

PD-AAP-179

LOFA COUNTY RURAL HEALTH  
EVALUATION REPORT

June 1979

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LOFA COUNTY RURAL HEALTH PROJECT (LCRHP) EVALUATION  
June 1979

**I. INTRODUCTION**

The Lofa County Rural Health Project (LCRHP) was designed to provide an integrated rural health and family planning delivery system in Lofa County. It was initiated in July 1975 as a jointly sponsored MH&SW/USAID project for a duration of four years at a total estimated cost of \$4.5 million. The project is scheduled to terminate in September 1979.

In accordance with the Lofa County Rural Health Project PROP and by direction of the Minister of Health and Social Welfare (MH&SW), a committee was appointed to conduct an end of project evaluation to review and assess project objectives, giving specific attention to possibilities for replication in other counties in the country.

The Committee consisted of:

Dr. J.N. Togba, Chairman - (Professor & Chairman, Public Health and Preventive Medicine, Medical College, University of Liberia)

Dr. Regina Cooper - (Physician, J.J. Dossen Hospital, Maryland County)

Dr. Walter T. Gwenigale (Medical Director, Bong County)

Dr. K.G. Wit (Netherlands Team Leader, Village Health Worker Project, Maryland County)

Ms. Evelyn C. McLeod (Deputy Program Officer, USAID)

Mr. J.C.N. Howard, Jr. (Senior Economist, Ministry of Finance)

Dr. Michael Fuchs (Evaluator Consultant for LCRHP)

## II. SUMMARY

During the initial state of planning and implementation the philosophy behind the LCRHP appears to have been to create an outreach program of the newly established John F. Kennedy Medical Center in rural Lofa County. For this, a paramedical program was planned to be established consisting of the above Center in Monrovia, two existing hospitals in Lofa County, five rural health centers and 30 rural health posts.

This health delivery system was expected to emphasize curative and preventive health aspects equally. According to the Project Proposal (PROP), this system would provide or be able to provide more accessible, expanded and improved health and family planning services to the population in Lofa County, at the end of the project implementation.

To reach this high objective, important improvements in administration, management, coordination, supply and support were considered necessary. These were expected to be obtained by improving the quality and number of personnel, the construction, renovation and re-allocation of health facilities, the establishment of improved logistics and supervision, including support systems, the improve-

ment of record keeping and reporting at all levels.

The emphasis was aimed at the improvement of preventive health services, such as immunization, family planning, Maternal and Child Health (MCH) and health education. In addition, curative services were to be improved. During the implementation of the project, in view of the relative lack of success in community health and preventive services, important changes were proposed, as is reflected in the revised implementation plan of 1978. According to this plan, the former emphasis on family planning decreased considerably. The attention was therefore directed more towards health facilities outputs, such as the number of patients treated rather than the initial population - based health indicators. The objectives were re-directed to focus on strengthening public health aspects, such as the improvement of water and waste disposal systems in communities (instead of clinics), outreach activities into villages (vaccinations), health education activities also outside the walls of health facilities, efforts to motivate communities towards popular participation and community action and the training of traditional midwives. Important efforts were made towards strengthening and expansion of the training of physician assistants at Tubman National Institute of Medical Arts (TNIMA) in Monrovia.

The major achievements include:

- Health facilities have been well constructed and well staffed. The staff shows a positive attitude towards their patients and their (curative) activities. There is an adequate supply of drugs, equipment and recording materials.
- There is a marked increase of deliveries in health facilities and pre-natal and under-five years of age visits.
- The combined efforts of the Expanded Immunization Program (EPI) and the project in the last months resulted in an important increase in immunization coverage both in static as well as by mobile units.
- The re-adjustments made in the project goals in the second half of 1978 towards public health aspects was a positive action for the project. Activities such as construction of wells in the communities instead of only in health facilities, efforts to establish health committees in villages and the training of traditional midwives are illustrations of this positive change.
- Supervision of health posts and health centers is not satisfactory, particularly those seen in Lower Lofa, Konia, etc. Of particular advantage to the achievements of the project is the work done by the MCH - Supervisory Team, the counterpart, and also the contributions made by the Community Health Physician, and the Teacher/Trainer.

