rate of communicable diseases, the consequences of ill-timed, closely-spaced and too frequent pregnancies which weaken the social structure at the base - the mother and the preschool child.

Health services for this sector are difficult and expensive to provide. Traditionally, services have been oriented toward curative rather than preventive measures which benefit the urban population at the expense of the rural population, and community participation as well as the traditional health practices and technologies not utilized; the socio-cultural background and particularly the role of women has been usually largely ignored.

3.3 Economic analysis

In its most general sense, the SIDS project seeks to reorient the priorities of national health plans towards the rural sector. The 20 member nations agree that national health expenditures have, in the past,

disproportionately favoured expensive, urban health facilities. However, efforts to expand the provision of health services in the rural areas have been constrained due to a number of factors, all of which relate to the present inadequacies of the health infrastructure at all levels, and lack of active community participation. Neither upper level, managerial personnel, nor middle level, supervisory and training personnel exist in sufficient numbers and with adequate experience to allow an effective delivery of health services to rural areas. The SHDS project seeks to alleviate these inadequacies through its three-pronged approach to the problem. By increasing the understanding and skills of personnel in the public health field, and through supervision and support, the SHDS project aims to create viable health plans better suited to meet the needs of their people. Health goals will be translated into economically feasible and effective national health plans, programmes and projects.

In order to best meet the health needs of rural areas, it is generally agreed that primary and preventive services offer the greatest benefit at least cost. If the health coverage of the population is to be increased, it must involve either an increase of budgetary allocations or a shift in allocations from the urban to rural sector. This can be accomplished in part by reducing the development of expensive hospitals (with their high recurrent costs) and devoting these resources to the construction of lower cost health centres and posts, with the emphasis shifted towards primary and preventive services. By this approach, funds could be released and used for more community health workers, at a significantly lower cost than the large professional level staffs required to operate hospitals. Hospitals also will have to be reoriented to play their role as referral, training, supervision and logistic support centres for the communities served by them. In its attempt to reorient health

services along these lines, this project will contribute towards greater health benefits for a greater percentage of their population, within the limits of national health resources.

The estimated cost of A.I.D. inputs in this project amount to approximately \$20 000 000 over a five-year period. Based on the estimated population of 130 000 000 in the Central and West African countries, this amounts to a per capita expenditure of \$0.15. However, as the emphasis is directed toward rural populations as the primary beneficiaries, one might assume that maximum benefits will accrue to the 80% of the population living in rural areas. The per capita benefits in that instance would amount to approximately \$0.19. If one adds the WHO inputs to those areas in which A.I.D. is participating, but excluding WHO input into health manpower development, the actual per capita inputs are doubled. See Table B. Though these inputs appear minimal, the major proportion of inputs are concentrated on health manpower training at the level where maximum multiplier effects will be attained, thus extending the impact of the actual dollars spent.

Thus, the overall goal of the project represents an economically desirable and effective means of providing lower cost health service delivery. The three objectives designed to meet that goal are cost effective as well.

Table A
URBAN AND RURAL ESTIMATED HEALTH EXPENDITURES
IN CENTRAL AND WEST AFRICA

Country Health Plan	Estimated Urban Expenditures for Plan period		Estimated Rural Expenditures for Plan period		Estimated Total Expenditure
	In millions	Percent	In millions	Percent	In millions
BENIN ¹ 1974-1978	1 379.4 CFA*	71.2	558 CFA	28.8	1 937.4 CFA ²
CAMEROON 1973-1980	(East Cam.) (West Cam.)	80.7 88.1	(East Cam.) (West Cam.)	19.2 11.8	
CHAD 1973-1979	1 260 CFA	31.9	543 CFA	29.1	2 035 CFA
GABON 1971-1975	981 CFA	45.5	1 178 CFA	54.5	2 162 CFA
GUINEA 1973-1978	502 574 Sy**	72.6	127 058 650 Sy	18.3	692 593 027 Sy
IVORY COAST					
LIBERIA 1977-1980	\$ 12.4	54.9	\$ 4.0	17.7	\$ 22.6
MALI 1974-1978	8 234.9 CFA	85.2	1 436.9 CFA	14.8	9 721 800 CFA
MAURITANIA 1973-1978	1 063 CFA	55.1	856 CFA	44.9	1 929 CFA
NIGER 1965-1974	1 037 CFA	61.3	607 CFA	35.9	1 691 CFA
NIGERIA 1973-1980	N 406.410***	53.5	N 219.175	23.8	N 759.978
SENEGAL ³ 1974-1978	2 108.5 CFA	91.2	234.3 CFA	17.2	2 239.74 CFA
SIERRA LEONE 1974/75-78/79	13 205 Le***	78.9	3 550 Le	21.1	16 855 Le
UPPER VOLTA 1977-1978	207 CFA	16.1	1 538 CFA	83.9	1 905 CFA

¹ Source: Mise en Oeuvre du Discours - Programme du 30 Novembre 1972.

