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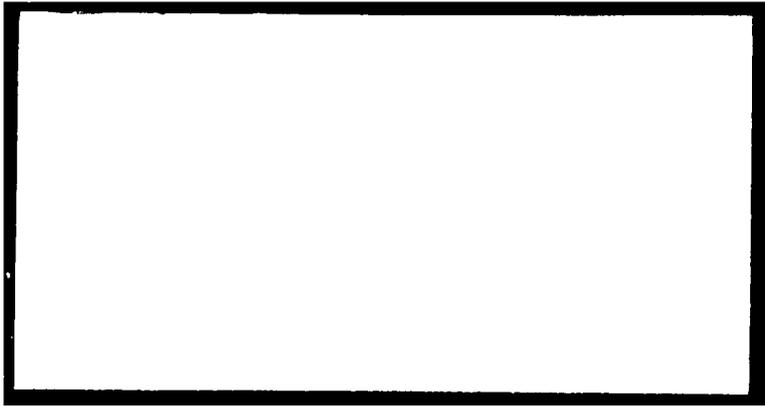
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**STUDY OF THE FEASIBILITY OF A
CONTRACEPTIVE SOCIAL MARKETING PROJECT
IN LIBERIA**

**A Report Prepared By:
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**During The Period:
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ADDENDUM

The present government's policy on family planning and public health is unclear at the moment. While there are indications that this uncertainty temporarily affects USAID-supported programs, the recently retired USAID Health Officer, Dr. Frederick Zerzavy, reports continuing high interest in this project. The Minister of Health and Deputy Minister of Health, in fact, have given him clear indication of a desire to see a social marketing family planning project go forward, hopefully, before the end of the calendar year 1980. USAID/Liberia also continues to support timely initiation of the planning phases of the project.

June 18, 1980

INTRODUCTION AND BACKGROUND

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Summary of Assignment and Methodology

Ms. Diana L. Altman, a consultant for the American Public Health Association (APHA), studied the feasibility of a social marketing or commercial retail sales (CRS) project in Liberia in February-March 1980. The consultant was asked to assess the availability of marketing research information and organizations; the possible range of methods, present prices, movement, and sales; in-country packaging capabilities and probable alternatives to local packaging of bulk supplies; prevailing product distribution and retailing systems; major distributor firms; and current product promotion and advertising practices, capabilities of qualified advertising agencies, and possible constraints on a promotional campaign. Related political, geographic, socioeconomic, health, and legal factors, as well as the provisions (means and level) of family planning services, were also examined. The assignment required the identification of possible sponsors, an evaluation of the management structure, and an estimate of the cost of supporting development of a CRS project.

The consultant collected information and statistics from various Government of Liberia (GOL) ministries, USAID, United Nations agencies, the Family Planning Association of Liberia (FPAL), pharmaceutical importers, and wholesalers. She held meetings with relevant officials of the Government of Liberia, USAID, the FPAL, and members of the medical and business communities.* She made informal surveys of retail outlets, pharmacists, and shopkeepers in Monrovia, Buchanan, Gbanga, and several small towns and visited weekly "ground markets." The consultant made a brief trip to Accra, Ghana, to meet with the head of two advertising agencies, Lintas, Ghana, which now handles the account for the Ghana CRS project, and Afromedia (Liberia), a prime candidate for a social marketing effort in Liberia; and John Hayes, resident manager of the Ghana CRS project, who provided information on possible strategies for Liberian and Ghanaian cooperation in packaging CRS products.

Observations and Findings

A. Politics

Liberia has enjoyed independence and self-government since its founding in 1847. Liberians are proud of their long history of independence, see themselves as a political model for Africa, and support the government's role in the Pan African movement.

Tribalism seems to be much less important than the differences in locale (urban/rural residence). While Liberians identify with their tribal roots, intertribal friction seems to occur only rarely. However, the perceptions

* See Appendix A for a list of persons contacted. Statistical information (tables, graphs, charts) can be found in Appendix B.

that "city folks" enjoy most of the advantages and that rural farmers and villagers are neglected cause some resentment. A massive effort to improve rural living conditions (30 percent of the budget is now spent on rural development), to build roads (a major national effort), and to improve communications (a massive \$10,000,000 radio tower project is being considered) is helping to break down the "we-they" attitude.

