

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D.C. 20523

LIBERIAN RURAL INFORMATION SYSTEMS
669-0134
(Liberian Rural Communication Network)

PROJECT PAPER
Proposal and Recommendations
for Review by the
Project Review Committee

Unclassified

AGENCY FOR INTERNATIONAL DEVELOPMENT PROJECT DATA SHEET	1. TRANSACTION CODE <input type="checkbox"/> A = Add <input type="checkbox"/> C = Change <input type="checkbox"/> D = Delete <input checked="" type="checkbox"/> A	Amendment Number _____	DOCUMENT CODE 3
2. COUNTRY/ENTITY Liberia	3. PROJECT NUMBER 669-0134		
4. BUREAU/OFFICE AFR	5. PROJECT TITLE (maximum 40 characters) Liberia Rural Information System		

6. PROJECT ASSISTANCE COMPLETION DATE (PACD) MM DD YY 8 1 5 8 17	7. ESTIMATED DATE OF OBLIGATION (Under 'B:' below, enter 1, 2, 3, or 4) A. Initial FY 810 B. Quarter <input type="checkbox"/> C. Final FY 817
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8. COSTS (\$000 OR EQUIVALENT \$1 =)						
A. FUNDING SOURCE	FIRST FY 80			LIFE OF PROJECT		
	B. FX	C. I/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total						
(Grant)	(500)	(0)	(500)	(4920)	(80)	(5000)
(Loan)	(3000)	(2000)	(5000)	(3789)	(2911)	(6700)
Other U.S.						
1. Peace Corps	0	0	0	0	1153	1153
2.						
Host Country		231	231		5827	5827
Other Donor(s)						
TOTALS	3500	2231	5731	3709	1000	18,710

9. SCHEDULE OF AID FUNDING (\$000)									
A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1)				- 0 -	- 0 -	500	5000	5000	6700
(2)									
(3)									
(4)									
TOTALS				- 0 -	- 0 -	500	5000	5000	6700

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)	11. SECONDARY PURPOSE CODE
12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each) A. Code B. Amount	

13. PROJECT PURPOSE (maximum 480 characters)

To provide rural Liberians with the data they need, in a form they can understand, to make informed decisions concerning the use of development opportunities and facilities available to them.

14. SCHEDULED EVALUATIONS Interim MM YY MM YY Final MM YY 1 1 8 3 2 8 17	15. SOURCE/ORIGIN OF GOODS AND SERVICES <input type="checkbox"/> 000 <input checked="" type="checkbox"/> 941 <input type="checkbox"/> Local <input type="checkbox"/> Other (Specify) _____
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16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment.)

17. APPROVED BY	Signature Remo Garufi Title Director, USAID/Liberia	18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION MM DD YY _____
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AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT PAPER FACESHEET

1. TRANSACTION CODE
 A ADD
 C CHANGE
 D DELETE

2. DOCUMENT CODE
3

3. COUNTRY ENTITY

4. DOCUMENT REVISION NUMBER

5. PROJECT NUMBER (7 digits)
669-0134

6. BUREAU/OFFICE
 A. SYMBOL: AFR
 B. CODE: 06

7. PROJECT TITLE (Maximum 40 characters)
Liberian Rural Information Systems

8. ESTIMATED FY OF PROJECT COMPLETION
87

9. ESTIMATED DATE OF OBLIGATION
 A. INITIAL FY: 810
 B. QUARTER: 4
 C. FINAL FY: 814 (Prior 1, 2, 3 or 4)

10. ESTIMATED COSTS (\$000 OR EQUIVALENT \$1 =)

A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FX	C. L/C	D. TOTAL	E. FX	F. L/C	G. TOTAL
AID APPROPRIATED TOTAL						
GRANT:	538	0	538	4980	80	5060
LOAN:	3000	2700	5700	3000	2700	5700
OTHER US 1 Peace Corps 2	0	0	0	0	1183	1183
HOST COUNTRY		231	231		5827	5827
OTHER DONOR(S)						
TOTALS	3538	2931	6469	7980	9790	17770

11. PROPOSED BUDGET APPROPRIATED FUNDS (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH CODE		E. 1ST FY		H. 2ND FY		K. 3RD FY	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	I. GRANT	J. LOAN	L. GRANT	M. LOAN
(1) EH	610	248	252	538	5700	914	-	1191	-
(2)									
(3)									
(4)									
TOTALS		248	252	538	5700	914	-	1191	-

A. APPROPRIATION	N. 4TH FY		O. 5TH FY		LIFE OF PROJECT		12. IN-DEPTH EVALUATION SCHEDULE MM YY 017 82
	C. GRANT	P. LOAN	H. GRANT	S. LOAN	T. GRANT	U. LOAN	
(1)	983	-	1434	-	5060	5700	
(2)							
(3)							
(4)							
TOTALS	983	-	1434	-	5060	5700	

13. DATA CHANGE INDICATOR: WERE CHANGES MADE IN THE PID FACESHEET DATA BLOCKS 12, 13, 14, OR 15 OR IN PRP FACESHEET DATA, BLOCK 12? IF YES ATTACH CHANGED PID FACESHEET

2 YES
 1 NO

14. ORIGINATING OFFICE CLEARANCE

SIGNATURE: _____

TITLE: Director, USAID/Liberia

DATE SIGNED: MM DD YY

15. DATE DOCUMENT RECEIVED IN AID/W OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

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LIBERIA RURAL INFORMATION SYSTEMS
RURAL COMMUNICATIONS NETWORK PROJECT PAPER
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I. SUMMARY AND RECOMMENDATIONS

A. Executing Agency

The primary executing agency for the grant and loan funded project proposed in this paper will be the Liberian Broadcasting System, (LBS), recently created by the Government as a cabinet level agency responsible for all public radio and television broadcasting. The funds will be made available to the Liberian Rural Communications Network (LRCN), one of the three operating divisions of LBS, to create a rural network capable of producing and disseminating development information and programs.

B. Recommendations:

A grant in the amount of \$5,062,000 (five million, sixty two thousand dollars) and a loan in the amount of \$5,700,000 (five million, seven hundred thousand dollars) for the seven year period FY-80 - 86 be authorized to the Government of Liberia for the purpose of creating a rural information system consisting of seven regional radio broadcasting stations and central support facilities.

Of AID's total \$2,711,000 (two million seven hundred and eleven thousand dollars) in loan funds and \$30,000 (eighty thousand dollars) in grant funds will be for local costs. The loan funds are used for construction, vehicle maintenance and operation, and supplies and materials; while the grant money finances in-country training. The GOL contribution to the project in the form of commodities, personnel and operating expenses will be \$5,827,000 (five million, eight hundred and twenty seven thousand dollars), or 32% of total project costs of \$17,770,000 (seventeen million, seven hundred and seventy thousand dollars). The planned FY 80 AID obligations are for a grant of \$538,000 (five hundred and thirty eight thousand dollars) and a loan of \$5,700,000 (five million, seven hundred thousand dollars). No waivers are recommended for the project.

C. Project Description

The Liberian Broadcasting System is charged with the operation of all public broadcasting facilities in the country. Currently, these are ELBC, a radio facility with AM, FM and shortwave broadcasting, ELTV, the nation's only TV facility, and the Liberian Rural Communications Network. ELBC AM and FM and ELTV service the Monrovia area. Formerly these stations were operated on a commercial basis with an emphasis on entertainment and news. At the direction of the Government these stations are in the process of de-emphasizing their commercial/entertainment programming, and increasing the importance of their public service operations. ELBC shortwave is presently the only facility with the ability to provide nationwide radio service. All of the ELBC stations have been used in the past primarily as news/propaganda outlets for the former government. The newly created Liberian Rural Communications Network is designed to encourage rural development throughout Liberia by promoting (A) increased utilization of the government services already functioning in rural areas, (B) expansion of these services to a greater portion of the rural population (C) increased two-way communication between the rural population and all levels of government (D) additional self-help activities, and (E) the informed involvement of the rural population in local and national development activities.

To meet these responsibilities the LRCN will establish seven regional stations, each capable of originating programs of local interest in local languages, supported by a central programming unit located in Monrovia. The Programming Service Unit (PSU) will assist the development oriented ministries in preparing effective multi-media campaigns in support of their on-going development activities. As part of these campaigns, the PSU will prepare program materials for use by the regional stations.

Under the grant AID will provide the technical assistance, in-country and overseas training and a limited amount of commodities required to support the technical advisors. The loan funds will be used to provide the broadcasting and programming equipment and facilities for the LRCN. In addition the loan will provide a limited amount (\$150,000) of spare parts for ELBC's AM, FM and shortwave stations. These parts are necessary to maintain the operations of these facilities.

D. Summary Findings

The joint GOL/USAID Project Design Committee with the assistance of USAID funded consultants has carried out detailed technical, economic, social, financial and administrative analyses for the proposed project. In each case the project was found feasible and beneficial. A negative determination was made at the time of the Initial Environmental Examination. The benefits accruing to the rural residents are expected to be far greater than the limited investment in this project would seem to indicate. No social, cultural, economic or technical factors were found that would severely limit chances of project success. The project has been determined to be appropriate within the framework of the USAID Country Development Strategy Statement in that it promotes the distribution of Government benefits to rural areas and encourages various rural development activities.

E. Legal Criteria

The project meets all applicable statutory criteria (see Annex B). With respect to the host country contributions, the Government expenditures are far in excess of the 25% required contribution. The Government's Ministry of Planning has approved this project as a priority undertaking and has included in the GOL's FY 80/81 interim development plan.

Prior to any disbursement, or the issuance of any commitment documents under the Project Agreement, the GOL will furnish evidence that it has given the Liberian Broadcasting Network adequate budgetary autonomy and authority to expend funds for the LRCN in a timely and propitious manner.

Further AID will require, prior to disbursement of any loan funds for construction that:

1. Final site selection has been made and approved by the GOL and
2. Construction plans are complete for the seven regional stations, central facility and supporting infrastructure.

II. BACKGROUND AND PROBLEM

The Government of Liberia has accelerated its efforts in rural development during the past decade. Budget allocations for development activities have increased over 80 percent since 1974. Yet, health, education and agricultural services reach only 35-40 percent of the total population. Major problems persist in developing and implementing efficient and cost-effective delivery systems to serve Liberia's widely dispersed, multi-lingual population of 1.8 million. Over 70 percent of the country's population are located in the rural areas and have only limited access to all-weather motor roads.

Previous efforts in rural development have utilized highly centralized approaches supported by inadequate staff and planning, resulting in logistical and other bottlenecks that have prevented the timely and efficient flow of basic services to the rural population. The GOL is fully aware of these deficiencies and has adopted decentralize integrated rural development as the philosophy behind its future development plans.

A rural development task force created by the former government, has continued to function since the coup and is planning for the rapid implementation of a program to decentralize Government operations. One of the goals of this program is to involve local communities in the decisions and activities that affect them. A draft decentralization plan is currently being reviewed by the Government.

This plan presents a comprehensive infrastructure for decentralization including development councils, committees, and action groups from the national and county levels down to the villages. It calls for the reassignment of central government personnel to the counties and local government offices. Decentralization is a major effort that will be extremely difficult to implement. However, even partial success in achieving decentralization through popular participation will constitute a major breakthrough in national development.

One of the most important components of successful decentralization is the need for improved channels of communication. Successful integrated rural development requires effective two-way communication at all levels. Individual projects in health, family planning, farmer training, agriculture extension, adult education and teacher training are often limited by inadequate communications. Villagers are unaware of and make only limited use of existing development opportunities

because information about these programs is not readily available to them in a form they can understand. Service ministries have considerable information but it does not reach sufficient numbers of people in a timely and relevant form to make a meaningful impact on their lives.

The GOL is convinced that local radio programming and broadcasting in local dialects can be an effective instrument for the promotion of rural development. Presently, only ELBC, a government owned, commercially operated station, and ELWA, the broadcasting arm of the Sudan Mission in West Africa are broadcasting specifically for Liberia. There is radio coverage in local dialects to the rural areas on a regular basis by ELWA through short wave transmission. The ELBC short wave broadcast to the interior is spotty and very few programs are aired in local languages. The flow of development information over both has been minimal. No AM coverage extends beyond the Monrovia area. However, it is important to note that even with the existing limited development programming there is a rapidly growing demand for more broadcasting that can improve rural living.

Because of the ELWA short wave broadcasts, nearly every village has several radio receivers. Since the second band on most short wave receivers is AM, most of the rural population have access to an AM radio receiver.

In response to the demand for more development programming and in cooperation with the GOL Ministry of Information and Cultural Affairs, AID conducted a communication technology seminar in Liberia during October 1977. This seminar included participants from the Ministries of Education, Health, Agriculture, Local Government and other development related agencies. It focused on case studies of LDCs where mass communication has been utilized for development purposes. Considerable interest was generated by GOL participants and a formal dialogue was begun regarding a possible project. In December 1977 DS/ED assisted the Mission in follow-up discussions with the GOL that produced favorable GOL response for a joint project in the use of radio for development. In January 1979 a GOL/USAID committee continued these discussions with the assistance of PFDSO/W. The committee identified a number of problems and needs as perceived by the Professional personnel of the GOL central ministries. Also, the committee reviewed a variety of approaches that had been used in LDCs where radio formed the primary medium of communication.

In May 1979, a team of senior level personnel from the Ministries of Information, Agriculture, and Local Government

accompanied by an EHP officer from USAID/Liberia participated in the Basic Village Education (BVE) Workshop in Jamaica which reviewed the recently completed Radio Education Experiment in Guatemala. Following the workshop the group visited the BVE Project site in Guatemala and gained valuable insights applicable to conditions in Liberia.

Upon their return this group became the nucleus of the Project Design Committee composed of GOL and USAID/Liberia personnel. In preparation of the PID and this PP, the committee with the assistance of AID funded consultants made the important design decisions. Full collaboration among the GOL Ministries, ELBC, ELWA, and USAID was achieved through the committee approach. Thus, the project design reflects a consensus among the actual participants who will be involved in project implementation.

III DETAILED PROJECT DESCRIPTION

A. Goal and Purpose

To provide adequate, relevant and effective learning opportunities for all who want them at a cost commensurate with available resources is one of the prime goals of the education and human resource development sector. In support of this goal, the purpose of the project is to create a communications network capable of promoting economic and social development throughout rural Liberia. The primary media to be used in this network is radio.

B. Objectives

The Liberian Rural Communications network (LRCN) is designed to support rural development by:

1. Promoting the increased utilization of existing government services by the rural population.
2. Providing development and other services to a greater portion of the rural population.
3. Increasing communication between villages and the local, regional and national governments.
4. Promoting increased self-help activities.
5. Distributing news and entertainment, especially of local relevance.

6. Informing the rural population of, and involving them in, local and national development activities.

In order to carry out these functions effectively, the LRCN will:

1. Provide a communication network to support rural development programs of sponsoring agencies both government and private.
2. Produce and transmit development related programs in English and indigenous languages.

C. Organization of the Liberian Broadcast System

The Liberian Government has undertaken a program to restructure and refocus the countries broadcasting services. As part of this effort, the government has created the Liberian Broadcasting System (LBS) as an autonomous government agency responsible for the operation of all public broadcasting in Liberia. The organizational structure of LBS and its relation to LRCN are graphically presented in Chart 1. Under the management of a Director General, who reports directly to the Chief of State, the LBS is responsible for the operations of ELBC, the Monrovia based commercial AM, FM and short wave radio service, ELTV Monrovia's commercial television station, and the Liberian Rural Communications Network. Prior to the creation of the Liberian Broadcasting System, ELBC and ELTV were organized on a commercial basis as a government corporation. These stations were not self supporting and required subsidies to operate. The government is planning to refocus the programming of these stations from their present entertainment/public service format to one giving greater emphasis to public service and development. To accomplish this goal the government is willing to increase its subsidy of the stations to offset loss of revenue expected from the reduction in entertainment/commercial type broadcasting. ELBC AM and ELTV will eventually assume the function of the LRCN's regional station for Montserrado County, but this transition will be gradual because of the present structure and commercial nature of the stations. The short wave and FM broadcast stations are expected to continue to be commercial, emphasizing entertainment and national and international news. (Some LRCN test broadcasting will be carried by the ELBC short wave before the completion of the regional stations, but in general the station will remain an entertainment channel.) Successful intergration of ELRC

into a national public service radio network will require allowances be made for the primarily urban and more sophisticated nature of the Montserrado audience. The regional function of the individual stations within the LRCN network (as detailed below) make programming for regional differences not only practical but desirable.