² Estimated cost for construction and repair of health establishments.

³ Source: Readjusted III Plan 1979-1978.

* CFA 100 = 21.00 ** Sy 1 = 80.055 *** N 1 = 21.00 **** Le 1 = 21.24

NOTE: Due to lack of accurate statistics in most cases, estimations were made from available data relating to two broad categories: curative expenditures which are basically urban, and preventive expenditures which are basically rural. Estimates are not necessarily representative of the total health budget.

Table B

<u>Project activity</u>	<u>A.I.D. Inputs (average p.a.)</u>	<u>WHO Inputs (average p.a.)</u>	<u>TOTAL</u>
Strengthening Health Delivery Systems	\$ 1 200 000 *	\$ 1 917 000 *	\$ 3 117 000 *
Dakar Planning and Management	570 000	275 000	835 000
Lagos and Lomé Centres	1 100 000	542 000	1 642 000
Post-basic Nursing Education	450 000	245 000	695 000
Disease Surveillance and Data Collection	1 000 000	570 000	1 570 000
	<hr/>	<hr/>	<hr/>
TOTAL .	\$ 4 310 000	\$ 3 549 000	\$ 7 859 000
	=====	=====	=====

* Includes: 2 LCHDS Centres
Abidjan Office
University back-up

3.4 Financial analysis and Plan

(to be completed)

PART 4 - IMPLEMENTATION PLANNING

4.1 Administrative arrangements

Partially completed. See sections on following pages.

Detailed Plan for Administration: The Strengthening Health Delivery Systems (SHDS) Project, although being implemented in two phases, is nevertheless a total entity conceptually as to objectives. Phase I was necessary in order to plan more adequately for Phase II, representing the operative phase of the project. At the same time, however, the pressing need for project activity into the training and immunization aspects resulted in Phase I which will continue into Phase II in a planned and sequential fashion.

The real meaning of the SHDS Project will be in its operational capacity to respond to the perceived health needs of the 20 Central and West African countries within the stated limits of the project as to programme and funds. The World Health Organization (WHO) in its role as secretariat has a primary liaison responsibility between the 20 countries and the project staff. Therefore, the geographical proximity of SHDS and WHO to the countries, and the programmatic responsiveness which can result, is basic and necessitates the maintenance of the programmatic headquarters of SHDS on the African continent. The leadership and direction of SHDS must be in and from Africa.

During Phase I of SHDS, there were three levels of agreements, one amongst the 20 countries, WHO and the United States Agency for International Development (USAID), a second between the American Public Health Association (APHA) and USAID, and a third between APHA and Boston University (BU). Such an arrangement served the purposes of the project well in that APHA was able to carry out logistical support and the academic institution, the technical aspects of the programme. During Phase II, it is proposed that there should be only two levels of agreement and operation. The first as before amongst the 20 countries, WHO and USAID. The second of a subcontractor type between USAID and an academic institution which would be responsible for all aspects of USAID operation, as provided for in the agreement between the 20 countries, WHO and USAID.