Although citizenship is reserved for "members of the black race", the large expatriate community (over 5,600 workers and their families) does influence Liberian life. Europeans and Americans figure prominently in the primary industries--production and export of iron ore, rubber, timber, and industrial diamonds. Lebanese and, to a lesser extent, Indian merchants dominate domestic import and retailing services. The non-Liberian community works closely and harmoniously with Liberian leaders. Despite some resentment of foreign dominance of business and trade, the role of expatriates in Liberia, whose economy is more viable than that of most West African countries, is recognized. In fact, more and more emigrants from neighboring depressed countries, especially Sierra Leone, Guinea, and Ghana, are settling in this country which has long been part of traditional West African trade and migration patterns.

The government's attitude toward making a family planning policy part of national development planning is ambiguous, and officials differ in their views on a policy of population growth. Liberia shares with many other countries the problem of providing basic public services to large urban concentrations and to dispersed, isolated rural residents. Despite an estimated growth rate of between 3.3 percent and 3.4 percent, a crude birth rate of 50, a crude death rate of 20, and a life expectancy of 48, government policy seems to favor continued population growth.

Liberians are sensitive to the fact that their country has one of the smallest populations in continental Africa. The population is scattered and the density low (39 persons per square mile). Virgin forests cover large areas, and only 40 to 45 towns have more than 2,000 people (see Appendix C, Maps 1 and 2). Much of the population is concentrated in the area of Monrovia; 17 percent lives in the Greater Monrovia Area (GMA) and 35 percent in Monserrado County, one of the smallest counties in size. The population also concentrates on or near concessions (iron ore mines and rubber plantations) and adjacent trade centers.

B. Geography and Climate

While there are no significant geographic features, other than unimproved forest areas, which hinder the distribution of goods, climate will play a major role in any social marketing project.

Liberia, in the tropical rainbelt, experiences annually long monsoon seasons. Geographers claim that the coastal plain of Liberia receives more rain than any other part of West Africa. Over 160 inches (190 inches in Monrovia) fall each year between late April and early November, though the rain lets up slightly in August, the "mid-dry" season (See Appendix C, Map 3). Farther inland, rains are less severe, but the seasonal pattern scarcely differs.

Regular distribution of goods by mid-to late June is almost impossible because the unpaved, laterite roads (the condition of most roads 50 or so miles beyond Monrovia) become impassable. Monrovia merchants and up-country retailers overcome seasonal transportation problems by anticipating orders and stocking requirements. A new marketing effort, however, must be planned around the rains, and every attempt must be made to launch selling four to five months before the roads become impassable (in June and July).

C. Socioeconomic Factors

1. Economy

Liberia enjoys a stable export economy and a good balance of trade. Its currency is the U.S. dollar. No foreign currency or exchange control problems exist. Liberia derives 70 percent of its income from mining, rubber, and timber and 20 percent of the GNP from traditional agriculture. There is very little local manufacturing, although there are several protected industries (e.g., auto batteries, cement manufacture, rubber footwear, matches). The trucking industry is reserved for Liberian citizens and is dominated by the Mandingo tribe, a traditional West African trading group. An open door policy and liberal tax and tariff regulations encourage foreign investment. The massive new free port and industrial park facility is expected to further stimulate the economy.

Inflation has taken its toll but has not affected the Liberian economy as severely as it has the economies of many African countries. The consumer price index rose 7.5 percent in 1977/78 and approximately 11 percent in 1978/79, with the highest increases in food, rent, and utilities. Of a total 1978 labor force of 948,000, 417,000 (44 percent) were employed. The balance, 56 percent, while theoretically unemployed, included large numbers of the 66 percent to 70 percent of the population engaged in traditional agriculture. The typical reported household income, nevertheless, was low: in 1974, 73.6 percent of the population reported monthly incomes below \$50; 16.9 percent reported monthly incomes of \$50-\$100. In addition, over 75 percent of all households reported one or more children under the age of 14. While income is probably underreported for tax purposes (the average income for workers in 1975 was \$122.42 a month) and may have nearly doubled in the last five to six years, the majority of Liberians lives marginally.