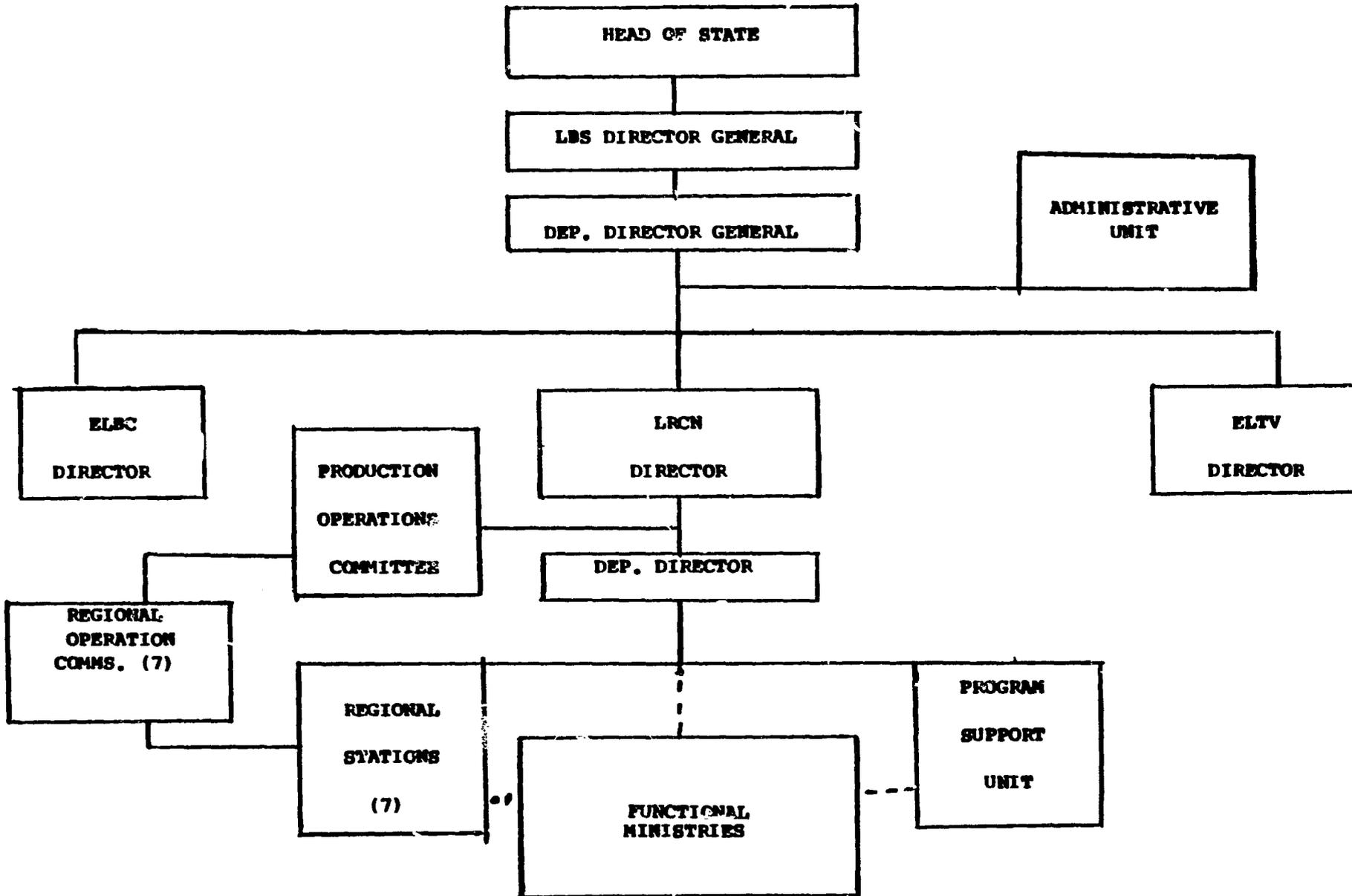
The Liberian Rural Communications Network

The LRCN is one of the three operating divisions of the Liberian Broadcasting service. As such, the LRCN will be managed by a Director for Rural Communications, who reports to the Director General of the Liberian Broadcasting System. The Director of the LRCN will be advised by an interministerial Program Operations Committee responsible for coordinating the operations of the rural communication networks with those of the ministries concerned with rural development. This committee will be composed of Deputy and Assistant Minister with authority to commit the resources of their ministries to the support of individual or coordinated information campaigns.

The LRCN will have a separate budget and in program policy and development operate independently of ELBC and ELTV. All three organizations will use common support services such as personnel, administration and procurement. Chart 1 presents the organizational structure of the Rural Communications Network showing the interrelationships among the seven regional broadcast units, the central programming unit and the ministerial advisory committees.

A complex problem which had to be dealt with as the organizational and functional characteristics of LRCN were being planned, was the degree to which the activities of the LRCN should be decentralized. There is, at present, momentum in the GOL to decentralize certain governmental activities by moving government delivery systems away from Monrovia to the rural areas. The purpose is to make resources, both material and human, more readily accessible to the rural citizens. However, centralization and decentralization, are not mutually exclusive alternatives. In order to maximize the benefits to be derived by the rural population from the LRCN, it is more efficient to centralize certain functions and decentralize others. For example, there are many problems already identified which are common to nearly all rural Liberia. Basic agricultural principles, nutrition, sanitation, pre-natal and child care are only a few. Economies of scale are possible if programs focusing upon these common problems can be developed at a single site

LIBERIAN BROADCASTING SYSTEM ORGANIZATION CHART



then adapted linguistically and culturally for use in the several cultural regions of the country. For each region to develop these programs independently would waste time and money.

Also, the multi-sectoral planning which is essential to an effective integrated rural development program would be impossible to accomplish without the continuous working involvement of key resource people from several ministries. These vital people must work and spend much of their time at the central Ministries offices in Monrovia coordinating outreach programs with LRCN. Their contributions would be diminished if they were not intimately involved in LRCN's overall program planning and if they were not readily available for subject-matter input to programming.

On the other hand, there are distinct and important differences among the rural people in the various regions of the nation. There are different languages, cultures, crops and living environments. While the rural people have many needs in common, they also have many problems which are unique. This reality argues for the decentralized production of certain radio programs of local relevance. The differences in customs and values that characterize the different ethnic groups and which should guide the development of the programming must be addressed at the local level. The complexities of language and dialect variations demand that programs be broadcast in the languages of the region. The assessment of the needs of the rural population will be made through local surveys and observations - not in a conference room in Monrovia. Self-help and radio listening groups and other village level activities can only be successfully created by interventions that originate at that level.

The GOL recognizes the necessity of having both centralized and decentralized functions within the LRCN. The proposed rural communications network is flexible and responsive to program development opportunities wherever they originate - in the Ministries of Health, Agriculture, Education, etc., or in the territories, counties and villages. In operational terms, the LRCN will have a centralized Programming Service Unit and several regional programming and broadcast stations.

The Programming Service Unit will be responsible for:

1. National systems design, regional stations development, staffing, training, inter-ministerial coordination, central program planning and overall network direction.

2. Collaboration with officials in charge of extension and outreach in all development ministries and agencies to provide radio programming in support of their on-going and planned programs.
3. Systematic research on the information, motivation and training needs of different target audiences, e.g., women in the reproductive age group, in-school and out-of-school children, teachers, village health workers, agriculture extension aids, commercial farmers, small farmers, subsistence farmers, fisherfolk, hunters, foresters.
4. Development of radio programs on subjects of national relevance, using the instructional systems design approach. These productions will be based on needs assessments collected for each region and will be made available to regional stations for local transmission. There will be no transmission from the Central Programming Service Unit. It is strictly a program development facility that services the needs of the regional stations.
5. Allocation of programming and broadcast time in broad subject areas for local station programming and production e.g., local news, local folk entertainment, interviews with villagers on problems he/she faces, how-to-do-it tips related to local crafts, crops and occupations.
6. Planning of a local radio discussion group strategy to ensure audience comprehension, utilization and action.
7. Design and implementation of an audience feedback system on attention, comprehension and utilization of radio programs.
8. Design and implementation of a summative evaluation of the project.

Regional Programming and Broadcast Stations will be responsible for the following:

1. Production of local-language programs in support of regional agriculture, health and education projects (e.g, Maryland Village Health Worker Project, the Upper Lofa Development Project), using the instructional systems design approach with special attention to programming in languages that are spoken by smaller groups in the rural population.

2. Local production of "bottom-up" programs that feature local folk forms and interviews with the people.
3. Broadcasting centrally produced programs on topics that have regional relevance, e.g., English as a second language, primary school science and math, in-service teacher-training vocational training, disease prevention, environmental health and sanitation, family planning and legal aid information etc.
4. Organization of village community radio-listening and discussion groups in collaboration with teachers, health workers, agriculture extension aids, and Peace Corps volunteers in the field.
5. Regular collection of audience feedback data on centrally produced and locally produced programs.
6. Collection analysis and interpretation of summative evaluation data.

The LRCN will enable Liberia agencies directly responsible for rural development to perform their outreach function more efficiently and cost-effectively through radio. Horizontal integration of LRCN activities with those of the development agencies is ensured by both the organizational structure and operational procedures of the LRCN.

D. Project Staff

Implementation of this project will require the development of a cadre of communication specialist to assist local animators and village people in the development process. The cadre of professional and technical personnel includes 16 at the Program Service Unit and 5 each in the Regional Units for a total of 51 LRCN staff. In addition, the project will train 16 ministry content specialists who will work with the PSU and 2 ELBC writer/producers who will assist in the development of LRCN programs used by ELBC. The position titles of LRCN personnel are shown below. Their major responsibilities and position qualifications appear in Annex F.

PSU Personnel

- 1 Director
- 1 Chief of Production/Deputy Director

1 Administrative Assistant
 1 Chief Engineer
 1 Maintenance Technician
 1 Evaluation Coordinator
 1 Materials Coordinator
 3 Instructional Systems Designers
 3 Producer-Writers
 3 Community Organization Specialists
 16 Ministry Content Specialists

Regional Personnel

7 Regional Managers
 7 Instructional Designers
 7 Producer/Writers
 7 Maintenance Technicians
 7 Community Organizer/Evaluation (REG)
 35 Ministry field staff

E. LRCN Coordination and Management

The operations and programming activities of the LRCN will be coordinated by the Program Operations Committee which will be chaired by the Director of LRCN, and comprised of the Regional Managers, the Chief of Production, and Ministry representatives. The Committee will analyze identified rural needs and related development objectives, prioritize them and determine allocations of production, transmission time, and budget.

During the early phases of the project the committee will need to meet often, since it is anticipated that many adjustments will have to be made. As experience is gained, rescheduling and reallocation needs will no doubt diminish. This committee is a key element to insuring the integration of the LRCN into the nation's rural development efforts.

The Regional Managers will chair the Regional Program Operations Committees, which determine priorities for the local level. The regional committees will consist of village and county officials as well as ministry field staff representatives. This committee will schedule transmission time, within the overall allotment for local programming and will allocate resources for the production of locally relevant programs. Decisions related to languages, and narrowly specialized needs will be made by this committee. The Regional Manager

will represent this committee's interests as a member of the central Program Operations Committee.

The proposed regional unit sites are Voinjama, Gbanga, Buchanan, Sanniquellie, Greenville Robertsport and Zwedru. These sites were chosen by an inter-ministerial project design committee based on the criteria of national coverage, homogeneity of listening audience, availability of electricity, location of political centers and availability of local infrastructure. The project includes funds for detailed site design and construction of the seven proposed regional stations. The Programming Service Unit (PSU) will be located in or near Monrovia to facilitate coordination with the central Ministries.

As mentioned previously, the PSU will develop and produce programs, campaigns and series which will be sent to the regional units. Programs such as teaching english to adults as a second language, literacy methods for animators and in-service training for primary teachers will be taped in the major languages and prototype english scripts will be provided as the regional units deems desirable. It will be important for the Chief Engineer, Evaluation Coordinator and Materials specialist to work in the regional broadcast areas for significant amount of time.

A task force or team approach will be used for program development at both the PSU and regional stations. Programs will be developed by instructional system design production teams comprised of a Ministry Content Specialist, Instructional Design Specialist, and a Producer-Writer. The Evaluation Coordinator, Materials Coordinator, and Community Organization Specialist will make inputs at appropriate stages of the development of each program.

The production teams will be dynamic, formed for a specific task, such as the development and production of one broadcast, a series of spot announcements, a campaign, or a course. When a task has been completed, individual team members will be reassigned to other teams with a different task. At the regional level similar teams will be established to produce programs of local relevance. Local ministry field staff will be part of these teams.

The regional staff must be able and willing to perform all program development, production and public relations functions including announcing, equipment operation, and script-writing. The Ministries already have extension agents implementing development programs at the village,

district and county levels. For example the Adult Education Division of the Ministry of Education presently employs 283 people to conduct adult literacy classes. The MOE provides teaching materials, local supervisors and trainers in support of these literacy teachers. This is one example of animators already in place. Similarly, the ministries of Agriculture, Health, Action for Development Progress and Local Government have field personnel who will be assisted by the LRCN.

Given that the LRCN is designed to facilitate bottom-up communication and be involved in rural development implementation, it is expected that each regional station will transmit a significant proportion of its programs in the major language of the region. In addition, they will regularly transmit programs in the languages spoken by minority language groups. Some programs will utilize English to encourage use of the national language, and English will be taught as a second language to support in-school instruction or teacher training.

Each regional station will record and transmit interviews and folk music in the local languages and design programs in support of local development projects. In cases where one of the major languages of a regional station is a minor language in other regions (Kpelle for example), that station as well as the PSU, will distribute broadcast programs to other stations. Several languages, are spoken by significant numbers of people in more than one station's coverage area, but are not major language of any region. Therefore, rather than have each station design programs separately in the same language on a topic that is relevant to more than one station's area, (e.g., teacher training, malaria prevention), programs in these topics and languages will be assigned to the Programming Service Unit which then sends them for transmission to the regional stations. Thus, efficiency and regional specificity are insured.

F. Program Development Strategy and Procedures

An examination of a variety of rural radio and non-formal education programs clearly reveals that if behavior change is the desired outcome, it is not enough to merely transmit information to a listening audience. The information messages must be purposefully designed to change behavior and they must be supported and enhanced by other message sources, such as village opinion leaders, government field workers, graphic and print media and local group interaction. This mix of resource inputs will not work effectively unless carefully planned and orchestrated.

Furthermore, a system of intervention of which radio is the crucial element must be responsive to actual and perceived needs of the intended recipient. Variations in programming will be tested to determine the degree to which they are accomplishing their intended purposes. Then programming formats will be revised based on this feedback. This amounts to applying a straightforward "systems" methodology to the design and delivery of teaching programs. This methodology-commonly called "Instructional Systems Design" (ISD) is not difficult to learn and its effectiveness has been unequivocally demonstrated in a variety of both formal and non-formal education activities and programs.