- An operational County Medical Depot has been established and quantity of supplies are readily available.
- The cooperation between the governmental and non-governmental health organizations is good but need greater improvement.

### III. EVALUATION METHODOLOGY

This final evaluation focused on the overall project in terms of the accomplishment of the project objectives. Attention was given to outputs, inputs, and lessons learned. Project documents, evaluation reports, financial data were reviewed and analyzed. The project site and many health facilities were visited, and local government officials were interviewed. Also MH&SW officials and USAID personnel concerned with the project were interviewed.

### IV. TYPES OF INPUTS

#### A. USAID Inputs:

The original Grant Agreement, dated December 23, 1976 between United States of America through USAID and the Government of Liberia through MH&SW stipulated that USAID was to provide technicians, training, commodities with an initial grant not to exceed two million seven hundred thirty-one thousand (\$2,731,000.00) dollars as specified under Section 3.1 of the Grant Agreement. However, Amendment One, dated March 28, 1977, clarified this Section which stated the total amount to be \$2,118,000.00. Amendment Two, (December 22, 1977) later

provided for an increase of \$615,000.00, thus changing the total USAID Grant Assistance to \$2,733,000.00.

Observations:

According to the Project Grant Agreement, USAID assistance was not to exceed a total of \$2,733,000 for the life of the project. To date, USAID has only obligated \$2,397,000 and expended only \$1,861,000. Given the original total of grant assistance, it appears that \$336,000 has yet to be obligated, and that a balance of the obligated amount, \$536,000 (as of April 15, 1979) remains unexpended. If the total amount estimated at \$2,733,000 had been obligated, the unexpended amount would then be \$872,000.

The components of USAID's contribution to the project included:

U. S. Technicians Costs	\$1,098,000
Participants (Training)	62,000
Commodities	667,000
Other*	446,000
Uncommitted	<u>124,000</u>
	\$2,397,000

1. Personnel:

USAID funded the technical advisory services of the Indian Health Service through a Participating Agency Service Agreement (PASA) with the U.S. Department of Health, Education, and Welfare.

\*Technician support, e.g. housing, allowances, benefits, etc.

The original project team consisted of:

- a. One Public Health Generalist, Chief of Party, for four years.
- b. One technical Teacher/Trainer for four years. Partly working in Lofa County, mostly at TNIMA, Monrovia.
- c. One Family Planning Generalist for four years.
- d. One Supply and Logistic Specialist for two years.
- e. One Social Science Research/System Specialist/Evaluator Consultant on intermittant basis.'
- f. One Maintenance Advisor for one year.
- g. One TDY cost Accountant, on intermittant basis.

Observations:

All members of the USAID - funded project team as indicated in the PROP were provided. However, personnel changed during the implementation, which resulted in a gap in staffing.

There were two chiefs of party attached to the project. The first one, arriving in July 1975, resided in Monrovia for the two years of his tour, and only spent up to 25% of his time in Lofa County. The second COP, who arrived in September 1977, was based in Lofa County, but seemed not to have had the opportunity for full involvement in the project. As such he was very much underutilized.

The maintenance advisor was stationed in Monrovia and occasionally visited Lofa County. He could have served effectively if stationed in Voinjama to supervise repairs and construction of buildings.

It should be pointed out that the maintenance advisor and the supply/logistic specialist (who later became the deputy chief of party) were transferred to the Lofa County Project from the JFK project in October 1977; both maintaining functions outside the project. This type of arrangement should be avoided and should have been rejected by MH&SW.

The FASA team later consisted of the following:

- Chief of Party, who was to oversee and manage the LCRHP but actually only managed petty cash, directed repairs of vehicles, received and made reports.
- Deputy Chief of Party, a qualified engineer, functioned chiefly as procurement officer for purchases from GOL Trust Fund and forwarded petty cash and supplies to Chief of Party. He was also appointed to serve as maintenance advisor.