2. Ethnic Groups

Sixteen tribes speaking 28 different dialects (six are major dialects) reside in the country. Each tribe falls into one of three ethnically and linguistically similar groups--the Kru, Mande, and Mel, with the former two claiming the bulk of Liberia's indigenous peoples (see Appendix C, Map 4). The Greater Monrovia Area is a potpourri of various tribes, descendants of freed American and Caribbean slaves, and people of mixed ethnic backgrounds. Monrovia itself has quite a cosmopolitan flavor. The numerous up-country concessions for mining and agriculture attract workers from all tribal groups.

although primarily local people work in the mines and on the plantations in their tribal areas (see Appendix C, Map 5). Several languages are spoken: English, the lingua franca of Liberia, is universally spoken in Monrovia; a substantial number of people know Arabic, the language of the Mandingo traders; many rural residents, especially women, children, and older men, speak only their native tongues.

3. Literacy

Literacy is estimated at 25 percent and may be as low as 10 percent in rural areas. Arabic literacy is insignificant (around 1 percent). Full- or part-time school enrollment has more than doubled over the last 10 years; in 1978, 62,409 children attended kindergarten, 129,776 elementary school, and 45,668 secondary school. These figures represent about 35 percent of those aged 5-19, although reportedly fewer females than males receive an education, especially a more advanced education. For all practical purposes, a marketing project would have to be geared to a non-literate population.

4. Religion

According to recent survey, 65 percent of all Liberians purport to be Christians. Other sources, however, claim that traditional religions have the most followers. One source suggests that approximately two-thirds of the population practices traditional religions, and the remaining one-third is split between Christianity and the Muslim faith. Muslim influence is strong in the western part of the country, while Christianity predominates in the Monrovia area, along the coast, and inland in larger towns (see Appendix C, Map 6). Islam, however, has no pervasive influence on daily life or sex roles.

Christian missions are noted for their good schools and are required by law to operate at least primary schools at their stations. These schools, as well as the often excellent medical facilities, influence more than the religious life of Liberians.

Neither the Christian nor Muslim movement seems opposed to birth control. Indeed, Christian sects seem to support family planning. The philosophies and rites of followers of some traditional faiths are sometimes pro-natalist. For example, many believe the spirits of ancestors may be reborn in grandchildren.

5. Health

Liberia is making a valiant effort to expand public health care, in particular to rural areas. The government increased the 1978/79 budget for health 31 percent over that for 1977/78, but the Ministry of Health and Social Welfare is still hard pressed to provide essential services to the populace. Although unopposed, family planning is not included as part of government health care, and the provision of services is primarily the responsibility of the private

sector and the FPAL. Nevertheless, officials recognize that the problems of infant mortality, poor maternal health, childhood malnutrition, early pregnancy (both in and out of wedlock), illegal abortions, secondary school dropouts by pregnant teenage girls, and increasing venereal disease must be tackled vigorously.

The infant mortality rate is about 160 per 1,000; adolescents account for 25 percent of all births; abortion is common (through undocumented, trained and traditional medical practitioners alike perform abortions readily); and according to unofficial sources, as many as 50 percent of female school dropouts are pregnant. The Ministry of Health and Social Welfare's policy is to promote maternal-child health (MCH) to develop "quality" citizens without sacrificing population growth.

The government health program emphasizes prevention and sanitation, although health programs actually seem to focus on facilities and manpower for curative services (e.g., approximately one-fourth of USAID's \$32 million commitment to health and sanitation is earmarked for sanitation, malaria education, nutrition and public health, and wells, with the major portion, \$7A million, set aside for a sewage system for Monrovia. Over half--\$16,637,000--has been allocated to the JFK Medical Center in Monrovia).

During a February 1980 visit to Liberia, Patricia Harris, Secretary of the U.S. Department of Health, Education and Welfare, stated the intention of the U.S. Government to increase assistance for health programs. Under the government health structure, there are three hospitals, 12 health centers, and 71 clinics. Eighteen concession and mission hospitals, the former serving about 150,000 and the latter 30 percent or more of the population, provide additional services. Nevertheless, many Liberians have little or no access to health care. In 1977, there were 178 doctors (135 in the GMA); the doctor/patient ratio was one per 9,400. Since then, the number of doctors has increased slightly; however, the supply of nurses and midwives has tripled in the last 10 years. As in many countries, many people receive health advice and medical services from pharmacies and drugstore employees.