The LRCN is committed to the use of the ISD methodology in its planning and programming activities. Since that decision has implications for the LRCN's organization, management and staffing patterns the application of the ISD process of this project is described below in summary form. Some understanding of this methodology is essential to justify the personnel requirements and proposed training activities included in this project. Programming in the LRCN will be developed by special instructional systems design teams consisting of a radio producer and writer, a subject expert, and a LRCN instructional designer. The ISD process consists of the following twelve steps.

1. Describe target audience characteristics

The initial effort will be to develop an accurate economic, political and ethnographic profile of the lifestyle of the population that is reached by each regional transmitter. This profile will be prepared for the use of the programming staff by instructional designers and consultants, using social and anthropological data collection methods and open-ended interviews, as well as data already available.

The profile will be undertaken at two levels:

- a. A general description of the lifestyle of each linguistic group in each regional station's coverage area, to be conducted during station construction, before any programming is planned.
- b. A profile of a specific segments of a population e.g., subsistence farmers, to be specially undertaken prior to designing special interest programs with and for them.

Since programs will be developed at the regional station and at the programming service unit for regional use, it is necessary that these population profiles be available

in both places. Such profiles will be particularly useful in Liberia where there is some physical and social distance between the message designers and audiences, and in situations where multi-lingual, part-time writers who need quick orientation to their audience are hired for special campaign

2. Compile and analyze needs assessment data

After having developing profiles of the audience, the next step involves assessment of their present information needs, skills, and attitudes. These will be compared with desired levels. Entry level data will be sought from various ministries' reports and analyses and from government census and school publications before initiating primary data collection. The data collection will be conducted by content experts and the instructional designers who will draw on the skills of the evaluation specialists. It will be audience-specific and subject-specific to help identify possible gaps between the expected levels determined by the implementation agency concerned and the existing levels. These gaps will then be reviewed by the members of the Program Operations Committee.

Primary data collection on actual levels of rural information, attitudes and skills for population segments will bear in mind both the observation of relevant officials and experts who work with the population segment under study, and the self-perceptions of each segment. Separate data collection procedures will be designed to tap both dimensions to help reach an understanding of rural reality.

At this stage the assessment will deal with needs and problems, not solutions.

3. Setting objectives

Given prioritised information on the needs of each audience segment per subject area, the instructional designer and subject matter expert will begin to write specific program objectives. Each series or campaign will have objectives that define specific terminal behavior (behavior the learner should be able to demonstrate at the end of the program services) criteria of performance for such terminal behavior (how well the learner is expected to perform) and conditions under which the terminal behavior is expected to occur. Such clearly defined objectives are crucial in team production efforts so all members of the team will have identical understanding of the program objectives. These objectives are also important when pre-testing drafts scripts with a sample audience and when performing summative evaluation. The Evaluation Specialist will assist in

preparing measurable objectives.

4. Identifying learning activities

The instructional designer and subject expert(s) will list a range of learner activities designed to help bridge the gap between the expected levels of information, skills and attitudes and present levels.

5. Specify learning activities and objectives amendable to treatment by radio

The radio producer-writer now joins, the instructional designer and subject-expert(s) in listing which learning activities are best facilitated by radio, which ones require printed materials and which ones require direct interpersonal teaching for learning. Thus, a short list of objectives and learning activities is finalized, and the media choices are made to help in the teaching/learning process.

During the early years of the project it will be necessary to test different techniques for utilizing radio to determine which activities are most effective for accomplishing specific kinds of objectives and for developing successful strategies to insure that animators can and do pursue them effectively. It is important that the full range of alternatives (open broadcasting, rural radio forums, formal instruction groups) be systematically examined with various audiences to determine those that are most effective in achieving a particular goal.

6. Collect subject matter details

The role of the content expert becomes very important at this point. The content expert will begin to identify the basic substance for each program and explore the possible solutions suggested at the village level and among ministry experts.

7. Design instructional strategy

The instructional designer now generates alternative instructional and persuasion strategies to help attain the objectives selected within the context of the subject matter. Persuasive strategies used may be rational or emotional. Instructional strategies may include lectures, demonstrations, learning by doing and many others. Message styles may be light and entertaining, authoritatively didactic, formal or informal.

8. Coordinate radio input with the use of other media

No medium can be expected to be equally good at addressing all types of learning tasks. Because education and extension effectiveness is a function of a variety of well orchestrated inputs, the LRCN Community Organization Specialist and the Materials Coordinator will be called in to advise the production team at this stage. The Community Organization Specialist will be familiar with the availability, mobility and skills of village-level workers, and consults with the concerned agency at the district level, in order to determine the design of an appropriate interpersonal communication strategy for each target audience. The Materials Coordinator works at coordinating existing media or developing new materials when needed to re-inforce the message and maximize learning impact.

9. Prepare detailed program specifications

After describing the objectives of the total series, the instructional approach and its multi-media components, full attention will be given to individual programs in the series. The production team will record their ideas for each program, including its objective, content, format (dramatic, lecture, lyrical, etc.) and provide concrete example of learning situations at the village level to serve as take-off points for the writers. Media components are listed and described in sufficient detail to insure the completed program package will have internal coherence.

10. Produce sample materials for pre-testing

The producer-writer develops two or three prototype programs that represent the approach of the series in order to test it on a sample of the target audience. The prototypes are tested by the instructional designer for "attention-getting" power and verbal comprehension. They are played in the village on audio cassette recorders, to individuals or small groups of the target audience they are designed to effect. The content expert and producer-writer will go to the village to observe villager reactions in pre-testing sessions. Each instructional designer may want to develop a cluster of pre-test villages with whom he has good rapport in order to facilitate responses to trial tapes.

11. Revise approach on the basis of pre-test findings

If major problems have not been detected as a result of the pre-test, the series is ready for production. Documentation of the approach and specifications are filed in a script-writer's handbook by the instructional designer to facilitate its use by other writers who may work on the series at the Program Service Unit or at regional stations. If several problems have been detected in the prototype that require major changes in the instructional approach or format of the series, the production team will then prepare an alternative approach that will be pre-tested before final production. To generate guidelines on the type of radio programs that attract attention and are comprehended in rural Liberia before LRCN goes on the air, it is recommended that the instructional designer tape a variety of radio programs being transmitted on other stations and take them to specific rural target audiences for play-back and testing, to get a feel for rural preferences.

12. Establish audience feedback panels

The instructional designers at each site will set up a regular feedback plan consisting of unannounced visits to segments of different target audiences to collect attention and comprehension data on a regular basis. Special monitoring trips will be made by the community organizer of each regional station to check on whether the group discussion strategies are actually working and whether opportunities for action and adoption in the form of input supply exist at the village level. This information on program impact and utilization is reported to the production team members, Regional Managers, LRCN Senior Staff and the Program Operating Committees to help refine subsequent programming endeavors.

This step-by-step instructional message design process has continuing evaluation, monitoring, and program improvement built into it. Every program series produced regionally or at the central service unit, will refer to a specific target audience and certain definite information, skills, attitudes and baseline data from the needs assessment study that precedes any large scale program development. Every program series, produced regionally or at the service unit will have a statement of objectives for the series and for the individual program. These objectives will be verified at the prototype-testing stage to ensure that objectives are realistic and attainable. A regular feedback panel in selected villages will provide data on whether program objectives have been achieved in terms of information, skills and attitudes as well as monitor the

orchestrated supply of multi-media materials and development resource inputs.

G. STAFF TRAINING PROGRAM

The training of nearly 70 Liberians to establish, manage and implement the LRCN is the single most important component of this project. Among the technical and professional specialities required are several for which there are few, if any qualified and available Liberians. There are, however, sufficient numbers whose education and previous experience qualify them for further training in the required specialties. Pre-service training in the form of long and short-term programs, followed by on-the-job training, will be used to train the required staff.

The training program is being guided by the principle of conducting as much of the training as possible in-country. The training method most appropriate to the "hands on" work of running a radio station is a series of short courses coordinated with on-the-job training. A primary function of the project funded technical assistance personnel is to provide the on-the-job training and to train trainers for the continuing LRCN program. However in the start-up phase of the project it is impossible to do all the necessary training in Liberia, The top professional personnel at the PSU will be sent to the U.S. or third countries for training. In fact as a pre-project activity, some potential LRCN personnel will begin long-term training in the fall of 1980 and winter of 1981 under the African Manpower Development Project. The top people at the PSU will be trained both in their speciality and as trainers to assume their training functions upon their return to Liberia. While the project will develop the required cadre of Liberian personnel, it is important that a local training capacity be developed to meet the continuing needs of the LRCN. Normal attrition will, in time, cause the need for replacement of LRCN personnel at all levels, from technical to professional. Training programs will be institutionalized in LBS or LPCN. Additionally, the University of Liberia, Booker T. Washington Institute and Cuttington College University, will be encouraged to broaden their programs to include some of the needed job specialities such as instructional design, evaluation, broadcast media development and broadcast technology.

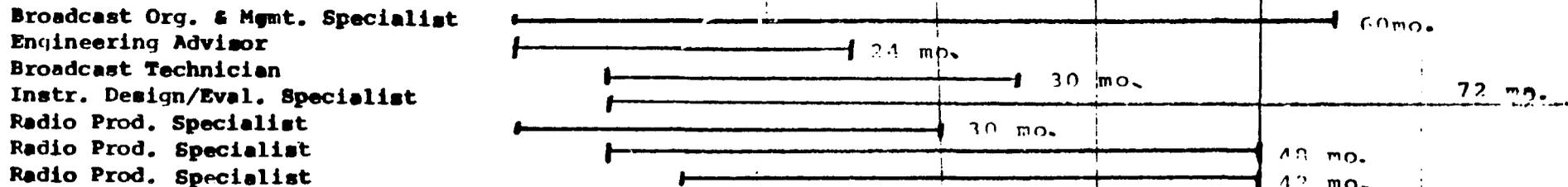
In the recruitment of LRCN staff, effort will be made to hire personnel with the most relevant training and experience as possible. This appears most likely in the management and engineering areas and the assumption is that some of these people will require little formal training. Because of this the training plan is flexible to accommodate variable entry-

LRCN STAFFING PLAN

YEAR

1. 2. 3. 4. 5. 6. 7.

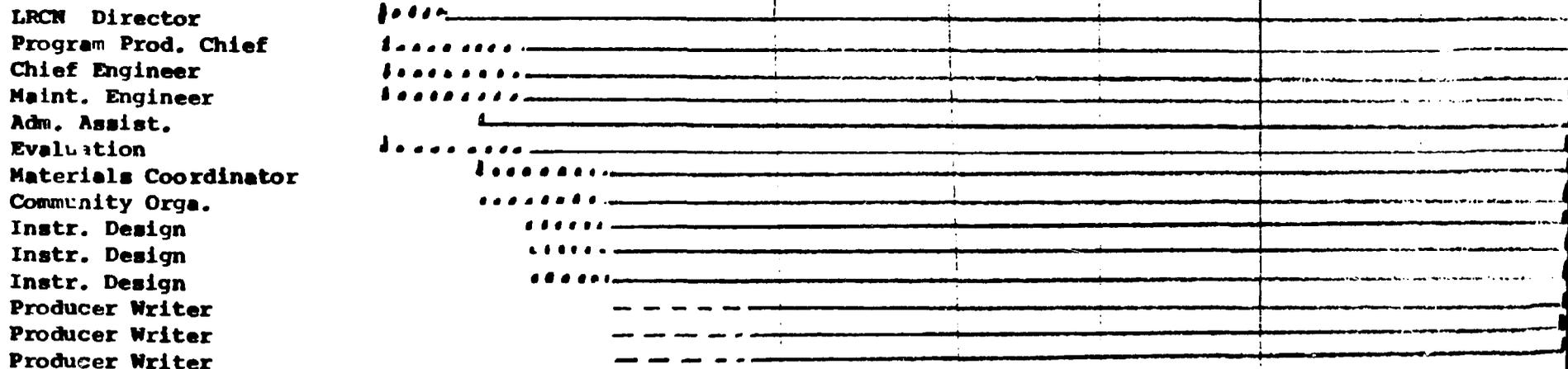
A. TECHNICAL ASSISTANCE PERSONNELS



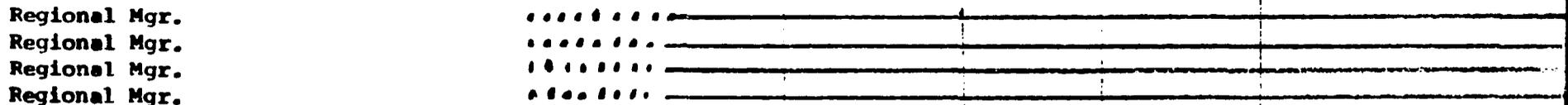
Short Term T.A. (40 months as needed)

B. LRCN STAFF

PSU



REGIONAL



LRCN STAFFING PLAN

YEAR

1. 2. 3¹¹. 4 5 (2. 6 7

Instr. Designer (4)
 Prod. Writers (4)
 Community Orga. (4)
 Maintenance Techn. (4)
 Regional Mgr. (3)
 Instr. Design
 Prod. Writers (3)
 Community Orga. (3)

C. MINISTRY CONTENT SPECIALISTS

Ministry of Agriculture (4)
 Ministry Health (4)
 Ministry of Education (5)
 Others (6)

**D. Additional 3 - 6 month
 In-Country Training
 will be scheduled as
 required.**

**E. Special-on-the-job training
 programs will be designed
 to upgrade the skills of
 promising individuals.**

KEY TO CHART

U.S. or third country training
 Local training - - - - -
 Employed staff _____

(1. First four stations start
 to broadcast.

(2. Last three stations start
 to broadcast.

level job competency. Some individuals may only need "topping off" training in order to become proficient. Others may need more than estimated.

As the LRCN staff is recruited, a number of short in-country orientations and training workshops will be conducted. If the US training is to be maximally effective, the trainees before they leave Liberia need a complete understanding of what the project is being designed to accomplish and how the training they are to receive should relate to that end. A training and staffing plan for all LRCN personnel appears in chart 2. The term of assignment of the individual technical assistants is placed on the chart to show their availability to provide on-the-job training assistance. The Evaluation/Instructional Design Specialist and two of the Radio Production Specialists will have important training responsibilities and their work in the first months will focus on development of the training program.

In total, the project provides 45 months of short term US or third country training, including 12 months of unspecified training which will be sufficient to train personnel hired to replace people lost to other programs. One hundred and forty months of long term training including 20 months of unassigned training will be funded. In-country training will consist of a series of short seminars and workshops on instructional system design, radio production techniques, script development etc. These courses will extend over a nine month training period which will include the short workshops as well as on-the-job program development. Two classes of 15 people are scheduled to begin at the end of the projects first year in preparation for the opening of the first four stations. Similar courses will be offered in year 4 prior to the opening of the last three stations. Ministry content specialist will receive training in the first group. It is planned that 16 Ministry personnel be trained and assigned to the LRCN to work on program development.

H. Technical Assistance

The development of the LRCN requires the introduction, coordination and integration of the technologies of broadcasting engineering, instructional systems design and network management. These technologies and procedures as they are applied in this project are almost completely new in Liberia. Further, the LRCN requires a level of

of multi-sector cooperation for which there is little precedent in Liberia.

Ideally, a project of this type should begin with fully trained and experienced Liberian personnel. Section III-F describes the training required to ensure the availability of a core of key Liberian staff able to undertake station operations. However, even with effective training, the Liberian staff will lack the crucial ingredient of experience. Liberians, through trial and error, could gain this experience over time as have the personnel of other nations during the past 75 years. However, the cost in time, money and loss of effectiveness in the dissemination and utilization of development information will be high. In order to limit the costs involved in developing an experienced Liberian staff the project includes the technical assistance required to establish a fully operational rural communication network within the time frame of the project. The joint GOL/USAID Project Design Committee has carefully identified and coordinated the plan for external technical assistance to maximize Liberian involvement from the beginning and hasten the phase-out of the foreign advisors.