The Deputy Chief of Party could have served better in supervising well drilling, construction of health facilities, and maintenance of vehicles in Voinjama instead of being stationed in Monrovia doing what a secretary could easily handle.

- Physician Teacher/Trainer, stationed in Monrovia, trained physician Assistants for rural health stations. Except for increase in graduates (1979) twenty, there was no appreciable increase in number of graduates over the past four years (8 per year). However, there has been an extension in the length of time spent in training from two to three years, without sufficient justification and guarantee for added proficiency.
- Public Health Nurse Advisor has been very effective, energetic and involved in day-to-day operation. There is adequate MCH/FP supervision. However, this is dependent on two persons. One of whom will leave in September, the Public Health Nurse Advisor, and the other, the Liberian counterpart, may leave at anytime since her husband has been transferred to Monrovia.
- One Social Science Research System Specialist/Evaluator Consultant visited Liberia four times a year (one month each) to evaluate the project. The frequency of visits could have been reduced to twice or even once a year and most importantly at least part of his functions should have been absorbed by the Chief of Party, or others in Liberia, such as USA trained Liberian health administrators or other experienced nationals. Two secretaries were stationed in Monrovia, whereas only one part-time

secretary was provided for the project site. At least one full-time secretary should have been assigned to the project site.

2. Participant Training:

Training abroad:

- Five leaders of the health centers.
- Five midwives in family planning for the health centers.
- Two midwives as teachers at TNIMA.
- Training of the Rural Health Administrator, not specified.
- Training at TNIMA.
- On-the-job-training.

Observations:

There were significant changes in the proposals for training abroad. Five staff members of rural health facilities were trained in family planning methodology, two in public health administration, and one in logistics and supply methodology. In addition, eight were sent for training in hospital administration, only one of them is presently employed at the Tellesyan Memorial Hospital in Lofa County. It is felt that at least two participants in the various sectors should have been trained in order to provide for continuity should one person leave the position. Furthermore, trained participants should have been permanently assigned to the project.

Adequate attention should have been given to the mid-wifery and practical nurse program at Curran Lutheran Hospital. The graduates of this two-year program are equally effective in

rural health work. Support to this program by the LCRHP only commenced in 1978 by providing 5 scholarships per year from the Trust Fund.

3. Commodities:

Drugs and supplies, vaccines, vehicles and family planning commodities and supplies as specified in the PROP.

Observations:

Many items were ordered from the U.S.A. since 1976 but have not yet arrived. There is no accurate record to show what drugs, supplies and other commodities were purchased by USAID fund.

B. MHSW INPUTS:

The Government of Liberia contribution to the project, as stated in the Project Grant Agreement, under Section 3.2 of this Agreement, was estimated as nine hundred twelve thousand \$912,000. A trust fund was created by mutual arrangement between the Ministry of Health and Social Welfare and USAID to alleviate lengthy bureaucratic procedures.

Observations

Although the Government of Liberia through the Ministry of Health input was estimated at \$912,000, the amount expended was \$2,208,000. This figure excluded salaries of the County

Medical Director, Deputy Minister/Project Coordinator and many others involved in ICRHP activities and the other facilities from the Ministry of Health.

The high staffing patterns proposed for health centers and health posts were not completely met by MH&SW; however, the health facilities were adequately staffed.

Shifting of rural health personnel by MH&SW without the knowledge of the Medical Director of Lofa County interfered with project promotion.

#### 1. CONSTRUCTION OF HEALTH FACILITIES

Through MH&SW, CARE/Liberia constructed, repaired or remodeled over 30 clinics in Lofa County. This contribution from CARE was estimated at \$170,347.00.

##### Observations

It is necessary that in future construction of health facilities more ventilation in waiting rooms be provided.