The Pharmacy Board of Liberia lists 38 pharmacists, many of whom are Indian or Ghanaian. Thirty-one pharmacies operate throughout the country, 27 in Monrovia alone; the 59 medicine stores (shops, run by non-pharmacists, which sell Class B, C, and D drugs) are scattered in smaller towns (only eight operate in Monrovia). All drug importers wholesale directly to retailers and, with only one exception, also operate retail pharmacies. Policy on drugs and their sale are set by the Pharmacy Board, a body of seven persons directly responsible to the Ministry of Health and Social Welfare. Its current president is Clavenda Bright-Parker, who is also the president of the West African Pharmaceutical Federation. The Pharmacy Association is a professional association of trained pharmacists working in Liberia; although influential, the group is not connected officially to the government nor is it responsible for formulating drug regulations.

D. Health and the Law

Drugs, all of which are imported, are categorized in four classes. The most dangerous drugs, usually those prepared by pharmacists, are Class A; they are restricted to pharmacies and require a license to import. Most other

prepackaged drugs loosely fall under one of the three other classifications and are sold by medicine stores and sometimes general stores.

Most pharmacists and drug importers and wholesalers interviewed were uncertain about the classification of various contraceptive methods. Unless a drug is placed in Category A, few seemed concerned about strict regulation of distribution. Oral contraceptives (OCs) are Class B; spermicides, Class B or Class C. Traditionally, condoms are perceived as drug products and, although they may not be legally classified as drugs, they are thought to carry the classification "D". As in much of the non-Western world, prescriptions for OCs in Liberia are required but the contraceptives are freely available. Condoms, like other over-the-counter (OTC) drugs can be (and in rare cases are) sold in supermarkets and small grocery stores. Apparently, spermicides could be similarly marketed. This is being clarified with relevant officials by the president of the Pharmacy Board. The expectation is an approval to sell spermicides outside pharmacies for a special social marketing project.

The brand names of all imported and locally-made products must be registered. No special laws regulate the repackaging or overpackaging of bulk supplies. Brand regulation of products is routine and usually takes only a few weeks.

Standard charges are levied on imported pharmaceutical products. Charges for duty (from which most drugs are exempt) and $1\frac{1}{2}$ percent bank fees would not apply to any project commodities. Other charges totaling 5 percent of CIF value--port charges ($1\frac{1}{2}$ percent), transportation and handling costs (3 percent), and councilors fees ($1\frac{1}{2}$ percent)--probably would be levied.

Margins on all but luxury goods are established by law, but because of supply fluctuations and inflation, both the percentages and categories of goods change from time to time. Despite government attempts to control prices, especially for food, prices are not fixed. Consequently, while most merchants sell within the established margins, the market tends to set consumer prices. Pharmaceutical margins are 33 percent for wholesalers, 50 percent for retailers; consumer goods margins range from 8 percent to 10 percent for wholesale and 10 percent to 25 percent for retail, depending on consumer demand and the number of merchants in the selling chain.

There are no legal restrictions on advertising contraceptive products. Traditionally, however, drug products are not promoted to the public. Normally, not even point-of-purchase materials or leaflets are used. Product packaging and personal selling are the standard methods of sales promotion. During the consultant's field assignment, for example, a radio ad for an OTC worming medicine caused a flurry in the pharmaceutical community. The current chairman of the Pharmacy Board, who considers advertising unsuitable, unilaterally sent to pharmacists a letter on official stationery disavowing advertising. This prompted a meeting of Pharmacy Board officers, who requested that the letter be redrafted to clarify the Board's more lenient position. The officers noted that some products, such as those required or promoted in a social marketing project, should be exempt from any advertising ban. This matter of consumer promotion was to be discussed with the Minister of Health upon her return

from leave. Interestingly, the Deputy Minister, a physician in charge of all medical services, had no objection to the advertising component of the social marketing project discussed at an early meeting with the consultant.

E. Current Family Planning Activities

1. Government of Liberia (GOL)

The Liberian government supports family planning efforts but its official involvement in such efforts is limited. Contraceptive supplies are neither stocked by nor distributed to government facilities.