The job descriptions, major responsibilities and length of assignment required for each external technical expert are detailed below. The total range of skills and expertise needed to meet the full technical assistance tasks ordinarily come in clusters but some individuals have unusual combinations. Considerable flexibility will be necessary in the recruitment of each person to assure that the full range of expertise is provided. It is very important that the U.S. team possess substantial successful experience in LDCs, preferably in Africa.

1. The Broadcast Organization and Management Specialist
(5 years)

This specialist will serve as the Chief of Party and will be the principal advisor to the LRCN Director. His primary responsibility will be to coordinate and monitor the technical assistance provided to the LRCN. When specialized technical assistance is required, he will recruit and direct short term personnel (40 person months available) to meet the unusual needs. Further he will assist and advise the Director in policy matters, program management, and staff training. In order to adequately support the Director and to coordinate effectively the efforts of the advisory team, this person would need some knowledge of all

the critical specialities, though not necessarily to the level of the individual specialists.

2. Chief Engineering Advisor (two years)

This person will serve as a counterpart to the LRCN chief engineer and should have a BS in electrical engineering or equivalent and have at least 10 years of broadcast engineering experience. He will participate in the design, layout and installation of the first four regional broadcast facilities and the program service studio. He will be responsible for supervising the construction and tuning of the studios, the AM transmitters and antenna system. He will also assist in the final definition of the equipment specifications and serve as an advisor in the commodity procurement process. One of his most important responsibilities will be the continuing development of skills in the LRCN engineering and maintenance staff. Thus, experience as a trainer is important. The chief engineer should arrive as soon as possible at the beginning of the project and remain for 24 months.

3. Broadcast Technician (2-1/2 years)

While the chief engineer's responsibilities emphasize the design/installation aspects of the project, the broadcast technician's advisory tasks will emphasize the maintenance aspects. He should have at least ten years experience in broadcast or related engineering. With the departure of the chief engineer advisor, the broadcasting engineer will become the counterpart to the LRCN chief engineer. He should be broadly knowledgeable in broadcast technology and be capable of "improvisational maintenance". He will have responsibility for continuing the on-the-job training of the LRCN engineering and technical staff and experience in organizing and conducting this type of training is essential. It is expected that the broadcast technician will arrive in Liberia at the end of the first year of the project and remain for a 30 month tour. He will overlap in assignment the chief engineer for 18 months and be on-site for 12 months following the departure of the chief engineer advisor.

4. Instructional Systems Design Specialist (6 years)

This technician will be the chief advisor for the design and execution of the baseline studies and system of on-going program evaluations. He will be responsible for the initial effort to develop an accurate economic, political and ethnographic profile of the lifestyle of the population that is reached by each regional transmitter. Using the

information gathered in this profile and working with ministry outreach divisions, the IDS specialists will assist the production teams in setting objectives and determining program success in meeting those goals. He must insure that appropriate formative evaluation procedures are followed in the program development phase and that summative field evaluation strategies are implemented to validate program effectiveness and project success.

The Community Organization Specialist and the Evaluation Supervisor will be the technician counterpart.

This advisor is scheduled to arrive in Liberia toward the end of the first year of the project and remain for the life of the project. It may be appropriate to have two similarly qualified people for two three year tours.

5. Radio Production Specialists (3 or 4 technicians for a total of 10 person years)

The responsibilities of these technicians is to develop the Liberian staffs' skills through formal courses and on-the-job training. The first production specialist who is scheduled to arrive in year one will establish the in-country training program with the assistance of short term consultants as required. He will coordinate the training program for the regional staff and content specialists which proceeds the opening of the first four stations. This first specialist will work primarily at the PSU, while the others will spend most of their time assisting in regional stations operations. Two technicians will be assigned to rotate among the four stations that will be operational at the beginning of year three. By the end of year four these stations should be capable of running without the advisors. These technicians then will be reassigned to the three stations opening in year five. It may be appropriate to have the position with a four year tour divided into two two-year tours and recruit two similarly qualified people.

Since the production teams will be interdisciplinary in character, the radio production specialists will make their differentiated contributions in the context of a team effort. The PSU advisor will be a counterpart to the LRCN Deputy Director/Chief of Production. Those assigned to the regional units will counterpart the Regional Managers. They will be responsible for continuing the skill development of the LRCN producer-writers and will regularly participate in the production teams activities.

In total there will be seven long-term advisors during the life of the project for a total of 25.5 person years.

Commodities will be acquired in support of the technical assistance team. These will include vehicles and office equipment.

6. Short-Term Consultants

In addition to the long-term technical consultants there will be a need for short-term consultants to deal with some highly specific professional or technical problems and to supplement the expertise of the resident advisors. These individuals will also be called upon to do some specialized in-service training. Examples of specialties in which additional expertise will be required are project evaluation, rural health education, transmitter maintenance, agricultural education, basic education and teaching English as a second language. These are only representative of possible needs; the project activities will determine which particular specialists and in what number will be needed.

Short-term consultants who are specialists in evaluation and needs assessment will be needed in Liberia during the first two or three months of the project. With Liberians from the service ministries and other agencies involved in integrated rural development, they will plan for the collection of baseline data. This data will be collected in the context of the overall evaluation plan and also serve as input to the assessment of the villagers needs.

Some of the short-term consultants will have recurring involvement in the project in order to maintain continuity. This will yield benefits as their knowledge of the project, and its problems, grows. Funding is provided for 40 person months of short term consultant assistance.

I. Peace Corps Assistance

The Peace Corps will provide 23 volunteers over the course of the seven year project. The skills, number needed, and date they are required appear in Chart 3. Initially eight volunteers will work as part of the program design teams in the regional stations and at the PSU. Two will work in the evaluation and program feedback area, while one is scheduled to assist in graphic productions and publication coordination. Each will have a Liberian counterpart and

PROPOSED PEACE CORPS ASSISTANCE - LRCN

<u>SKILLS</u>	<u>PROJECT MONTH REQUIRED</u>	<u>NUMBER NEEDED</u>	<u>LOCATION</u>	<u>COUNTERPART</u>
1. Evaluation Specialist (Needs assessment, formative evaluation, training and testing.)	13	2	PSU (Monrovia)	Evaluation Spvr.
2. Graphic Arts/Material Coordinator (Develop and test use of print and nonprint material)	21 45	1 1	PSU (Monrovia)	Material Coordina- tor
3. Writer/Designer/Producer - Radio Programs (Extensive local language training advisable)	23 46 52	4 4 3	Regional Stations	Station Mgr. or Regional In- structional System Programmer
4. MOA Writer-Producer-Radio Programs	23 46	1 1	MOA/PSU (Monrovia)	MOA Content Specialist
5. MOH Writer-Producer-Radio Programs	23 46	1 1	MOH/PSU (Monrovia)	MOE Content Specialist
6. MOE Writer-Producer-Radio Programs	23 46	1 1	MOE/PSU (Monrovia)	MOE Content Specialist
7. Special Programs Writer-Producer-Radio Programs	23 46	1 1	PSU-ADP MLG, etc. (Monrovia)	Senior Program Designer
		Total		23

several will be working closely with the contract technicians. All of the volunteers except the evaluation specialists will be replaced at the end of their two year tours. Additionally, three new volunteer positions will be added in year five to work in the new regional stations.

J. Facilities and Equipment

AID will loan the government of Liberia \$2.2 million (including contingency) to construct studio/office buildings for seven regional stations and a central programming and planning facility in or near Monrovia. The loan fund will be sufficient to run all utilities to the site and to clear the land for antenna erection. Details appear in the Engineering section of the Technical Analysis and in Annex E, the Engineering Plans. Additionally the loan fund will finance the purchase of AM broadcast transmitters and antennas, studio and air conditioning equipment, and basic office and studio furniture for all eight facilities. The broadcast equipment will be of current design and good reputation with proven, extensive field service. All components should meet applicable EIA and FCC standards and meet or exceed manufacturer's published specifications.

Finally \$150,000 will be loaned to the GOL for the rehabilitation of the ELBC short wave facility and to provide spare parts for ELBC's AM station*. Although these facilities are not part of the LPCN, this one time assistance will permit the Liberian Broadcasting System to regain and maintain its capability to broadcast nation-wide via short wave and continue its AM operation for Montserrado County. These stations, because of their change in emphasis from entertainment to public service, will serve to test some of the LRCN program formats and techniques. They will also offer, on an interim basis, some of the services the LRCN will provide when it begins broadcasting from its own facilities during the third year of the project.

Without the infusion of these spare parts the Liberian Broadcasting System will not be able to maintain its existing facilities. The loss of these facilities would be a blow to the creditability of the new system and directly effect its chances for success. This, of course, would in turn effect the possibilities of successfully creating the rural communications network. The existing ELBC AM and short wave facilities need no additional direct assistance, beyond these parts, to maintain their current operations. The LRCN will provide indirect assistance, in the form of program development as ELBC switches to public service orientated broadcasting.

*Tentative parts list appears in Engineering Annex

The production unit at the PSU will include space and equipment for two studios, two announcer booths, two control rooms with record/playback capability in the 1/4" reel to reel NAB cartridge and cassette formats. Duplicating equipment for transfer from each recording format to the others will be provided. Each regional station will have space and equipment sufficient for a studio, control room, transmitting facilities, offices, storage, and a repair shop. Equipment will be standardized as much as possible to promote maximum maintenance capability with minimum training and spare parts inventory. As much as possible, recording and producing equipment should be immune to the effect of line voltage and frequency variation. Each facility will be provided with a back-up diesel generator.

The transmitters will have 10 KWs of power broadcasting in medium wave. The antennas will be series fed vertical radiators with radial ground systems. The height of the antennas will vary according to frequency assignment from 197 to 440 ft.

Installation of the equipment and possibly erection of the towers will be done by the project engineers and maintenance technicians under the guidance of the Chief Engineer Advisor and Broadcast Technician. Each station will have a full time Liberian technician for routine preventative maintenance and break down repair. The regional stations will be equipped with basic spare parts and test equipment. The Programming Service Unit will have a larger spare parts inventory (approximately 10% of equipment cost) and provide technical expertise and additional test equipment as required by the regional sites.

The Programming Service Unit and the Regional Units will have simple duplicating equipment to reproduce printed materials. Sophisticated publication of large quantities will be done through the Ministry of Information's facility or by contract.

IV. BUDGET AND FINANCIAL PLAN

The total project cost over the seven year project period is \$17,770,000. For the project AID will provide a grant of \$5,060,000 and a loan of \$5,700,000; while the GOL provides \$5,827,000 and the U.S. Peace Corps, \$1,133,000. Of AID's total, \$2.7 million in loan funds and \$80,000 in grant funds will be for local costs. The local costs from the loan will be used for construction, vehicle maintenance, operations, supplies and materials; while grant funds finance in-country training. Chart 5 provides a yearly and life of project budget while chart 4 summarizes all costs.

Chart 4

LIBERIAN RURAL COMMUNICATIONS NETWORK

SUMMARY COST ESTIMATE

Item	AID GRANT		AID LOAN		GOL	Totals
	FX	LC	FX	LC	LC	
A. <u>Technical Assistance</u>						
Long term	3105	-	-	-	-	3105
Short term	440	-	-	-	-	340
Sub-Total	3545	-	-	-	-	3545
B. <u>Personnel</u>	-	-	-	-	2873	2873
C. <u>Participant Training</u>						
Long term	194	-	-	-	-	194
Short term	198	80	-	-	-	278
Sub-Total	392	80	-	-	-	472
D. <u>Commodities</u>						
Broadcast Equip	-	-	2252	-	-	2252
Vehicles	-	-	132	-	311	443
Supplies & Materials	-	-	-	200	101	301
Sub-Total	-	-	2384	200	412	2996
E. <u>Other Costs</u>						
Construction	-	-	-	1650	-	1650
Electricity	-	-	-	-	1713	1713
Contingency Fund	1045	-	605	700	-	2350
Miscellaneous	-	-	-	161	829	990
Sub-Total	1045	-	605	2511	2542	6703
Totals	4982	80	2989	2711	5827	16,589
					<u>PCV Costs</u>	<u>1,183</u>
					Grand Total	17,772

LCRN BUDGET CONTRIBUTIONS
(PROJECTED EXPENDITURES)
(\$000)

	<u>YEAR 1</u>	<u>YEAR 2</u>	<u>YEAR 3</u>	<u>YEAR 4</u>	<u>YEAR 5</u>	<u>YEAR 6</u>	<u>YEAR 7</u>	<u>TOTALS</u>
1. USAID CONTRIBUTIONS								
<u>Grant Funds</u>								
A. Technical Assistance								
1. Long Term TA at 110,000/yr	275	550	770	495	385	220	110	2,805
2. Short Term TA at 10,000/mo	40	120	80	20	20	20	20	400
3. Contractor Central Support	35	70	85	62	42	26	20	340
Totals	<u>350</u>	<u>740</u>	<u>935</u>	<u>657</u>	<u>447</u>	<u>266</u>	<u>150</u>	<u>3,545</u>
B. Participant Training								
1. Long Term U.S. (104 pm at \$1850/mo)	104	30	30	30	---	---	---	194
2. Short Term (45 mo at \$3500/mo)	84	21	--	32	21	---	---	158
3. In country (5 courses at 20,000 each)	---	40	20	20	20	20	---	120
Totals	<u>188</u>	<u>91</u>	<u>50</u>	<u>82</u>	<u>41</u>	<u>20</u>	<u>---</u>	<u>472</u>
(A & B Totals)	538	831	985	739	488	286	150	4,017
C. Inflation/Contingency (10%/yr)	<u>---</u>	<u>83</u>	<u>206</u>	<u>244</u>	<u>224</u>	<u>173</u>	<u>115</u>	<u>1,045</u>
Grant Total	538	914	1191	983	712	459	265	5,062
<u>Loan Funds</u>								
A. Broadcast Equipment	1,317	---	---	710	60	75	90	2,252
B. Construction	1,000	---	---	650	---	---	---	1,650
C. Vehicles for T.A. (at \$12,000)	36	36	36	12	12	---	---	132
D. Vehicles Operation & Maintenance	7	21	42	42	28	14	7	161
E. Supplies & Materials	5	25	25	25	40	40	40	---
Totals	<u>2,365</u>	<u>82</u>	<u>103</u>	<u>1,439</u>	<u>140</u>	<u>129</u>	<u>137</u>	<u>4,395</u>
F. Inflation (10%/yr)	<u>---</u>	<u>8</u>	<u>21</u>	<u>476</u>	<u>65</u>	<u>78</u>	<u>105</u>	<u>753</u>
G. Equipment and Construction Contingency (15%)	<u>348</u>	<u>---</u>	<u>---</u>	<u>204</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>552</u>
Loan Total	2,713	90	124	2,119	205	207	242	5,700
TOTAL AID CONTRIBUTION	3,251	1,004	1,315	3,102	917	666	507	10,762

LRCN BUDGET CONTRIBUTIONS (Cont.)
(PROJECT EXPENDITURES)
(\$000)

<u>II. GOL CONTRIBUTIONS</u>	<u>YEAR 1</u>	<u>YEAR 2</u>	<u>YEAR 3</u>	<u>YEAR 4</u>	<u>YEAR 5</u>	<u>YEAR 6</u>	<u>YEAR 7</u>	<u>TOTALS</u>
A. Personnel Salaries	167	214	407	435	550	550	550	2,873
B. Vehicles (at \$9,000)*	9	50	11	96	13	116	16	311
C. <u>Other Costs*</u>								
1. Electricity	6	7	215	235	330	440	480	1,713
2. Equipment Maintenance	-	-	15	25	50	60	75	225
3. Telecommunications	1	2	5	6	7	12	15	48
4. Vehicle Oper. & Maint.	3	15	36	40	66	72	80	312
5. Travel (Local & International)	40	44	49	35	20	22	34	244
6. Supplies & Materials	55	10	11	15	18	20	22	101
Sub-Total	<u>55</u>	<u>78</u>	<u>331</u>	<u>356</u>	<u>491</u>	<u>626</u>	<u>706</u>	<u>2,643</u>
GOL Totals	231	342	749	887	1,054	1,292	1,272	5,827
 <u>III. PEACE CORPS CONTRIBUTION</u>								
Volunteer Support* (at \$14,000 py)	<u>---</u> (1 py)	<u>15</u> (10 py)	<u>170</u> (10 py)	<u>186</u> (12 py)	<u>245</u> (12 py)	<u>270</u> (12 py)	<u>297</u> (12 py)	<u>1,185</u>
 <u>IV. GRAND TOTALS</u>								
	<u>3,482</u>	<u>1,361</u>	<u>2,234</u>	<u>4,175</u>	<u>2,216</u>	<u>2,228</u>	<u>2,076</u>	<u>17,772</u>

*Inflation Factor Included

There are three key issues to be discussed in relation to the financial plan. The first is the willingness and ability of the Government of Liberia to fund recurrent cost. All of the capital expenditures for broadcast equipment and buildings will be financed through the AID loan. The GOL will have no major investment expenses from its current budgets. Because of the tight national budget, GOL costs for the first two years have been kept to a minimum. After that, the costs rise but the implementing Ministries, and the Ministries of Planning and of Finance have reviewed the costs and approved the levels proposed. Although the GOL budgets are tight for the next two years, there are still funds available to support high priority projects.