#### 2. TRAINING

Five scholarships yearly for the midwifery training program at Curran Luthern Hospital were provided through the Trust Fund. Also all expenses for training of the physician assistants at TNIMA were borne by MH&SW.

V. OUTPUTS:

A. Improved Health Facilities Construction

Observations:

Health facilities, including latrines, have been renovated and/or constructed. Where latrines have been constructed they are not being used and are usually kept locked. The reason for this, as stated by one of the physician assistants, is that there have been problems in keeping the latrines clean due to their improper use. Even in the villages, where latrines were built the villagers by-pass them. There is a great need for health education to address this problem.

In a few cases, there is the non-existence of a water supply system directly to the health facility. Water is carried daily from a stream or well to the health facility. Where a potable well exists, it is being used.

It is interesting to note that the project paper states in the output section that "all health posts and centers will have two potable water wells and two sanitary latrines".

Although this was stated, these things have not been provided. At the Bopolu Health Center, which is a large health center, a latrine is being constructed with materials from the missionaries in the area and also with funds from the center's staff. The funds for this construction should have been financed from the Trust Fund and supervised or constructed by the engineer listed among the PASA Team.

One health post visited in Shelloe had been constructed as a self-help project, a result of political pressure and influence. The center was not in the ICRHP plan of health facilities. ICRHP has planned to construct a facility in an area which would accommodate more people as well as be centrally located between two towns.

Self-help health facilities which are constructed without coordination with ICRHP officials caused problems in staffing and providing supplies for the facilities.

Concentration of the program was on Upper Lofa, particularly along road routes, with insufficient attention given to Lower and Central Lofa. This omission of large areas and population from the project resulted in much disappointment and embarrassment to the Grantor and Grantee.

B. Improved Training of Health Manpower and Staffing of Health Facilities:

Observations:

Two physician assistants were to be assigned to each health post; however, most health posts have only one. The original idea of two physician assistants was not realistic, especially given the past history in the number of males entering the physician assistants training program and the number who remained as physician assistants after the two year government obligation period terminated.

In the course of the project it was decided that it was best to staff each health facility with a physician assistant and a midwife, and not two physician assistants.

The physician assistant training program is focused on the curative aspect of health delivery services and less attention given to the preventive element. This has been a great disadvantage to the program. Physician assistants are responsible for improving the health of the rural people and therefore should be knowledgeable in preventive medicine and public health. The physician assistant curriculum should have been revised to emphasize this fact which would allow for the continuation of a two-year physician assistant training program rather than an additional year.

Adequate supervision of P.A.'s in the field is a major problem. In Lower Iofa County, the Bopolu Health Center staff informed the Evaluation Team that the staff rarely sees a supervisor from ICRHP. It is felt that a supervisor for P.A.'s needs to visit the health facilities to provide the necessary on-the-job guidance and assistance as follow-up to the formal training at TNIMA. At the Gbarma Clinic, the physician assistant stated that he had not seen a supervisor since his assignment to the clinic in March 1979 and he was never formally introduced to the local authorities.

Sufficient attention should have been given to the training facilities in Lofa County at Curran Lutheran Hospital where a two-year program for midwives and practical nurses is conducted. This could have led to an increase in output of graduates for health delivery services. Support to this program by the LCRHP only commenced in 1978.

There was insufficient support and guidance from the Ministry of Health and Social Welfare as demonstrated by the following:

- The late training of two key staff personnel interfered with the collection of baseline data needed for proper planning and evaluation of the program. Because of their involvement in other Ministry of Health and Social Welfare activities and insufficient guidance given them, their support to the LCRHP was weak.
- The functions of the project coordinator were ill-defined and not adequately worked out.

Nearly all traditional midwives trained are employed in health facilities. This deprives the village of the rare source available for promotion of health and community health, which indeed defeats the original objective of the (revised) program.