To date it has participated in only one family planning activity, part of a demonstration health project in Lofa County jointly sponsored by the Ministry of Health and Social Welfare and USAID. The family planning component is generally considered a failure. A large inventory of commodities is still warehoused in Lofa; in fact, because of a lack of storage space, 21 cartons of condoms (dated November 1975) were sent back to Monrovia as overstock. No attempt was made to use this 2,000+ gross in other government health programs. In short, the government shows little interest in becoming directly involved in family planning programs, despite its promotion of MCH and preventive services.

Nevertheless, GOL officials' response to a social marketing project is positive, even enthusiastic in some cases, although the government clearly does not wish to incur project costs or become directly involved.

2. USAID

Excepting the Lofa County project, USAID health projects have not included family planning. The mission encourages training, demographic studies, and data analysis by agents within and outside Liberia. Given the experience in Lofa County and the strong emphasis on health programs, the support of the U.S. Ambassador, the Mission Director, Health Officer, and other AID officials for the social marketing project is especially encouraging.

3. Family Planning Association of Liberia (FPAL)

The FPAL is more active in family planning than any other organization in Liberia. Under agreement with the Ministry of Health, the FPAL has chief responsibility for promoting family planning and for providing contraceptives. The FPAL opened its first clinic in Monrovia in 1966, and has since added seven, two in Monrovia and one each in five of nine counties. Each clinic employs at least one field worker who is responsible for contacting people in their homes and villages and supplying products. The clinics provide standard family planning services, gynecological examinations, and laboratory tests (e.g., urinalysis, parasite detection, pap smears, injections for infections, and in Monrovia and Buchanan, infertility services). Services and supplies are provided for a fixed fee because the IPPF requires the FPAL to

raise 25 percent of its budget locally. Careful records are kept of clinic patients, sales, and income (see Appendix D). The FPAL also sells commodities to private hospitals and clinics, which submit scant data on acceptors.

The OC products supplied are Noriday and Norinyl, Ovral, Ovulen, Eugynon, and Neceugynon; condoms are bulk-packed Durex (lubricated and plain) and Akwel (colored); Neo Sampoo, packaged in tubes of 20, is a spermicidal tablet. The charges for these contraceptives are as follows (clinics outside Monrovia usually charge only half the fee):

| <u>Contraceptive</u> | <u>Cost</u> |
|---|-------------|
| IUD | \$2.00 |
| Pills | 1.00 |
| Condoms | Free |
| Jelly | 0.50 |
| Neo Sampoo | 0.50 |
| Foam | 0.50 |
| Depo-Provera | 5.00 |
| Diaphragm | 2.00 |
| <u>Service</u> | <u>Cost</u> |
| Gynecological Examination | \$3.50 |
| Injection (depends on type, e.g., penicillin) | 0.50 |
| Routine Lab Test | 1.25 |

The number of annual acceptors has fluctuated over the last three years. The number of new acceptors in 1977 totaled 13,465 and continuing acceptors 8,302, for a total of 21,767. In 1978 the total number of acceptors fell to 17,335, mostly because continuations (3,720) dropped. The total number of new and continuing acceptors increased to 20,660 in 1979; this is impressive, comprising 5.7 percent of all fertile couples. The calculation is based on 20,660 acceptors in 1979 divided by the estimated 364,140 fertile women in the country.

If CYP is the desired indicator, the annual unit sales of contraceptive methods can be translated into CYP. Thus, 2,759 CYP from OCs (38,187 cycles), 494 from Neo Sampoo (49,400 tablets), 304 from IUDs (304 pieces), 200 from

condoms (20,000 pieces), 190 from Depo-Provera (760 doses), and about 50 from all others (vaginal jelly, aerosol foam, and diaphragm) totals 3,997 CYPs. Rounded to 4,000 and used as a denominator for 694 (Neo Sampoo and condoms) and for 2,759 (OCs) yields 17.4 percent of FPAL acceptors protected by condoms and spermicides and 69 percent protected by OCs.

While OCs are the favorite method among FPAL acceptors, this is partially because OCs are promoted more widely by FPAL workers. Neo Sampoo, a relatively new introduction by the FPAL, is gaining rapid popularity among staff and clients. Condoms, unlike other methods, are given away free and viewed as a less attractive method by the FPAL. No public advertising of a specific method is done. On the other hand, a social marketing project, backed by pioneer advertising, could make contraceptives available in a large number of outlets at prices competitive with those of the FPAL and substantially below the present commercial market.