The second issue is to what extent does the expenditure of funds reflect the stated desire for decentralization and rural development (See Section III C.) Obviously the activities at the Programming Service Unit are in support of the regional stations, but an excessive expenditure of funds on the central facility would reflect an inappropriate design. The following table summarizes by major category the central and regional expenditures.

COMPARATIVE COSTS
LRON (\$000)

ITEM	REGIONAL	PSU
Personnel	1671	1210
Technical Assistance	1520	1685
Participant Training	162	310
Equipment and Const.	3432	470
PCV Support	308	336
TOTAL*	<u>7093</u>	<u>4011</u>

64% of the assignable funds will be spent in the regional stations. Given the advantages of certain central programming and planning and the economies of scale at the PSU, the mix of funds seems reasonable.

* Inflation, contingency and other cost that cannot be assigned to a particular unit are not included in the total.

Finally, the financial plans show that in the task of institutionalizing the Liberian Rural Communication Network the project is providing loan funds for capital cost and grant funds for human capital development. Since investment in human resources has proven to provide the highest economic returns to a country, the budget allocations for training and technical assistance are relatively high. The key to successful institutional development is the quality, training and experience of the individuals brought to work at the institution. Long after the radio equipment has been scrapped, the human capacity development by the project will continue.

In summary, the project expenditures are in line with the Liberian Government's priorities and reflect its capability to finance such activities and promote decentralization and institution building through human resource development.

V. IMPLEMENTATION PLAN

A. Project Schedule

A proposed project implementation schedule showing key project activities appears in Table 1. This table along with the chart for the LRCN Staff Plan (Chart 2) presents a detailed list and timing of project actions, events and responsibilities.

Because of the long lead time needed to prepare for broadcasting, a number of actions should be taken as soon as possible after the project agreement is signed. The Project Implementation Order/Technical Assistance should be executed in the same month as the Proag. The process to contract for technical assistance and coordination of training will follow the usual contracting procedures with the final selection of the contracting entity and individual advisor, subject to USAID and GOL approval.

The Contractors planning for training will need to be both flexible and creative since they will be charged with the responsibility of coordinating the placement of all trainees. Some of the trainees can be placed at a single institution for all of their training, but the contractor may wish to propose additional or alternate training sites for the specialty areas. Because of the diversity.

of specialties, it is unreasonable to expect a single institution to be strong in all these areas. All proposals should describe the types of short-term training that will or may be needed and describe how these would be staffed and implemented. Identification of third country sites for specific types of short-term training should be made. Evidence of the willingness of these third country sites to accept the LRCN trainees should be furnished.

The contractor will provide assistance on site at the the US institution to facilitate student placement, to assist with relocation and to provide orientation and guidance to the trainees, and to generally coordinate the contractor's overall technical support.

The contractor will be expected to assist LBS and the LRCN with the procurement of broadcast commodities. This will include refining specifications and evaluating the proposals for the transmitters, antennas and studio equipment.

The institutional contract will include funds for household furniture, office supplies, miscellaneous office equipment, and vehicle repair and maintenance. The contractor vehicles will be purchased under the loan portion of the project by LBS.

B. Procurement plan

All procurement under the loan portion of the project will be conducted by the Liberian Broadcast System which will receive the assistance of the contractor and USPID in preparing the commodity order. Annex E of this paper contains a listing of the equipment and commodities needed by the project. LBS will need additional specifications and a plan that meets AID financed commodity requirements. The contractor will work with LBS to create the detailed lists and procurement plan. It is imperative that LBS order the equipment in the first six months of the project in order to have the equipment available for installation at the end of year two.

The authorized source of procurement for the project is Code 000. Construction of project facilities under the loan will be handled through the usual GOL procedures that ensure competition and reasonable cost estimates. 611aa certification appears in Annex D. No procurement waivers are anticipated at this time.

Detailed Implementation Schedule

<u>MONTHS</u>	<u>DESCRIPTION</u>	<u>ACTION AGENT</u>
0	Submission of PP to AID/W	USAID
2	Approval of PP by AID/W	AID/W
3	Signing of Project Agreement	USAID/GOL
3	Submission of PIO/T	USAID
4	LRCN Director General employed by GOL	GOL
4	Broadcast sites designs finalized ELBC spare parts ordered	GOL
4	Request for Technical Assistance Proposals issued	USAID
6	Building Plan for Broadcast Facilities and Central Program Service Unit approved; construction contracting begins	GOL
6	LRCN Sr. staff to US as participant trainees	USAID
7	Contractor selected	AID/W USAID GOL
7	Contractor Advance TDY Adm. Officer arrives	Contractor
	Vehicle procurement initiated	GOL
9	TA team leader arrives	Contractor
10	Short term consultant arrives to plan baseline study	Contractor
12	Engineer, Evaluator and Radio Programmer arrive	Contractor
12	Project Implementation Plan revised and Life-of-Project Work Plan approved.	GOL/Contractor
12	Specs. for broadcast transmitters, antenna and studios completed. Invitations to bid let	GOL
14	Plan for collection of baseline data and needs assessment survey developed with service ministries	GOL/Contractor
14	Commodities procurement completed	GOL
18	Broadcast technician advisor arrives	Contractor
18	Building construction and electrification completed-4 regional stations & central studio	GOL
18	Antenna and equipment specialist arrives to begin installation	Contractor
18	Broadcast equipment and other commodities arrive	Contractor
18	Baseline and needs assessment data analyzed	Contractor/GOL

Table 1

<u>MONTHS</u>	<u>DESCRIPTION</u>	<u>ACTION AGENT</u>
18	First year project evaluation completed	Contractor/AID
18	From needs assessment data the Program Operations Committee begins program planning, time allocation and prioritization of broadcast schedule	LRCN
18	Local animators assigned in four regions Orientation and ST training started	GOL
19	Short term in-country training begins	
23	Support resources and media related to first broadcast cycle distributed to animators	GOL/LRCN
24	Preliminary test of programs with animators and graphic materials tested in selected villages using audio tape recorders	LRCN
24	Regional Program Committee formed	
26	Field test data analyzed and evaluated by ISD/evaluation specialist; reported to Central & Regional Program Committees	LRCN
27	Initial efforts at organizing self-help listening groups in villages in special needs areas using tape recorders and PCVs	LRCN
27	LRCN/ISD production teams begin work on priority programs	LPCN/Contractor
30	4 stations ready for broadcasting	LPCN
32	Regular daily broadcast (2-hours) begins	LPCN
32	Survey evaluation of audience size and listener reaction on sampling basis begins	LPCN
32	Broadcast times, frequency and program content intensively advertised	LRCN
36	Daily broadcast schedule increased to 4 hours daily	LRCN
39	Start second-cycle ST training of field animators	Contractor/GOL
39	Major evaluation	Contractor
40	Field evaluation of selected behavioral effects at village level begins	LRCN/ Contractor
40	Planning for 3 additional stations begins	
40	Personnel for the fifth, sixth and seventh stations are hired; training begins	LPCN
41	Commodity procurement begins and construction contracting process initiated for last three stations	LRS

Table 1

<u>MONTHS</u>	<u>DESCRIPTION</u>	<u>ACTION AGENCY</u>
54	Operation of the last three-stations begins	LRCN
66	Major Evaluation	USAID/LBS
78	Final field evaluation survey data collection begins	Contractor/LRCN
81	Team leader advisor departs	Contractor
94	LRCN in steady-state of production and broadcast effectiveness	LRCN
94	Final project report submitted	Contractor

VI. Project Evaluation Plan

The selection of radio as a primary information delivery system and as a village catalyst is frequently justified on grounds of access to otherwise unreached populations, high-quality education, and low per capita cost. This project will, therefore, be assessed on these three counts by AID and GOL with the assistance of short term consultants with expertise in the evaluation of development supported radio projects. Funds have been programmed for evaluation through the technical assistance contract.

GOL and AID will set up evaluations of project implementation and accomplishments. The evaluation will assess the above justifications and the following impacts:

- a. The development impacts of the project i.e. :
Who was reached by the LRCN? With what messages? What effects did the message have? Who benefited most?
- b. Organization and management of the LRCN, i.e. :
Were staff adequately trained? Were they in position in time? What was the nature of intra-organizational relationships among different specialists (production, instructional design, community organization, evaluation and content) and between the program service unit and regional radio stations? How well did the Program Operations Committees work? What were the problems with community organization around radio listening?

The Evaluation Supervisor at the LRCN and the technical advisor on evaluation to the project will collaborate with a technical assistance consultant to design appropriate evaluation parameters that address items a. and b. above. Further, the group will develop a detailed evaluation plan that will include the following:

1. Baseline establishment

Pre-project implementation baseline data collection from the transmitter coverage areas on levels of information, skills and attitudes related to agriculture, health, education, and overall regional development. The data will be qualitative and quantitative in nature, and will use the survey interview and anthropological participant observation methods. Local-language speaking interviewers

will be recruited from the departments of education, sociology and psychology at Cuttington College and at the University of Liberia. If need be, the technical assistance contractor will handle data analysis overseas by computer to expedite provision of this information to members of the LPCN's staff and Regional and Central Program Operations Committees. Pre-project baseline data for project formulation is rarely achieved but is highly desirable. This activity must start one year before the transmitters are expected to be on the air.

2. Mid-course assessments

Small focussed studies on specific questions will be undertaken periodically by the Evaluation Supervisor and the Evaluation Advisor. The studies will be based on questions generated by the project's progress toward it's goals and by findings and observations from the instructional designers program try-outs and the community organizers' group discussions. Examples of questions that will be the basis for study are as follows:

How many women at what age, occupation and family status levels are listening to which programs in the Zwedru transmission area? Is the first quarter of science-education radio programs reaching its educational objectives? What are village health workers' reactions to radio programs in health and nutrition? How well are Program Operations Committees working? Findings from these studies will be fed back to all the LRCN staff, experts, advisors and policy makers to enable mid-course corrections, in addition to establishing milestones in the project's development.

3. Major evaluations

The project will be evaluated four times during the course of its seven year life. The evaluations are scheduled as follows and each will use the parameters set out by the evaluation study group.

(a) Progress evaluation (month 18):

This review will be a simple evaluation of project progress and the logic of the original design. It is scheduled early enough that changes can be made in the design and certain assumptions can be verified. This evaluation will be coordinated by the head of the consultancy team and include USAID and LBS officials.

(b) First major evaluation (month 39)

After the first four stations have been broadcasting for a year, a mid-project evaluation will be undertaken to assess its success especially in relation to the variables that were evaluated in the baseline. The selection of variables and related issues will be based on mid-course assessments and program feedback. This evaluation will be a joint undertaking of USAID, LRCN, and the contractor who will provide short term evaluation assistance.

(c) Second major evaluation (month 66)

This evaluation will be in form and substance similar to the first. It will follow by approximately a year the opening of the last three stations and will evaluate their performance. The evaluation will also determine the self-sustaining nature and the success of the first four stations.

(d) End-of-project status

Six months before the end of the project, data collection will start on the same variables assessed at the baseline. The common core of questions and the possibility of interviewing some of the same individuals before and after the project is crucial to help establish a change factor attributable, in part, to the radio input. Additional areas evaluated will be the nature and intensity of inputs, extent of coordination of inputs, success of institutional development, self-sustaining nature of LRCN, and local training capability.

All evaluation findings will be included in an End-of Project Report and made available to all LRCN-related organizations, AID offices, other radio-education projects and interested teaching and research institutions.

VII PROJECT ANALYSESA. Technical Analysis1. Communciation Systems

A challenge of major proportion to the Liberian Government is how to accelerate efforts for improving the condition of living of the nation's rural poor. These people, a large majority of the population, are living at subsistence levels in remote areas where communications, education and ordinary social services are minimal or non-existent, lives are bleak and their lifespans are short. Infant mortality is nearly 170 per thousand and over half the deaths in the country are of children under five.

It is to the credit of the Liberian Government that it recognizes this national problem and has made integrated rural development and decentralization of Government services two of its highest priorities. As mentioned previously, many field service personnel have been employed and assigned to the rural areas. These include agriculture extension agents, health workers, nurses, physician assistants and school teachers. Because of poor roads and no means of mass communication, the contribution of these field agents is limited to the relatively few people they can reach personally. For the immediate future there will not be enough of these field personnel to help more than a small fraction of the rural poor.

A systematic examination of this problem and a search for alternative solutions suggested two possibilities:

1. Substantial expansion of the number of field agents.
2. A mass media approach using either television or radio.

The first can be rejected almost by inspection. While the numbers of field agents is being expanded as rapidly as possible, even with minimal training, the rate of increase is barely keeping pace with population growth. There simply are not enough qualified field workers to meet the need, nor will there be in the next two decades.

Neither is public television a viable option. The Liberian Broadcast Company has begun limited production and broadcast of television in the Monrovia area, but the cost of receivers and the initial capital investment are both very high. No feasibility exists within the foreseeable future for expanded national TV coverage by microwave relay linkage. And even if there were, the rural villages are without electricity or receivers. It will be some years before Liberia's economic capacity will be adequately developed to make national television network a realistic possibility.

On the other hand, mass communication via radio appears to be a realistic alternative. At the present time, Liberia has two major radio facilities: ELBC, the radio arm of the Liberian Broadcasting Company and FLWA, a privately owned station, which broadcasts religious programs.

ELBC, State-owned but organized along commercial lines, features news and music in a general format. The range of its AM transmitter is quite limited, reaching only about 50 miles from Monrovia. A 50 KW short-wave transmitter does allow, weather permitting, programs to be heard by people with shortwave receivers throughout the nation. However, the transmitter has been down since the fall of 1979 because ELBC has not been able to afford to buy some rather expensive parts that blew out at that time. A large portion of ELBC news content centers around the speeches and travel of national officials. Its daily programming schedule is not published, and less than four hours total time weekly (in 15-minute segments) is devoted to broadcasts using local languages. Very few informational programs are produced by the Ministries of Health, Agriculture, Education and Information. With the exception of State functions, all air times including Ministry produced educational program - must be paid for on a commercial basis. Since the coup, some changes have taken place in the management and direction of the ELBC radio system. It has been placed as a division within the newly formed Liberian Broadcast System, and autonomous government agency. It is the intent of the government to increase public services and development related broadcasting but to date little change has taken place. One serious problem is that there is a lack of infrastructure to support this new direction in programming.