C. Improved Supply and Logistics including Transportation and Commodities, and Radio Communication:

Observations:

The system for providing drugs and supplies to Lofa County is functioning satisfactorily. The PASA Team logistics advisor coordinates the flow of drugs and supplies from Monrovia to Lofa. The commodities are placed in a local warehouse known as the sub-depot for distribution by the County Supply Officer.

The warehouse appeared to be well-stocked with the necessary commodities for the health facilities in the area. However, there exists a problem in an operative inventory system for the sub-depot and each of the health facilities. This is due to the lack of a simplified recording system that is easily manageable by the staff. The recording system would provide the necessary control for the flow of drugs and supplies.

In terms of the distribution system in providing drugs and supplies to the health facilities visited, it appears to be adequate. Health facilities submit requests to the County Supply Officer on a quarterly basis. In case of emergency need, the Supply Officer may receive the request while visiting the health facility or it is brought to him by an authorized person from the facility. It would be much easier if there were radio communication between health centers and the sub-depot.

Transportation has been an important element in the project - the procurement and utilization of vehicles. When the project was initiated in 1975, the vehicles procured were U.S. manufactured which was a requirement set forth in the Grant Agreement. These vehicles, automatic Ford Broncos, were inappropriate for the rough rural roads in Lofa County. They were sent to the project site without spare parts (which must be procured from the U.S.), mechanic, nor replacement arrangements. In addition, it was difficult to provide maintenance for the U.S. vehicles because of the inavailability of adequate maintenance infrastructure. The GOL Trust Fund was used to purchase locally better vehicles, most of which were based in Monrovia. The lack of supervision and care of vehicles led to their considerable misuse and continuous breakdown.

Until early May 1979, there was no effort made for the provision of maintenance infrastructure. This was observed by cracks in newly constructed buildings, broken windows, defective water-pumps after a half year of use, and most important the effect this had in the entire transport system.

The project provided for sub-contracting for maintenance services from private companies. Even though the PASA Team included an Engineer/Maintenance Advisor, who is based in Monrovia, and renders no direct service in this area.

Radios for communication are available in hospitals and some health centers, but are often not operating effectively.

D. Improved Sanitation and Water Supply Conditions

Observations:

Latrines have been constructed, but are not utilized. The Sanitary Inspector is a non-active participant in the program, although is relied upon for motivating and encouraging the population in the proper use of the latrines and improved water conditions. He seems to be unclear as to his role as it relates to the Lofa County Rural Health Program.

The Peace Corps is involved in well construction along with the Ministry of Local Government and the Ministry of Health. In some places, wells are very unhygienic and no longer usable because they were not dug deep enough. This has caused the wells to become dry with over usage and lowering of water table during the dry season.

E. Improved Family Health Care (Family Planning, Immunization and MCH)

Observations:

The Family Planning component of the project was carried out in terms of making available family planning materials and contraceptives at each health post center, and hospital. This particular part of the program was not well received. There are cases of pills, condoms, etc. available in post health posts, in

all health centers and in both hospitals in Lofa County but the program has not yet been accepted by the population. Considering local traditions, no effort was made to educate the population for appreciation and better acceptance of the problem.

While the emphasis was to be on preventive service, it is only recently that any real efforts were made in this direction. An important addition in this area is the Expanded Program for Immunization. This program is addressing itself to the needs of the Lofa County project through the provision of refrigerators, vaccines, supplies, and vaccinators. The program started in 1978 and is contributing to the increase in the number of persons being immunized.

The MCH part of the project is rather effective. Certified midwives and traditional mid-wives are playing an increasingly important role in this area. There is a need for more certified midwives for coverage in remote areas.

F. Improved Clinic Attendance

Observations:

There is a marked increase in clinic attendance as shown in Dr. Fuchs' report of April, 1979. This increase in clinic visits is undoubtedly due to the new structures, presence of trained personnel, continuous availability of drugs and medical supplies and improved roads.

G. Record-keeping System (health data collection)

Observations:

The project has contributed to the revision of the national health data collection system which was developed by the Ministry of Health's Bureau of Planning, Research and Manpower Development under the Health Management Planning Project, also a jointly sponsored MH&SW/USAID project.