Family planning education is under a director responsible for all information, education, and communications (IE&C) activities. Except for a short weekly radio program and a booklet on venereal disease, little family planning education is provided because of budgetary constraints. Two advertising agencies' proposals for promotional activities were turned down recently because funds were unavailable.

4. Other Organizational Efforts

Other family planning efforts are limited or stress manpower training. FPIA, for example, is interested in supplying commodities to community workers of the Youth Federation of Liberia. Pathfinder Fund provides commodities to the Phebe Hospital, a large Lutheran facility near Gbanga, and may supply other private hospitals as well. Training projects have been conducted by PIEGO, D. Bogue and the University of Chicago, Centre for Population Activities (CEFPA), American Home Economics Association, and Columbia University. A RAPID presentation by the Futures Group is expected shortly. None of these organizations provide services or widespread commodity support.

Development assistance from the German, Dutch, Japanese, and Korean governments, from UNDP, WHO, UNICEF, CARE and Goodwill, and from the Peace Corps does not seem to include funds for family planning programs.

F. Commercial Sector Sales

1. Oral Contraceptives

A wide variety of pharmaceutical products is available in every pharmacy. Informal surveys of all major pharmacies in Monrovia and of the only pharmacies in Buchanan and Kakata revealed that most stock from seven to 13 brands of oral contraceptives. Schering products, Eugynon, Neoeugynon, Microeugynon, Anovlar; Lydiol (Organon); the Parke-Davis product Norlestrin; and at least one Searle product, Ovral, Ovulen, or Ovulen 50, can be found in

any pharmacy. Medicine stores carry two or more brands but never the variety or quantity found in pharmacies. The best selling products are Lyndiol,* the Schering brands, and Searle's Ovral.

Prices range from a low of \$1.60-\$1.90 (for Ovulen, the cheapest contraceptive) to a high of \$3.05-\$4.25. (One pharmacy, however, is an exclusive importer and retailer for an Austrian product packaged in threes for \$3.35.) Though margins are fixed, the price for the same brand varies from store to store; moreover, the same product may sell for substantially more (sometimes less) outside Monrovia.

Sales information collected from all major importers (at least five handle one or more manufacturer's contraceptive products, and many pharmacies import products themselves) indicates that about 40,000 OC cycles were sold to retailers in 1979. (This is a rough, understated estimate; some smaller importers could not be reached.) Sales for all brands were slightly higher than the FPAL figure of 35,867. For comparative purposes, the Schering and Wyeth importers also provided sales information for the last two or three years; no significant changes in the sales of oral contraceptives are evident.

2. Condoms

Three manufacturers' products are sold by pharmacies, medicine stores, and a few supermarkets. Several larger stores carry more than one company's products; most stock the full line of only one company. Prices, which range from three for \$0.50 to three for \$0.75, bear no relation to manufacturer or brand name, and apparently reflect the retailer's fancy.

Durex monopolized the condom market until two years ago, when Akwell products appeared; 1979 sales by Akwell (41,904) exceeded those of Durex (36,240). Fujitex, the only other competing company, offers Chapeau; its sales (approximately 585 in 1979) are minor. Approximately 78,750 condoms were sold in 1979 without advertising backup. This figure is almost four times the 20,016 condoms the FPAL gave away. Purchases by expatriates may be substantial.

3. Spermicides

Several brands of vaginal tablets have been imported. Gynomon, available until last year, sold for \$1.10/10 tablets; Rendalls is now imported and sells for \$2.25/12; an order of Neo Sampoo has just arrived and will sell for \$2.60-\$2.75/20. None of the importers could provide data on their sales. A few pharmacies reported that spermicides sell well, although the Kakata pharmacy stopped buying the product because of poor sales. The importer

The large quantity reportedly sold in 1979 was not verifiable and may be exaggerated.

for Neo Sampoo expects it to move well partly because the FPAL's sales have increased substantially, from 16,640 units in 1977 to 49,420 units in 1979, though spermicides are not publicly advertised.