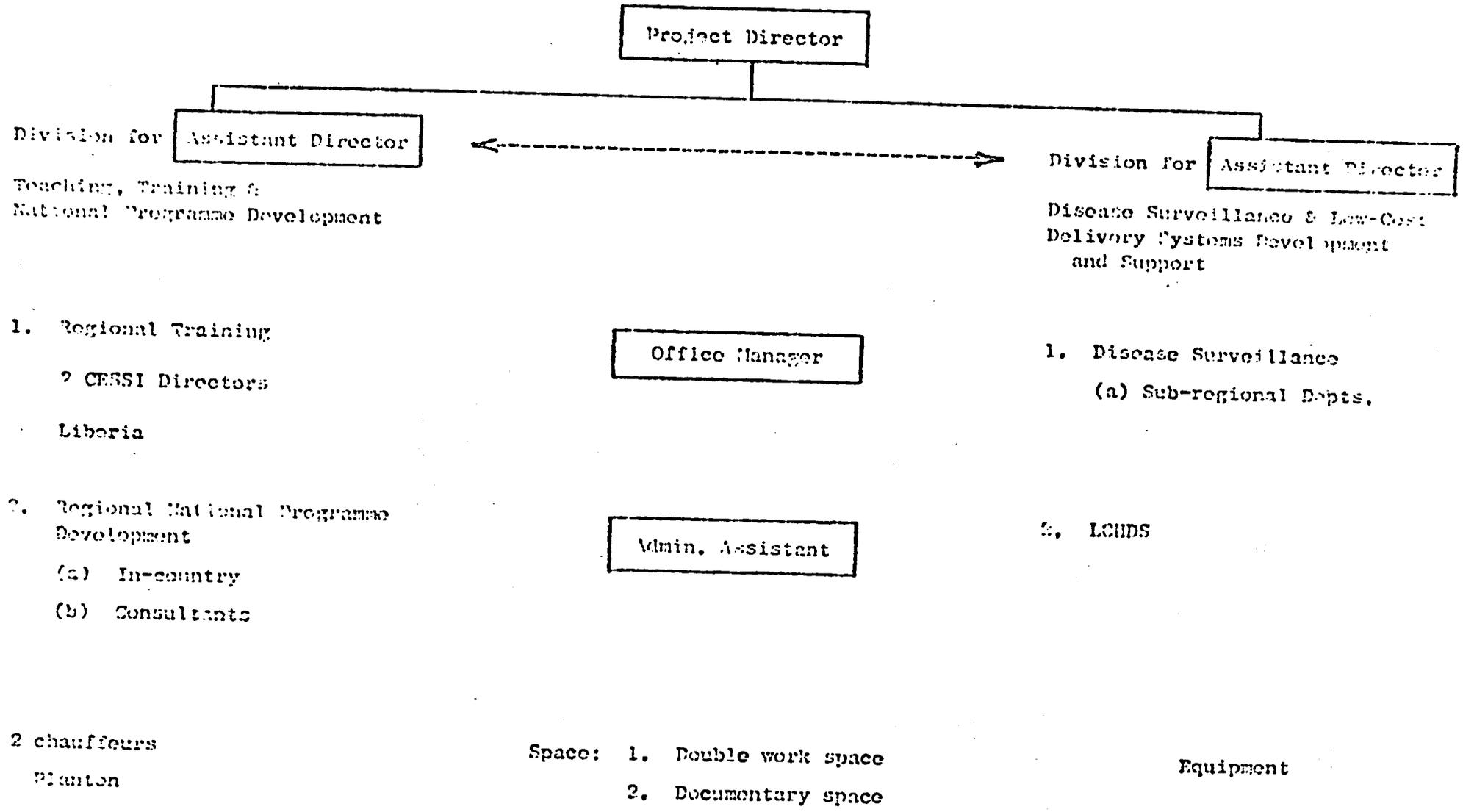
The SHDS Project headquarters should remain in Abidjan, Ivory Coast, and it should be known by the simple title, Strengthening of Health Delivery Systems Project Office. The SHDS Project Office will have two major divisions (see Diagram A) one for Teaching, Training and National Programme Development and the other for Disease Surveillance and Delivery System Development and Support. To maintain programmatic continuity and responsibility, two (2) assistant directors would be assigned to the SHDS Project Office, Abidjan, one for each major division. The assistant director for teaching, training and national programme development should have an educational background and experience in teaching and training in the health field in developing countries, preferably in sub-Saharan Africa. Although there are advantages if this person were also a health professional, it would not be absolutely essential. As indicated in the diagram, there are two functional sub-divisions of the Division of Teaching, Training, and National Programme Development. The first sub-division covers the six regional training sites that SHDS proposes to assist (Lagos, Lomé, CESSI Dakar, CESSI Yaoundé, the Dakar National Health Training project, and the public health training programme in Benin). The second covers the ongoing responsibility of continued national programme development in the various countries relative to the three major SHDS objectives as well as several other programme changes such as improvement of regional transportation and regional purchasing capability development. The assistant director for teaching, training, and national programme development would have the ongoing responsibility of monitoring SHDS activities at the six (6) WHO Regional Training sites. In addition, this person would participate in and help develop in-country training and health planning activities. Lastly, most of the development of programme activity relative to transportation in conjunction with UNICEF

and regional purchasing; remains to be done early in Phase II. This will occur under the leadership of the assistant director for teaching, training, and national programme development. The lines of authority and responsibility will be directly with the Project Director on the one hand and with the individual programme directors of each of the previously mentioned six (6) WHO regional programmes.