H. Job Classification Descriptions

Observations:

The Procedure and Task Manual for job description, standards, recruitment, selection, grievance systems has not been completed.

VI. ANALYSIS (LESSONS LEARNED)

The LCRHP made important progress in the field of curative services. Also the results obtained in MCH activities and deliveries within health facilities are substantial. In this connection supporting elements as well as logistic systems did meet the required levels. Without doubt these are important achievements.

In contrast to the above, results obtained in family planning, in environmental and in public health are in general unsatisfactory and far below expectations.

Although it is claimed that about 70% of the population of Lofa County is living within a 5-mile radius of health facilities, it should be realized that such an assumption using this numerical yardstick does not mean that 70% of the population is indeed covered since it depended on the National Census of 1974. It is regrettable

that the necessary investigations of actual census taking at centers started in this direction were not completed and no real information about this important aspect of actual population concentration became available. Experience shows that results of such geographical coverage may be much lower than expected since greater area of Lofa County is inaccessible by roads though with large population. This situation using the above method, is even more crucial (results much lower) in public health aspects in the Lofa County project, as was seen even in villages where health facilities are located.

Consequently although important progress was obtained, as described above, there exists a strong doubt about any substantial impact the project may have made on the health status of the population, at least at this moment. Obviously a major reason of this partial failure of the program is found in the way it was planned. The original PROP was exclusively institutional-oriented instead of population-oriented. The assumptions were made that this approach would automatically lead to a considerable improvement in the health status of the population and that the provision of family planning materials in rural communities would automatically lead to the use of family planning methods by the population. These assumptions give the impression that the PROP planners at that time appeared to have been insufficiently informed and/or aware about the real problems and characteristics of rural populations, whom they directly intended to serve.

The adaptations made in the revised implementation plan were considered important improvements. However, the reason why some of these adaptations, such as the improvement in public health and particularly in popular participation mainly failed, may very well have been the consequence of the general approach of the project, which was and continued to be a top-to-bottom one. It should have been realized that the success of the above adaptations could not have been attained by the isolated efforts of a few persons without any systematic backing - probably changing the whole system.

Many MH&SW and USAID participants are at least partially aware of the above described facts and mechanisms. The revised implementation plan and some results of the interviews held during this evaluation are indications to this fact. In addition to already mentioned factors, an important reason why this has not yet resulted into clear outputs, may be found in rather loose working relationship of the total project team, PASA and MH&SW teams. It appears that if the Project Coordinator, the COP, the County Medical Director, the Community Health Physician, the Teacher/Trainer, the MCH staff and both health administrators could have operated as a real team, the results of the project objectives would have become more substantial. No doubt many participants would have functioned more intensively and with more job satisfaction.

Relative to the important question of the desirability to replicate the Lofa County system in other counties, the answer is obviously not a simple yes, neither no. Certain important elements of the LCRHP, such as the logistics supply system, the supervisory system,

and staffing patterns in health centers and health posts and the MCH activities would be considered strongly for replication with minor modifications. Such inputs as the constructions of facilities could also be considered. The patient registration and reporting system of health facilities is already more or less implemented nation-wide. However, from all the elements mentioned a very critical reconsideration of costs and of the selection of materials are needed to make financing (at long terms) possible and to avoid considerable waste as appeared to have occurred in the Lofa experience.

In addition to this statement it should be mentioned that replication is not advisable, if this implies that the top-to-bottom approach and the clinical orientation of the total system will be an inevitable side-effect. However, at least theoretically this is not necessarily community health and population involvement are major components. Of particular importance will be the re-defining and expansion of the roles of Physician Assistants and other health personnel at Health Posts, which should be reflected into the initial training program.