G. Marketing Capabilities

1. Marketing Research

There is no marketing research organization in Liberia. The Domestic Division of the Ministry of Commerce and Trade has never collected marketing information nor does it know of any groups that have consumer information that would be helpful in marketing products. The Division recognizes the need for such data and plans to make surveys next year. Of all the advertising agencies contacted, only one occasionally conducts ad hoc marketing research with the help of a University of Liberia professor. Afromedia, a new agency with affiliates in Ghana and Sierra Leone, has an on-call staff person to make surveys. The agency believes that baseline data can be collected and necessary surveys designed, fielded, and analyzed in less than two months, and consumer advertising tests completed for timely product launch. Afromedia's staff have extensive experience in designing and testing promotional campaigns and have handled the advertising for the Ghana CRS project since it began.

2. Packaging

Almost all imported goods, especially pharmaceutical products, arrive attractively packaged. Little packaging is done in Liberia. A few products are bagged (coffee) or bottled in plastic (bleach) or glass (beer, soft drinks) containers. Items such as fish, soap powder, and candles are boxed in poor quality, often unmarked containers, which are usually imported.

A check of importers, printers, and advertising agencies revealed that Liberia has no capability for producing the overpacks and display boxes used in social marketing projects. The largest printer in Monrovia, Central Press, was willing to import equipment for cutting and scoring paperboard. All cardboard will have to be imported from Europe or the United States, and manpower trained to operate machines. Present skills preclude all but basic three- and four-color line printing. Quoted prices for necessary packaging were very high.

It may be possible to import packaging now produced for the Ghana project. While package designs and brand names should be tested in Liberia, they should be acceptable in any English-speaking country. The text which now identifies the packaging for the Ghana project can be removed on print runs for Liberia.

Efficient shipping by private air cargo is available. It will be more cost-efficient to produce large quantities in Ghana than to finance development of local capability, create new packaging designs, and import small quantities of cardboard for printing in Liberia. The Westinghouse resident manager of the Ghanaian CRS project could foresee no problems with a joint

packaging venture. Any such undertaking will have to be cleared with the new CRS project management in Ghana. The director of Lintas and Afrimedia is willing to handle logistical problems.

Printed materials other than packaging can be produced in Liberia. There are a number of printing firms in Monrovia. Although quality is often poor, if production is supervised and high standards demanded, the quality of the materials will be satisfactory.

3. Prices

Prices for common consumer items are high and have increased steadily and across-the-board over the past few years. Locally produced food-stuffs are somewhat cheaper in rural areas, but prices for most items are set by Monrovia standards and vary only slightly from one area to another. Although neighboring shops tend to carry identical items, there is no shortage of either basic necessities or luxury goods. Obviously, the purchase of food items accounts for the bulk of the average family's expenditures, but an estimated 11 percent to 12 percent of income is spent on health and personal products. The following is a list of prices for some frequently purchased goods and for certain widely available luxury goods.

| <u>Item</u> | <u>Price</u> | <u>Item</u> | <u>Price</u> |
|-----------------------|---------------|-----------------------------|--------------|
| Bread (Loaf) | \$0.45-\$0.80 | Palm-nuts (1b.) | \$ 0.45 |
| Rice (1b) | 0.25 | Eggs | 2/\$0.25 |
| Cassava (1b) | 0.40 | Meat: Beef and Pork 1b. | 1.50-2.00 |
| Salt (40 Grams) | 0.30 | Goat/lb. | 2.50 |
| Chilies (By the Cup) | 0.40 | Wild Game/lb. | 3.00 |
| Greens (Large Bunch) | 0.10-0.25 | Fish (2 lbs.) | 1.00 |
| Pineapples (Small) | 3/\$1.00 | Chickens (Small-Large) | 3.50-4.50 |
| Oranges (Each) | 0.15 | Infant Formula (Small Size) | 1.65 |
| Paw Paw (Small-Large) | 0.15-0.50 | Milk (Small Can) | 0.25 |

| <u>Item</u> | <u>Price</u> | <u>Item</u> | <u>Price</u> |
|---------------------------|--------------|---------------------|------------------|
| Coffee (Medium-Size Jar) | \$ 8.00 | Soap Powder (Small) | \$ 0.75 |
| Soft Drinks | 0.25 | Razor Blades | 3/\$0.15 |
| Beer (Small-Large) | 0.50-1.00 | Batteries | 0.35 |
| Aspirin | 0.50-0.65 | Candles | 0.15-0.20 |
| Toothpaste (Small-Medium) | 0.50-1.30 | Matches (Small Box) | 0.15 |
| Band-Aids | 0.50-0.60 | Cigarettes: Pack | 1.20-1.50 |
| Baby Powder (Small) | 0.95-1.35 | Hand-Rolled | 2/\$0.15 0.05 |
| Soap: Imported | 0.45-0.60 | Chicklets (2) | 0.05 |
| Local | 0.25 | | |