ELWA, a non-commercial, religious radio network, broadcasts in 45 languages (17 of which are Liberian), and has a range which extends beyond Liberia. Most of its programming consists of religious themes (including a cassette-based Bible Correspondence Course program for 500 church members), but it also includes some news, cultural and educational messages. Five very powerful transmitters, five well-equipped control rooms and recording studios, and three small recording and transmission booths are in use. Facilities also exist for outside live broadcasts. ELWA has offered to assist the Ministry of Education to broadcast educational programs by making available one of its transmitters, which lie idle between 0900-1400 hours, Monday-Friday, with the MOE assuming responsibility for preparing the programs and paying a nominal charge of about \$20 hourly to cover the costs of electricity and overtime to the broadcast staff. The Ministry of Education plans to take advantage of this offer.

In summary, Liberia's existing radio broadcasting system is wholly inadequate to support the goals of comprehensive rural development. In order to respond to the development needs of the population, the GOL must strive to extend radio coverage significantly and develop the capacity to program for development, both self-help and government promoted. English and local language broadcasts pegged at the understanding level of the rural populace are essential.

Radio for rural development has been used in other nations with considerable success. A three year field evaluation of a radio-based, non-formal education program for farm families of Columbia, South America was completed in late 1979 (Morgan, Muhlman, and Masoner, 1979). It reported that daily radio programs, when supported by interpersonal communication and other media, had a significant effect on the improvement of the condition of living of the Colombian rural population. Effects were assessed in terms of changed knowledge, practices and attitudes in the areas of health, agriculture and basic education, and these effects were positive and significant. Similar findings were reported from the Guatemalan Basic Village Education Project (Nesman 1978).

On the basis of considerable experience and research on the role of mass media and interpersonal communication in the developing nations of Africa, Asia, Latin America and the Middle East, the following general observations served as guidelines in the GOL decision to establish and operate a rural broadcasting service in Liberia:

1. Radio broadcasting is the mass communication medium that is the most effective and efficient means of reaching the widest audience of inaccessible rural people.
2. Radio programs about health, nutrition, agriculture and practical education can be stimulating and interesting to rural audiences if they are planned carefully to meet the needs of rural people; if they are presented in an appropriate format, (using the preferred language, using traditional/folk artistic and cultural forms) and if a variety of production styles (dialogue, dramatization, popular music and narrative) are used.
3. The majority of Liberian rural families can afford an inexpensive, transistorized, battery-powered medium wa

receivers. It has been estimated that there is at least one such radio in every village in the country and that one out of three families already owns a radio.

4. Illiterate people who are dependent on oral communication can benefit from radio broadcasting, and there is considerable evidence that radio carries with it a high degree of credibility.

5. Radio can report information much more quickly than print, and for remote areas it is more immediate than personal communication.

6. Multiple media is more effective than single-channel communication and two-way communication is essential to keep the entire multi-media system responsive to its own progress toward accomplishing its goals. Development support communication is best viewed as a process of information exchange that includes understanding the rural audience and their needs, communication planning around selected strategies, message production, dissemination, reception in listening groups, and feedback.

7. The effectiveness of development-oriented information presented by radio and supplementary materials is maximized when some type of listening/discussion group is organized at the village or family level. Research shows that individual listening, without follow-up discussion is less effective in bringing about desired behavioral change than organized listening.

8. Listening groups are more effective if each group has a leader (animator) who has been provided with a minimum of training in the group dynamics and leadership.

9. Project evaluation must be formative up to final project evaluation.

After making the decision to use radio, the final questions are what type of radio and where? In answering these questions a thorough engineering analysis was made by the GOL and USAID relying on site inspections, technical reports published by the Ministry of Information and interviews with ELBC, ELWA and Voice of America engineers. Among those variables taken into account were the availability of electrical power, soil conductivity, climate, accessibility to site, population distribution, and system maintenance requirements. Also taken into consideration was the need for each regional outlet to be responsive to the unique local needs and languages. The regional stations will be more than simple electronic message relays;

they will also serve as listening posts to which the villagers' needs can be expressed, around which responsive programming will be developed.

Based on these considerations, and the engineering recommendations the GOL has decided to install seven MW transmission stations. The proposed sites are Buchanan, Zwedru, Gbarnga, Voinjama, Robertsport, Saniquellie and Greenville. Approximately 1.2 million people will be able to hear the daily broadcasts from these sites. One factor in the decision to opt for AM transmission (versus shortwave or FM) was the availability of receivers. AM receivers are already widely available and replacement costs are low in comparison to short wave receivers. Also, within the broadcast range, AM signals are more intelligible and reliable throughout the normal broadcast day than are shortwave transmissions. Finally, AM commercial broadcasting has been underway since the early 1900's; technology is widely understood and easily learned. Comparatively speaking, it is a simple technology. As Liberian technical sophistication increases it may be appropriate to consider using FM transmission, if the number of broadcasts sites is expanded in the years ahead.

Based upon the above, this project utilizes broadcast and program development technologies that are feasible and efficient in achieving the outputs and purposes of this project.

2. Engineering analysis

The hardware recommendation for seven (7) regional radio production/transmitter facilities and one central production facility were made after a careful review of the following:

1. Existing broadcast facilities in Liberia.
2. Effectiveness of existing facilities in terms of coverage area and signal quality.
3. Available radio frequency assignments, permissible power and antenna configurations.
4. Previous data concerning calculated coverage available from various geographical locations within Liberia using various levels of radiated power at MW, SW, and VHF frequencies.
5. Estimated and measured ground conductivities and ambient noise levels at various locations and in different seasons.

6 Numbers and types of radio receivers available in areas around Monrovia and the up-country .

7 Locations which have electrical power available for broadcasting, access possible at all times for the year and appropriate land for antenna system construction.

8 Previous recommendations concerning rural broadcast in Liberia.

9 Expressed requirements of Liberian Government, Ministries and USAID representatives.

10 Advantages and disadvantages of various radio frequencies of transmission (AM, FM, SW).

11 Effectiveness and reliability of telecommunication facilities.

12 Availability of personnel for installing and maintaining radio production/transmitting plants.

13 Existing training potential within Liberia including institutions of higher learning and broadcast technology programs at ELWA and VOA.

a. Choice of Radio Band

The prevalent mode of radio broadcasting and reception in Liberia is Amplitude Modulation in the short wave and medium wave spectrum. Shortwave is presently the most effective because to date there have been no alternatives in areas outside Monrovia. However, the service is inconsistent due to tropical propagation which assures service only during select periods of the day and then with objectionable selective fading. A consistently poor S/N ratio with consistent signal levels, such as produced in fringe MW or FM, is preferable to fading which cannot be compensated for by the receiver.

The project objective of decentralization to enhance regional and self help development would not be met if the broadcast transmitters are located in Monrovia using SW propagations. There would be very little capital savings since four transmitters would be required. Short wave service cannot be assured at all times which seriously hampers the effectiveness of certain educational programs.

The use of VHF-FM broadcasting could be a viable alternative in meeting the LPCN needs. It features economy of operation (approximately 15 percent less than MW-AM), maximum use of

radiated power through the use of simple directional antennas, availability of assignment in all counties, consistent coverage with relative immunity to ambient noise and earth productivity effects and availability of SCA service for school use in second language or instructional broadcasting.

VHF-FM equipment is less costly for the transmitter proper and features somewhat lower power consumption. However the cost of related studio equipment is equivalent to that used in MW-AM unless stereo and/or SCA service is utilized in which case the cost of that equipment and the ground radial system are approximately equal. Any cost savings for the VHF antenna system would be negated by the cost of antenna site preparation due to the need to use the tallest possible tower on the highest available terrain.

VHF-FM signal propagation is such that extensive study must be carried out to insure a usable grade of service in a county which features rugged terrain and extremely heavy forestation. The obviously desirable sites for FM transmission cannot be considered at this time due to lack of access and electrical power. VHF-FM receivers are not widely distributed nor available in Liberia at this time and the typical low cost portables on the market are relatively insensitive.

Extensive study of topography, channel and power allocation, future road and electrical power line construction must be carried out before attempts are made to build a system of VHF-FM transmitting facilities for wide area service in Liberia.

Many studies have been carried out in the past 15 years on the use of MW-AM radio transmission to serve Liberia on a national basis. These have ranged from centralized super-power facilities to regional facilities in each county having a high relative population. Earth conductivity determines to a large extent the service that is rendered with this type of transmission. Little hard data exists on the conductivity in Liberia but guesses range from 5 mmho/m to 1 mmho/m. A minimum of 1 mmho/m is assumed here for worst case conditions.

Ambient noise is a significant factor that must also be considered. However, the only measurements available indicate that it is not high enough to warrant the requirement of a 3 mv/m to provide satisfactory service to rural areas as suggested in some findings. Satisfactory signal to noise ratios are a subjective thing and while 20 db is considered low in technical terms it is not uncommon to find this grade of service satisfactory when little else in the way of desired programming is available. Taking their worst case figures, it

can be expected that a 10 KW transmitters with 1/4 wave verticle radiators will produce a reasonable daytime grade of service in a radius of 45 and 60 miles. Unfortunately, some of the coverage is lost to the sea or neighboring countries because of the location of the proposed sites, but directional antenna systems are of little gain value, being mainly protective devices. Relocation of proposed sites to isolated but population centered areas would reduce the unserved districts; however, electrical power is unavailable and access difficult.

The proliferation on MW-AM receivers and the need to start somewhere without undue delay prompts the recommendation to begin the use of MW-AM facilities at the suggested sites. MW-AM transmission is a tried and proven technology that has been developed since the first quarter of this century and offers more service for investment of money and expertise than any other mode of radio broadcasting. Sufficient assignments are available to serve Liberia completely in the MW range as the need arises. (See Engineering Annex)

b. Site selection and station costs

The joint AID/GOL design committee selected sites based on the following criteria.

- a. Availability of reliable power
- b. Potential listener population
- c. Language groups
- d. Development activity in region
- e. Socio-political situation/constraints
- f. Existing radio coverage
- g. Accessibility
- h. Community readiness and support

Based on these criteria, the county capital cities of Gbarnga, Buchanan, Zwedru, Voinjama, Robertsport, Greenville and Sanniquellie were tentatively selected subject to an engineering site visit. Those visits, a summary of which appears in the Engineering Annex, concluded that each city has an appropriate site for the transmission and studio facilities. An adequate station can be built in each of the cities at a reasonable costs. Estimated costs are summarized in Chart 6 with the supporting analysis and equipment lists appearing in the Engineering Annex.

c. Equipment specifications

It is intended that this project be supplied with equipment of current design, of good reputation and proven, extensive field service. The intent is to procure a complete package for each of the eight facilities and it should be the responsibility of the vendor to assure its completeness to the last detail. All components should meet applicable EIA and FCC standards and exceed manufactures published specifications.

The facilities to be equipped are as follows:

1. Monrovia: A studio production unit capable of recording and duplicating radio programs for distribution to the regional radio stations will be built. It will be composed of two studios, two announcer booths, two control room facilities with record/playback capability in the 1/4" reel to reel, NAB cartridge and studio cassette formats. Broadcast quality recording equipment will be procured. Duplication capability from reel to reel to cassette is provided by an 8 to 1 duplicator. Multiple copy of reel to reel and cartridge presentation are to be accomplished with duplicating equipment in a real time mode until experience dictates expansion. Equipment will be common with that of regional sites to promote maximum maintenance capacity.
2. Regional stations: a 10 KW AM- medium wave transmitter facility using a series fed vertical radiator with radial ground system will be built at each station. The equipment purchases for each of the seven sites will be sufficient for a single studio, two control rooms, transmitting facilities with attendant office, storage and repair space. The facility will be air-conditioned and equipped with sufficient stand-by electrical power capacity to provide 200 hours of broadcast time in the absense of commerical power. As much as possible, recording and reproducing equipment should be immune to the effects of line voltage and frequency variation. Station equipment is

standardized as much as possible to promote maximum maintenance capability with the minimum training and spare parts inventory.

Maintenance of the established facilities will be one of the most difficult problems at the regional stations. The difficulties lie in the availability of trained technical personnel, the supply of spare parts to prevent extended outages, travel between sites for delivery of parts and expertise, and the humid environment.

Each site will have a full time technician for routine preventative maintenance and break down repair. He must be an experienced electronic technician who can diagnose and repair electronic, electrical and mechanical equipment, excluding office equipment, air conditioning and antennas. Site technicians will be responsible to a Chief Engineer for maintenance of the system.

Each site should be equipped with a basic spares and test equipment. The central unit should have an extensive spare parts inventory (approximately 10% of equipment cost) and provided technical expertise and additional test equipment as required by the regional sites. Preventative maintenance routines are a "must" in order to (1) combat the detrimental effects of dirt, dust, moisture, and water on the equipment. (2) keep the equipment in condition to insure uninterrupted operation. (3) maintain the equipment so that it always operates at maximum efficiency and (4) prolong its useful life.

B. Social Soundness Analysis

This project will provide a communication service to support development efforts for and with the rural poor. The project has no prescribed message content, rather it provides a message delivery system which increases access and involvement of the poor. The Project is designed to:

1. Assist development agencies in formulating more effective messages.
2. Enhance the involvement of rural populations in a truly participatory development effort.
3. Stimulate information flow from the people to the government agencies, as well as to the people from the government agencies. Feedback will be accompanied by the use of local animators to interact and collect information from villagers and by putting messages from the Government into a context that can be understood by villagers.

The LRCN will support existing and planned development and does not introduce any content not designed by responsible citizens and government officials. Additionally, the program development procedures are firmly grounded in the widely accepted and successful Instructional Systems Design methodology. Using this methodology, the LRCN will emphasize the necessity for thorough analysis of audience characteristics as the basis for program design, and for systematic collection and response to feedback to improve program effectiveness. These strategies, over time, should result in development activities that are more sharply focussed and relevant to perceived needs. Thus, this analysis will deal with those concerns directly related to a radio-based network to support development activities, not with the development activities themselves.

a. General Characteristics of the Target Audience

Approximately 80 percent of all Liberians are located in rural areas. The vast majority of these rural Liberians live in small villages and towns approximately two-thirds of which are located within 10 miles of an existing or proposed motor road of some type (i.e., all weather or feeder). The typical rural family is engaged in subsistence level farming using the slash-and-burn method of upland rice production. While there are several major programs that are introducing improved health practices, new methods of farming or improved educational opportunities, the majority of rural inhabitants still follow

traditional, social and cultural patterns with little improvement in the quality of rural life.

Through the expanding outreach programs of health, agriculture, and education and the current thrust for decentralized government infrastructure and services, there are rapidly growing expectations on the part of all rural citizens. The farmer, male or female welcomes information and assistance that will increase rice production or add cash crops. Rural women are also seeking ways to combat infant mortality, improve housing and provide a more nutritional diet. However, there is a paucity of reliable and relevant information and services available to rural inhabitants. Most farm families are almost completely dependent upon second and third hand information about services that do exist and little or no information is available about what can be done locally to improve the family and community life on a self help basis. Also the information concerning the services available to farm families are often incomprehensible to the target group and as a result, they are generally underutilized. Consequently, there is a growing demand for more information by rural persons regarding basic factors affecting their lives. There is an equally growing desire to become more involved in the decisions and activities which the rural folk are being requested to support.

b. Social Benefits

Successful implementation of the project will increase access to development information by hard-to-reach segments of the population: illiterates, residents of remote villages, those who have limited facility in spoken English, people who are not part of a formal education program, and women. Improved access will be accomplished by adding new radio stations with rural coverage, local language programming, utilizing local animators to improve listeners' habits and increase the listening audience, and scheduling which takes into consideration the life-styles and behavior patterns of specific audience sub-groups.