The assistant director of the division of Disease Surveillance and Delivery Systems Development and Support should be a public health physician with a strong background in epidemiology and experience with health delivery programme development at the peripheral level. Preferably, this person should have had experience in the developing countries of sub-Saharan Africa. There are two sub-divisional entities for the Division of Disease Surveillance and Delivery Systems Development and Support, namely: (1) Disease Surveillance, and (2) Low-Cost Health Delivery System Development. Since the disease surveillance activity is designed to emanate from three sites (OCEAC, OCCGE and Accra), the three CDC identified epidemiologists will relate directly to this second assistant director's supervision of low-cost health delivery systems development, this will, of course, relate primarily to the Centre Universitaire des Sciences de la Santé (CUSS) in Yaoundé and Dogliotti Medical School/INISA collaborative effort in Monrovia. Because of the existing and future possible USAID input in these two institutional complexes, close liaison will be maintained with country and area or regional USAID representatives. Responsibility of this assistant director within the project would be directly to the Project Director.

The SIDS Project office staff would be directed by an office manager and would consist of an administrative assistant, accountant-bookkeeper and (1) stenotypist, (2) secretaries, (3) chauffeurs and a planton.

Diagram A
SHDS PROJECT OFFICE, ABIDJAN



Office space currently occupied by the SIDS Project office is inadequate and should be doubled. This would allow for more work space and additional space for storage of books, pamphlets, manuals and other documents containing useful information about the 20 target countries. Accompanying the budget is a listing of additional equipment necessary to support the above.

The activities of the SIDS Project will be coordinated from the Central Project Office in Abidjan originally established during Phase I of the project. The SIDS Project office will in turn relate to and require backup through the U.S. contractor with AID/Washington, in agreement with WHO and, if and when required, with the Project Steering Committee. Although the SIDS Project office in Abidjan is the nerve centre of the project as it relates to the WHO Regional Office for Africa (AFRO) in Brazzaville and delivers service and know-how to the 20 countries of Central and West Africa, it will require technical and logistic backup from the U.S.-based contractor. Technical backup will continue to be necessary throughout Phase II for the three major objective areas, the health delivery system development component and the transportation and common purchasing mechanisms to be developed.

The contractor, such as an academic institution, in cooperation with WHO/AFRO, would identify specific backup responsibility for the National Health Planning and Management objective of SIDS as well as specific backup responsibility for the educational and training objective within its institutional structure. The responsible components within such an institution would in turn provide learned counsel, technical advice and a resource of consultants identified because of their special expertise. The project director and the assistant directors, in collaboration with the various regional institutional directors and the staff of WHO/AFRO and with the advice of the various WHO country representatives and ministries of health,

would call upon the appropriate expertise of the contracting institution as previously described. In some instances, the contracting institution may find it necessary to obtain certain expertise and technical know-how in other institutions due to the broad base of possible demands of such a project as SHHS. This is already envisaged relative to the Disease Surveillance objective where the previous experience and unique expertise of the Centre for Disease Control of the U.S. Department of HEW located in Atlanta, Georgia, would be almost impossible to replicate. Likewise, in the development of the centres for health delivery systems development at Monrovia and Yaoundé (CUSS), it may be necessary for the contracting institution to collaborate with another institution because of special expertise or past experience. In the final analysis, the contractor will provide all necessary backup expertise either from within the primary contracting institution or through collaboration with other institutions.

At present, Phase II anticipates delivering its input through collaboration in eleven (11) sites of operation. Six WHO regional training centres:

1. Training Centre for Health Service Personnel, Lagos, ICP/IBID/O22.
2. Training Centre for Health Service Personnel, Loué, ICP/IBID/O23.
3. Project for National Health Planning, Programming and Management, Dakar, ICP/SHS/002.
4. Centre for Post-basic Nursing Education, Dakar, ICP/IBID/O11.
5. Centre for Post-basic Nursing Education, Yaoundé, ICP/IBID/O12.
6. Post-University Teaching in Public Health, ICP/IBID/O08 - Liberia,

and two training and consultant activity sites to be developed for assisting in the establishment of health delivery systems. These will be developed in Monrovia, Liberia, for health system delivery development in Liberia, Sierra Leone and Gambia, and in Yaoundé for similar development in Cameroon and

adjacent countries. Both will rely heavily on collaboration between SHDS, the ministries of health, WHO, university centres, and other donors.

The remaining three (sites) of operation are the sub-regional centres for disease surveillance, immunization delivery, and data gathering located in a collaborative setting at OCEAC, OCCGE and in association with a MOH/WHO epidemiological activity in Accra, Ghana.

All project activity of SHDS will be supportive and collaborative through provision of expertise, supplies or equipment and consultants.

In an effort to relate activities to all participating agencies, university departments, etc., there would be an advisory group which would meet once a year to appraise all groups of ongoing activities and future plans and elicit their comments. This advisory group would be chaired by the Project Director's academic supervisor at the University; the report will be sent to WHO/AFRO and USAID for review prior to submission to the Project Steering Committee.

4.2 Implementation Plan

(to be completed)

4.3 Evaluation Plan

(to be completed)

ANNEXES

(to be completed)

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