It is of great importance that for the re-designing and eventually the formulation of a new national health plan, using the identified positive elements of the Lofa County project, the mistakes made during the formulation of the PROP are not repeated. It is therefore very essential that for the formulation of this national

plan, competent, public health-oriented nationals, who know by their own practical and professional experience the health situation in and the characteristics of the villages, should be given leading position in this effort, so that the real needs of the people intended to be served are reflected in this plan and its implementation.

VII. RECOMMENDATIONS:

- A. That the project be terminated in September 1979 as a MH&SW/USAID jointly funded project. However, special arrangements be made to provide continued assistance in teacher-training and the public health areas.
- B. That the Lofa County Rural Health Program place stronger emphasis on preventive health services and provide health education to the population.
- C. That the Expanded Program for Immunization be carried out throughout the county.
- D. That the Trust Fund be continued but under Liberian management in Lofa County with accountability to the Ministry of Health and Social Welfare. The fund should continue on the same quarterly allotment basis.

- E. That it is important that there be a clear understanding between the donor agency and MH&SW in the timely obligation and expenditure of project funds. At the present time, and given that three months remain in the life of the project, there appears to be an uncommitted amount of \$872,000 if the total original amount of \$2,733,000 of the Grant Assistance had been fully obligated. There is also \$148,000 unexpended in the Trust Fund. This could have been avoided if there had been a joint Trust Fund from Grantor and Grantee and if the project had been well planned and supervised.
- F. That the uncommitted funds in the project be utilized before the project ends to obtain essential commodities and to provide participant training.
- G. That adequate funds be set aside from the Trust Fund before the project terminates to provide for the completion of the mid-wifery training for those students presently enrolled in the training program at Curran Lutheran Hospital and who were originally funded under the LCRHP. The completion of studies of trainees presently supported by the LCRHP, i.e. mid-wives and practical nurses trainees.
- H. That the Physician Assistant Training Program and curriculum be revised to give special attention to preventive health services and skills needed for efficiency be incorporated in a two-year program rather than three.

- I. That participants trained under the project be assigned exclusively to the Lofa County health program.
- J. That adequate supervision be provided at the health facilities. Physician assistants, nurses and dressers should be visited by a physician assistant supervisor at least once weekly. Regular monthly visits should be made to health facilities by a physician and a public health nurse. The hospitals should be visited by the Chief Medical Officer or the Director of Preventive Health Services at least quarterly.
- K. That adequate supplies and distribution be continued to sub-depot on the same quarterly allotment basis.
- L. That a good maintenance shop for vehicles and other hospital equipment be established in Voinjama. Alternatives are to expand the staff and maintenance shop at Curran Lutheran Hospital in Zorzor or become a part of the maintenance arrangement for LPMC in Lofa County before the end of the project.
- M. That all project vehicles be assigned to the Lofa health care delivery program upon the termination of the LCRHP.
- N. That in future agreements, care be taken to accept less stringent rules and accept only commodities that can be used in Liberia and can be readily obtainable and easily maintained. No contract personnel unwilling to be assigned to project site should be accepted by MH&SW. These facts should be stipulated in the initial agreement.

- O. That when technical assistance personnel are provided, they should have well-defined job descriptions specified in the contract or PASA agreement in order to avoid underutilization of skills.
  
- P. That a study be conducted by project trained public health administrators on the real population covered by the project before its termination.
  
- Q. That those aspects of the project that have been successful be reviewed and analyzed with special attention given to cost-effectiveness and cost-benefit in order to determine replication in other counties.
  
- R. That in planning future projects, the areas away from the roads should be reached and given the same care as those accessible by roads. Some remote areas, where possible large concentration of people live, were omitted in the ICRHP because they could not be reached by motor vehicle or airplane.
  
- S. That in planning and designing projects with other donors, MH&SW should not only include representatives from the central office but consult with the appropriate field staff for inputs.  
  
MH&SW should be an active participant in project development that is to be jointly funded with assistance from other donor agencies/organizations - involvement in project conceptualization, design, implementation, and evaluation. It is important to designate the appropriate MH&SW official who would be available to fully participate as a project development team member.

Respectfully submitted,

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