Improved local pride and confidence and increased participation in development activities will result from three major thrusts of the LRCN:

1. Upward vertical communication: the flow of information from the bottom (village level and sub-groups of villages) up to more centralized planning and implementation agencies.

2. Horizontal communication: the flow of information from person-to-person, group-to-group, or village-to-village and

3. Downward vertical communication: the flow of information from government agencies downward to stimulate community level self-help activities.

c. Beneficiaries

Approximately 1.2 million people will benefit from this project. These are people who will gain access to development information through increase transmission capacity and local language broadcasting.

Young people under fifteen years of age (42% of Liberia's population) who are not attending school will be one of the prime beneficiary groups. The half of this group that do not have access to schooling will benefit from the non-formal education programs and general development information broadcasts. The two thirds of the rural population that does not have access to modern health care will receive health and sanitation information from the radio. Programs to improve the farming techniques for the 175,000 farm families in the LPCN audience will improve farm incomes and nutrition.

Women, in particular, will benefit since more women are illiterate, more women have not entered formal education and decision making processes, and more women do not understand English. The nature of women's economic contribution and of their child-bearing and nurturing function mitigates against continuing active involvement in formal education or other activities that take them from home. This project should alleviate some of those inequities, by giving them access to information.

d. Social Validity

This project does not involve changes in role, relocation of people or restructuring of existing organization. Rather, it is designed to enhance and build on social features of the various sub-segments of the population. It is planned that each Regional Unit will take on the distinct characteristics of its constituents and will be supported by and responsive to its social milieu and immediate environmental context. Radio as a medium of communication fits well in a social context in Liberia. The oral tradition is still strong as the primary medium of communication and cultural transmission throughout Liberia. Further, the low literacy rate (25% or less) mitigates against major reliance on print.

Local production and programming, with emphasis on broadcasting in vernacular languages, will increase access to information by groups who were previously excluded because they could not understand the national language. Use of local animators increases flexibility and adaptive capacity to meet local situations since utilization and feedback collection activities can be designed to fit specific local circumstances. Further, the emphasis on involvement of local people as a resource for broadcasts and to assist with actual production insures that the programming is responsible to peoples' perceived needs.

Regional Units will be located strategically in areas of population, and conform to overall ethnic distribution patterns to insure maximum impact and relevancy. Emphasis on regional broadcasting and production units supports the government's emphasis on decentralization and the recommendations of development experts. There is increasing and overwhelming evidence that development activities to be successful must grow out of total involvement of people-taking into account their urgent, felt needs. As Liberians become more aware, development efforts will receive greater pressure to provide support and to involve rural populations in more meaningful ways. As rural people become more involved and better informed they become increasingly capable of assisting in the development process.

e. Diffusion

The project will provide broadcast coverage to areas comprising nearly all of populated rural Liberia desired impact.

In summary, the proposed Liberian Rural Communication Network is socio-culturally feasible. No values, beliefs, social structure or local organizations impede project development. In fact, the project is designed to enhance and build upon local conditions and culture. The planned social consequences are positive and the number of beneficiaries substantial. The project will enhance rural participation in development and enhance the rural residents access to resources and opportunities.

C. Economic Analysis

The Rural Information System established through this project will encourage development of new knowledge, attitudes and practices in the traditional society of rural Liberia. Studies of rural broadcasting projects have shown it to be difficult to measure the changes made by rural information systems relying on radio broadcasts. To place an economic value on these changes, even after completion of the project, is equally difficult. Without economically quantifiable benefits, investment analysis is impossible for the project. Thus, the economic analysis will consider the relative cost effectiveness of the proposed solution to the problem of inadequate channels for development information and self-help promotion.

First the relative cost advantage of selecting a mass media approach rather than a system of animators is obvious. GOL financial capacity to hire the large number of animators needed to make an impact similar to a mass media campaign approach does not exist. Likewise, the selection of radio rather than television was based on the relatively high cost of television transmission facilities and receivers versus those of radio. In the target area where literacy is below 25%, the advantages of radio over printed material are self evident. Thus radio is the least cost channel of communication for rural Liberia. The project will reach 1.2 million rural Liberians at a cost of less than \$9/person/year.

The initial cost of creating the system will be a large expense in comparison to the GOL gross expenditure. But this type of institution building in any area is generally a relative high cost undertaking because of expenditures on training and the building of new facilities. However, a project such as this is an attractive economic proposition to the government because it intensifies the use of government programs and facilities and will improve the quality of life of some radio listeners independent of government assistance programs. Student numbers, whether in formal or non-formal programs, will increase considerably without a corresponding increase in the number of staff or in the capital spent on buildings and equipment. In the health area, preventative health techniques and sanitation programs will reach greater numbers of people; thus improving the general health of rural Liberians. Knowledge of government health facilities, and thus their use, will increase. Greater numbers of small farmers will have access to new farming knowledge and improved agricultural techniques. Other government programs will benefit by increased exposure and participation of the rural population in the development activities. Essentially, the project is cost effective in the sense of stretching the use or expanding the coverage of existing government activities.

Although a project objective is to reach the total rural population with development information, radio coverage per se is recognized as just one requirement of many for an effective rural information system. In order to accomplish the objectives of increased local participation and improved district and county communications channels, a decentralized system of transmitters, rather than one large centrally located one, is being designed. In terms of coverage, one large transmitter is more cost effective, but the possibilities of promoting local participation are limited. Thus the choice of 7 sites is the least cost transmission method in relation to the total of project objectives. The transmission sites are located in the county capitals and in the most densely populated areas of rural Liberia. Thus, providing opportunity for local participation and the greatest number of potential listeners.

The broadcast sites were chosen so not to compete with existing radio coverage. The plan is to disseminate development information generated through the project to Montserrado County over the existing stations, ELBC and ELWA. By using existing facilities, project costs will be minimized.

In order to minimize the cost of program production, the central programming and production facility, PSU, will be created to feed material to the stations. The rural stations will have a programming capacity, but it will be limited in nature so that duplication of machinery and capacity will be minimum. Economics of scale will be realized in the central production unit.

In summary, the project is the least cost approach for creating a rural information system which will expand and extend government facilities and promote local participation in development.

**PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK**

**Project Title: Rural Information Systems Project:
Liberian Rural Communications Network**

**Life of Project
From FY 80 to FY 87**

Date Prepared: June 1980

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><u>Program or Sector Goal</u></p> <p>To provide adequate, relevant and effective learning opportunities for all who want to learn at a cost commensurate with available resources</p>	<p><u>Measures of Goal Achievement</u></p> <ol style="list-style-type: none"> 1. Increased utilization of existing health, agricultural, educational and other GOL facilities, services and personnel. 2. Greater independence and self-sufficiency in the rural areas. 	<ol style="list-style-type: none"> 1. GOL Ministry records and reports. 2. GOL Ministry records, reports and on-site observations. 	<ol style="list-style-type: none"> 1. GOL will continued to support current and proposed National Development efforts. 2. Rural and urban citizens will utilize and adopt improved practice.
<p><u>Purpose</u></p> <p>To develop, for rural Liberia, a Radio Network designed to enhance development.</p>	<p><u>End of Project Status</u></p> <ol style="list-style-type: none"> 1. Four regional stations staffed, funded and operating 8 hours per day. 2. A systematic two-way flow of information and feedback between GOL services, ministries and facilities and the rural recipients of these services. 3. Increased number of radio listeners and demand for more development information and assistance. 	<ol style="list-style-type: none"> 1. Project records and reports. Observation. 2. Ministry reports and on-site visits. 3. Surveys. 	<ol style="list-style-type: none"> 1. GOL funding will be available. 2. GOL Ministry personnel will be willing to work in a cooperative arrangement with other ministries and local government personnel. 3. That rural population can improve its level of development.

**PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK**

ANNEX A
Page Two

**Project Title: Rural Information Systems:
Liberia Rural Communications Network**

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><u>Outputs</u></p> <p>1. Trained Staff</p> <p>2. Adequate facilities and equipment.</p> <p>3. Information Programs and Materials</p> <p>4. Radio Forum and Self-help Channels</p>	<p><u>Magnitude of Outputs</u></p> <p>1. Levels of Staff trained a. 16 Central Programming staff b. 35 Regional Staff c. 30 Participating Ministry Staff (planners)</p> <p>2. Types a. Buildings 1. 7 Regional Broadcast studios and offices 2. 1 Programming Service Center and offices b. Equipment 1. 7 Transmitters 2. Equipment for 7 studios and 1 programming center</p> <p>3. Six hours per day of development information programs including news.</p> <p>4. Two hours per day of programs for self-help and local participation.</p>	<p>1. Through project records and site inspections.</p> <p>2. Inspection of 8 sites.</p> <p>3. Project and broadcast records. Program monitoring.</p> <p>4. Project and broadcast records, Program monitoring.</p>	<p>1. Qualified Liberians will be available for training.</p> <p>2. Studio facilities will be made available in accordance with project specifications and schedule.</p> <p>3. Development information can be programmed and conveyed effectively by radio to non-literate non-English speaking rural citizens.</p> <p>4. Rural residents do desire to improve their lives through self-help activities.</p>

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

ANNEX A
Page Three

Project Title: Rural Information Systems:
Liberian Rural Communications Network

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p><u>Inputs</u></p> <p>1. Technical Assistance</p> <p>2. Training</p> <p>3. Radio equipment and other commodities</p> <p>4. Construction</p>	<p><u>Implementation Target</u></p> <p>1. 25 1/2 person/years long term. 40 person/months short term.</p> <p>2. 46 person/months of short term. 104 person/months of long term. 6-8 in country training session.</p> <p>3. 7 Regional Broadcasting Stations. 1 Central Programming Service Unit Support Commodities</p> <p>4. 8 Studio/offices.</p>	<p>1. Project budget;Contractor reports.</p> <p>2. Project records.</p> <p>3. Site inspection.</p> <p>4. Site inspection</p>	<p>1. Qualified personnel available to come to Liberia.</p> <p>2. Personnel available for training.</p> <p>3. Suppliers available who will ship to Liberia.</p> <p>4. Construction contractors interested in building.</p>

- PROJECT CHECKLIST

Rural Information Systems

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE?
HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PRODUCT?

A. GENERAL CRITERIA FOR PROJECT

1. FY 79 App. Act Unnumbered; FAA Sec. 653 (b); Sec. 634A. (a) Describe how Committees on Appropriations of Senate and House have been or will be notified concerning the project; (b) Is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than \$1 million over that figure)?

a. A Congressional Notification will be sent before authorization.

b. Yes

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$100,000, will there be (a) engineering, financial, and other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

a. Yes

b. Yes

3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?

N/A

4. FAA Sec. 611(b); FY 79 App. Act Sec. 10i. If for water or water-related land resource construction, has project met the standards and criteria as per the Principles and Standards for Planning Water and Related Land Resources dated October 25, 1973?

N/A

5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project?

Yes

6. FAA Sec. 209. Is project susceptible of execution as part of regional or multilateral project? If so why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.

No, the project focus is on self-help local development.

A.

7. FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

8. FAA Sec. 601(b). Information and conclusion on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

9. FAA Sec. 612(b); Sec. 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized to meet the cost of contractual and other services.

10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

11. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

12. FY 79 App. Act Sec. 606. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar, or competing commodity?

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec. 102(b); 111; 113; 281a. Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained

- a. No affect
- b. No affect
- c. The development of all participatory organizations will be enhanced.
- d. The radio stations may inform the public of alternative sources.
- e. Yes, the project will promote more efficient techniques.
- f. Radio programs may promote free labor unions.

U.S. radic equipment will be used.

All project personnel and operating exp. anses will be paid by GOL.

No, the U.S. dollar is the local currency.

Yes.

N/A

- a. The project will involve and assist the poor in all ways listed.

B.1.a.

basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

b. FAA Sec. 103, 103A, 104, 105, 106, 107.
Is assistance being made available: (include only applicable paragraph which corresponds to source of funds used. If more than one fund source is used for project, include relevant paragraph for each fund source.)

(1) [103] for agriculture, rural development or nutrition; if so, extent to which activity is specifically designed to increase productivity and income of rural poor; [103A] if for agricultural research, is full account taken of needs of small farmers;

(2) [104] for population planning under sec. 104(b) or health under sec. 104(c); if so, extent to which activity emphasizes low-cost, integrated delivery systems for health, nutrition and family planning for the poorest people, with particular attention to the needs of mothers and young children, using paramedical and auxiliary medical personnel, clinics and health posts, commercial distribution systems and other modes of community research.

(3) [105] for education, public administration, or human resources development; if so, extent to which activity strengthens nonformal education, makes formal education more relevant, especially for rural families and urban poor, or strengthens management capability of institutions enabling the poor to participate in development;

(4) [106] for technical assistance, energy, research, reconstruction, and selected development problems; if so, extent activity is:

(i) technical cooperation and development, especially with U.S. private and voluntary, or regional and international development, organizations;

(ii) to help alleviate energy problems;

(iii) research into, and evaluation of, economic development processes and techniques;

(iv) reconstruction after natural or manmade disaster;

- b. The project should help cooperatives substantially.
- c. The project is a self-help activity.
- d. Women programs will be part of project.
- e. Little affect.

The information system established by this project will strengthen nonformal and formal education, especially for the rural poor.

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BEST AVAILABLE DOCUMENT

B.1.b.(4).

(v) for special development problem, and to enable proper utilization of earlier U.S. infrastructure, etc., assistance;

(vi) for programs of urban development, especially small labor-intensive enterprises, marketing systems, and financial or other institutions to help urban poor participate in economic and social development.

c. [107] Is appropriate effort placed on use of appropriate technology?

d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or has the latter cost-sharing requirement been waived for a "relatively least-developed" country)?

Yes

e. FAA Sec. 110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to the Congress been made, and efforts for other financing, or is the recipient country "relatively least developed"?

The grant period will run for 5 years and has been justified to Congress through the CN.

f. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental and political processes essential to self-government.

a. b

The project will encourage the flow of development information that recognized local needs, capacities, and encourages institutional development.

g. FAA Sec. 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase or productive capacities and self-sustaining economic growth?

Yes, very much so.

2. Development Assistance Project Criteria
(Loans Only)

a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan, including reasonableness of repayment prospects.

b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete in the U.S. with U.S. enterprise, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan?

ANNEX C

NNNNVV TAA936ESC165
PP RUTAMA
DE RUEHC #1695 3610346
ZNR UUUUUU ZZH
P 270027Z DEC 79
FM SECSTATE WASHDC
TO AMEMBASSY MONROVIA PRIORITY 3956
BT
UNCLAS STATE 331695

27Dec79 0715 kj1

DUE ~~BOOK~~ DATE: 12/31/79

ACTION: EHR
INFO: D/DD
DP
CHRON

Handwritten: N/A
28 Dec 79

AIDAC

E.O. 12065: N/A

TAGS:

SUBJECT: RESULTS OF REVIEW OF REVISED LIBERIA PID - RURAL
INFORMATION SERVICES
NSERS

REF: STATE 241176

1. THE SUBJECT PROJECT PROPOSAL REVIEWED ON NOVEMBER 21 WAS APPROVED FOR FURTHER DEVELOPMENT. COMMINGLING PROBLEM CITED REFTEL WAS DETERMINED TO HAVE BEEN ELIMINATED DUE RESTRUCTURING OF PROJECT.

2. USAID MAY PROCEED TOWARD PP PREPARATION IN ACCORDANCE WITH DIRECTIONS PER PARA 4 REFTEL AND IN ACCORDANCE WITH OTHER ISSUES RAISED DURING NOVEMBER 21 REVIEW. IN ADDITION IT IS RECOMMENDED THAT PP DEVELOPMENT FOLLOW CLOSELY SUGGESTION MADE IN HOTVEDT TO ANDERSON MEMO OF DECEMBER 3, 1979. (COPY HANDCARRIED BY ZELAYA, USAID DEPUTY CONTROLLER 12/11). OTHER ISSUES RAISED DURING REVIEW OF REVISED PID OUTLINED BRIEFLY BELOW.

A. MECHANISM FOR COORDINATING INFORMATION SUBMITTED BY GOL MINISTRIES (E.G. INFORMATION STEERING COMMITTEE) SHOULD BE IDENTIFIED.

B. EXTENT OF COMPLEMENTARITY/LINKAGES OF RURAL INFORMATION SERVICES PROJECT WITH OTHER USAID AND OTHER DONOR PROJECTS IN TARGET AREAS SHOULD BE FULLY DETAILED.

C. ROLE OF ANIMATORS SHOULD BE DESCRIBED IN FULL.

3. PER WHITTEN TO ANDERSON MEMO OF 12/18, AID/W IS ADVISED THAT MISSION PLANS FOLLOWING MEMBERSHIP FOR PP REVIEW COMMITTEE: C. HUSSICK, USAID/DR (CHAIRMAN), E. MCCLEOD, USAID/DP, J. WILLS, USAID/DP, L. DONNOVAN, USAID/EMG, S. GRANT, REDSO/W, EHR, D. D'ANTONIO, USAID/CO, A. PALEY, USAID/EO, H. REYNOLDS, USAID/EH;R AID/W ALSO ADVISED PER MONROVIA 9889 THAT DS/ED WILL BE REQUESTED PROVIDE APPROPRIATE TECHNICAL EXPERTISE FOR PP DESIGN.

4. AA/AFR APPROVES NEGATIVE DETERMINATION RECOMMENDED BY IEE. VANCE

BT
#1695

VV TAA46IESC355
PP RUTAMA
DE RUEHC #1176 2571203
ZNR UUUUU ZZH
P 132329Z SEP 79
FM SECSTATE WASHDC
TO AMEMBASSY MONROVIA PRIORITY 2351

ACTION: AID
INFO: AMB
DCM
ECON
CHRON

14 SEP 79 RDM 1200

BT
UNCLAS STATE 241176

AIDAC

E.O. 12065: N/A

DUE DATE: 9/19/79
ACTION: KHR
INFO: D/DD
DP
CHRON

NAN
M 9044

TAGS:

SUBJECT: RESULTS OF LIBERIA PID REVIEW OF RURAL INFORMATION SERVICES (669-0134)T

1. THE SUBJECT PROJECT PROPOSAL REVIEWED ON JUNE 27 WAS NOT APPROVED FOR FURTHER DEVELOPMENT BECAUSE OF COM-MINGLING PROBLEMS IT POSES. PLEASE ACCEPT OUR APOLOGIES FOR THE REGRETTABLE DELAY.
2. AFTER CAREFUL REVIEW OF PROPOSAL, GENERAL COUNSEL DETERMINED THAT IT WOULD ASSIST A PLOC PROJECT WITHIN THE MEANING OF SECTION 620 (H) OF THE FAA AND HANDBOOK 1, SUPPLEMENT B CHAPTER 9. THE GC CONCLUSION READS AS FOLLOWS; QUOTE THE PRC PROVISION OF FOUR 10 KW TRANS-MITTERS APPEARS TO CONSTITUTE A BLOC PROJECT WITHIN THE MEANING OF SECTION 620 (H) OF THE FAA. THE A.I.D. PROJECT WILL ASSIST THIS BLOC PROJECT BY SUPPLYING NECESSARY SOFTWARE SUPPLIES AND TRAINING IN THE USE OF THE TRANSMITTERS. SHOULD THE LIBERIAN MISSION AND EMBASSY RECOMMEND THE CONTINUANCE OF THIS PROJECT, WITH PRC SUPPLYING THE TRANSMITTERS, THE MATTER MUST BE SUBMITTED TO THE ADMINISTRATOR IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN CHAPTER 9 OF HANDBOOK 1, SUPP. B, FOR A DETERMINATION AS TO WHETHER THE A.I.D. ASSISTANCE IS CONTRARY TO THE BEST INTERESTS OF THE UNITED STATES. UNQUOTE.
3. COPY OF WILLIAMS, AFR/GC TO NICHOLSON, AFR/CWA MEMO PROVIDING DETAILED DISCUSSION THIS CONCLUSION BEING FORWARDED USAID VIA APO.

UNDESIRABLE FOR INVOLVEMENT IN PROJECT ACTIVITIES THROUGH
SUPPLY OF TRANSMITTERS TO CERTAIN RADIO STATIONS AND
RECOMMENDING A RULING THAT IT IS IN THE BEST INTERESTS
OF U.S. FOREIGN POLICY TO PROCEED WITH THE AID PROJECT
ACTIVITY IN ANY EVENT. IF SUCH A RECOMMENDATION IS
APPROVED BY THE ADMINISTRATOR, THE MISSION MAY PROCEED
TOWARD PP PREPARATION IN ACCORDANCE WITH THE OTHER TERMS
AND CONDITIONS OF THIS PID GUIDANCE CABLE. ON OTHER
HAND MISSION MAY WISH SEEK ALTERNATIVE SOLUTION E.G.,
RESTRUCTURING OF PROJECT SO THAT COMMINGLING PROBLEM
ELIMINATED. OTHER ISSUES RAISED DURING PID REVIEW
OUTLINED BRIEFLY BELOW.

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5.2411

A. DEVELOPMENT PROBLEMS FOCUS

DEVELOPMENT PROBLEM AREAS WHICH LEND THEMSELVES TO
RADIO TEACHING METHODS SHOULD BE DEFINED AND INDICATION
GIVEN OF HOW APPROPRIATE INSTRUCTIONAL MATERIALS
MIGHT BE DEVELOPED.

- PLANS FOR ENSURING BENEFICIARY FEEDBACK REGARDING RADIO
TEACHING MATERIALS AND METHODOLOGY SHOULD BE DETAILED.

B. INSTITUTIONAL/BUDGETARY CONSIDERATIONS

GOL INSTITUTION RESPONSIBLE FOR PROJECT IMPLEMENTATION
AND MANAGEMENT SHOULD BE IDENTIFIED AND PROJECT
RELATIONSHIPS WITH OTHER GOL EDUCATIONAL INSTITUTIONS
SPELLED OUT.

- BUDGET WHICH PROVIDES FOR PROJECT NEEDS UP UNTIL
THE POINT THE GOL CAN ASSUME FINANCIAL RESPONSIBILITY
SHOULD BE CAREFULLY DEVELOPED.

C. OTHER CONSIDERATIONS

- PID REVIEW COMMITTEE EXPRESSED CONCERN THAT TECHNICAL
NATURE OF PROJECT MIGHT PRECLUDE ADEQUATE MISSION REVIEW
OF A FINAL PP (DUE TO ABSENCE ON MISSION STAFF OF THE
NECESSARY TECHNICAL SPECIALISTS) AND URGES THE USAID
TO CALL UPON AID/W OR REDSO FOR APPROPRIATE ASSISTANCE
AS NEEDED.

- MEANS OF ENSURING THAT RADIO CAPACITY ASSISTED UNDER
PROJECT IS ACTUALLY UTILIZED TO TRANSMIT DEVELOPMENT
ORIENTED MESSAGES SHOULD BE IDENTIFIED.

5. CONTENTS THIS CABLE DISCUSSED WITH W. A. WHITTEN
(USAID EHR OFFICER), DURING MEETING WITH AA/AFR
9/7/79. VANCE

BT

#1176

UNITED STATES GOVERNMENT

Memorandum

ANNEX D

TO : Mr. Remo Ray Garufi, Director

DATE: July 16, 1980

FROM : Bernard E. Donnelly, ENGR

B. E. Donnelly

SUBJECT: Project 669-0134, Liberia Rural Information Systems
FAA of 1961 as amended, Section 611 (a).

I have examined the information contained in the project paper and find it is adequate to satisfy the requirements of Section 611 (a) of the Foreign Assistance Act of 1961 as amended. The detailed plans, specifications and cost estimates will be reviewed prior to obligation.



LRCN POSITION
DESCRIPTIONS

The following are the descriptions of professional positions required to operate the LRCN;

Program Service Unit

The Director will coordinate and manage all aspects of the LRCN, assisted by the Regional Managers, an Administrative Assistant, a Chief Engineer and a Deputy Director/Chief of Production. He will be a senior level professional with a graduate degree and advance training in management, broadcasting, instructional systems design, or community organization. He or she must be able to deal effectively with government officials and technical experts from various disciplines. The Director must have demonstrated organization and supervisory ability and must be flexible and innovative in the use of radio as a medium to encourage community development efforts. The Director will be responsible for the management of the entire system and for coordinating the activities of the network with Ministry and local government. The Director will be responsible to set overall policy. He or she will also convene and chair the Program Operations Committee, which determines broadcast priorities, long-range plans, yearly broadcast and production schedules and budget allocations.

The Deputy Director/Chief of Production will be directly responsible for translating the decisions of the Program Operations Committee into campaigns, programs, broadcasts and support materials, following an instructional systems design method. He or she will supervise a staff of instructional system designers, producer/announcers, an evaluation specialist and content specialists from the Ministries of Health, Education and Agriculture. Other Ministry specialists will participate from time to time on an ad hoc basis. The Deputy Director will establish ISD production teams to carry out specific development and production activities. The Chief of Production will coordinate the instructional design activities of the PSU with those of the regional units, providing expertise, facilities and production support when necessary. In the absence of the Director the Deputy will assume the Director's responsibilities.

This person should have an advanced degree with emphasis on broadcast production, with training in Instructional Systems Design; and should have demonstrated supervisory ability.

The Community Organization Specialist will work with the Regional Community Organizer/Evaluators and through the Regional Managers in cooperation with Ministry outreach officials to foster the creation and utilization of community groups. The community organization specialist will plan and implement ways to assist the animators by conducting training sessions and community demonstrations, and devise strategies for facilitating community-to-community and people-to-government communications; and promote self-help programs to improve the quality of life of the rural people. The Community Organization Specialist should have a BA and advanced training in

instructional systems design and educational broadcasting.

Evaluation Supervisor will have the prime responsibility for insuring the flow of program development information from baseline surveys and continuing evaluations to the central and regional production teams. He is responsible for developing systems to gather relevant information in the proposed program areas and to survey animators and local participants about LRCM activities. Thorough knowledge of ISD and experience in program evaluation are essential for this position.

Materials Production Coordinator will work with the instructional design teams and ministries to identify and coordinate production of non-radio media components. He or she will be responsible for preparing printed components of LRCM programs, and for coordinating the publication of these components. The MPC must understand graphics and printing procedures; estimate costs accurately; carry out procedures for securing publication services; purchase supplies and media products; and operate and maintain simple duplicating equipment. The MPC must be a skilled, organized manager.

The Instructional Systems Designers are responsible for seeing that program development procedures adhere to ISD methodology and that quality programs are produced on schedule. In this sense they will be the leaders of the production design teams. They are responsible for coordinating with regional staff as appropriate.

Producer-Writers will work as members of ISD production teams. They will be responsible for writing scripts to reach specific groups utilizing the strengths and unique characteristics of broadcast radio. They will be responsible for producing technically competent radio programs, either live or on tape, that re-enforce local and national development efforts. They will also serve as announcers and/or talent, as necessary, utilizing their individual language competencies. One of the group will supervise the audio resources library.

The Maintenance Technician will work under the supervision of the Chief Engineer and assist with installation, operation and maintenance of equipment and facilities. He or she should have at least a secondary diploma, some background in electronics, and potential for higher education.

Announcer/Production Assistants will assist the Producer/Writers and perform as announcers. Selection will be made primarily on the basis of voice quality, language and writing skills and acting ability. They will collect information and secure and maintain sound-effects paraphernalia. It will be the task of the Announcers/Production Assistants to set up and maintain the audio-resource library, which will consist of a gradually increasing collection of discs and tapes to be used for production (sound-effects, music, interviews, dramatizations, and the like). They will assist producers in securing talent needed for specific productions and in maintaining the audio archives. Production Assistants should have completed secondary school and have potentials for higher education.

Regional Centers

The Regional Managers will administer the Regional Units, manage development of programs and coordinate local activities with those of the PSU. The management task includes supervision of local staff, scheduling, budgeting and general administration of the local operation. The Director will be responsible for securing part-time and temporary help as required. A major responsibility of the regional manager is to supervise program development using an instructional systems design approach. This task includes assisting with the program needs assessment for his or her region, guiding program design and production, overseeing the collection and utilization of data. He or she serves as chairman of the Regional Program Operations Committee which has the task of coordinating the activities of local government, rural development agencies and animators to insure that the broadcasts are utilized by the are in support of development programs. The Regional Manager should have a BA, and specific training in management, instructional design, Broadcasting, or community organization. He should be from the local region, speak the local languages, and exhibit leadership qualities.

Instructional Systems Designer/Producer will plan and produce locally relevant radio broadcasts by working cooperatively with local development workers and station personnel as head of the regional program design team. In some instances, centrally produced program guidelines will provide the framework for local productions. In others, local needs and interests will be the source of ideas for programs. Along with the regional manager this technician will coordinate program design and the assistance provided by the PSU. He should have a BA, with advanced training in instructional systems design and radio production.

Writer/Producer will work as a member of the production team with the responsibility of writing scripts suitable for the target audience. Additionally he will be responsible for producing radio programs, either live or on tape, that promote or enhance development activities. PSU scripts and tapes will be reviewed, and revised as needed by the writer producer. As do all others staff members, the writer producer will serve as an announcer. He should be the most competent in the dominant local language. The script and tape library and records will be kept by this individual.

The Community Organizer/Evaluator will carry out local evaluation activities to ensure that station programs are having the desired impact on the population. Toward this end the technician will conduct needs assessments, ascertain audience characteristics, assess the effectiveness of individual broadcasts, and support activities. Collecting audience feedback and conveying that information to program assess the effectiveness of individual broadcasts, and support activities. Collecting audience feedback and conveying that information to program planners will be the major on-going formative evaluation task.

The Community Organizer/Evaluator will work cooperatively with animators to plan utilization and evaluation strategies and collect data for feedback purposes. He should have a BA with advance training in community organization and formative evaluation, and must be able to work effectively with villagers, animators and technical experts.

The Maintenance Technician's primary responsibility is to maintain and operate production and transmission equipment at the regional center. A secondary task will be to assist in production as an announcer or talent. He should have at least 18 months of training or equivalent work experience in electronics engineering and maintenance.

Ministry Content Specialists

Content Specialists will be designated by each of the Ministries directly concerned with rural development efforts. (the Ministries of Education, Agriculture, Health, Local Government and Action for Development and Progress.)

The Content Specialist will perform coordination tasks and program development tasks. They will have working space in both the Ministry and the Program Service Unit of LRCN and represent the Divisions and/or Bureau within the Ministries designated to interface with the LRCN. Tasks include the following: (a) As part of the Program Operations Committee determine priorities and broadcasts schedules; (b) coordinate ministerial inputs into the design, production, utilization and evaluation of broadcasts and support components by securing the services of appropriate ministry expertise to work on specific programs; (c) work with the community organization specialist to plan effective development programs for their ministries; (d) work with the materials coordinator to ensure coordination of ministry and LRCN design and production of materials; and (e) represent the ministry viewpoints as working members of production teams.

These individuals should be recognized experts in their fields and be provided with training in broadcasting and instructional systems design.