It is difficult to hold consumer prices on any product. There is no way to guarantee that all retailers will abide by prices set for social marketing products. Distributors agree that the best way to prevent retailers from raising prices is to mention them in consumer promotion and advertising campaigns. Printing prices on boxes is less acceptable because of the continuing rate of inflation. The rule of thumb on pharmaceutical products is to assume a consumer price about double that of landed cost.

Although markup is a more accurate term, it appears appropriate to express profit percentages in the terminology commonly used in Liberia. Maximum margin or markup percentages are fixed by law. The merchant calculates his margin on cost of goods rather than on consumer sales price, and many shop owners charge less than the maximum allowed on more competitive or high turnover items. This accounts for the widely fluctuating prices on many products. Certain items classified as pharmaceutical products and available from pharmaceutical distributors--sanitary napkins and tampons, aspirin, etc.--are sold by general stores at prices competitive with those of pharmacies. Most likely, the higher pharmaceutical margins are taken by most merchants. Lower margins for some or all products distributed by a social marketing project would probably be taken up as a policy issue by the Pharmacy Board of Liberia, a government body, if the product comes under serious consideration.

The pharmaceutical importer and wholesaler supposedly take a 33 percent margin and the retailer 50 percent. Large retailers selling to smaller shopkeepers split the 50 percent margin with the latter. Most pharmaceutical products move through the two-step chain. Consumer goods pass along a longer distribution chain, and margins are more flexible. Importers and wholesalers sell for 8 percent to 10 percent; the retail margin, ranging from 10 percent to 25 percent, is split by a series of sellers before the product is retailed to consumers.

The following examples illustrate the Liberian price structure based on the above percentage markups or margins:

| | <u>Pharmacy Products</u> Price/Margins | <u>Consumer Products</u> Price/Margins |
|---------------------|---|---|
| Price to Public | 60¢ | 25¢ |
| Price to Retailer | 40¢ 50% | 20¢ 25% |
| Price to Wholesaler | 30¢ >33% | 18¢ 11% |

4. Distribution

All products move either through the private sector pharmaceutical or consumer goods distribution systems. In addition, the government's Liberia Produce Marketing Corporation buys and sells locally-produced foodstuffs and palm oil. Oral contraceptives, condoms, and spermicidal tablets, distributed through the pharmaceutical system, are imported and wholesaled exclusively by registered pharmaceutical businesses. Only one company, a branch of a British drug firm, acts solely as importer and wholesaler; all other companies own a pharmacy or warehouse (some own both) from which they wholesale and retail goods. Clavenda Bright-Parker, owner of one of the largest businesses, a FPAL board member, and an enthusiastic supporter of family planning, is interested in playing a major role in a social marketing project.

Pharmaceutical distributors usually employ representatives or detailmen who receive a set salary to handle the products of one or more companies. The representatives visit retail customers and doctors regularly to promote products and take orders. Supplies are either shipped to stores on privately-owned trucks or buses or picked up by retailers or their agents whenever they visit the warehouses in Monrovia. Up-country medicine stores may buy from each other or from the closest pharmacy when stocks are low. Transactions are in cash; established customers receive 30 days credit. Discounts (usually 10 percent) are given for larger orders and for cash purchases on all but small orders.

Consumer goods are moved more actively by importers and wholesalers. Larger firms have their own salesmen and delivery vans, although large quantities of goods are still transported by independent truckers (mostly Mandingos) and by up-country retailers (primarily Lebanese) who also transport their own goods. Because Liberia is a small country and because most towns are connected by road to Monrovia, many merchants regularly visit the capital to buy supplies. Covered flatbed trucks filled with travelers and their goods are a common sight on all roads. A few companies, such as Monrovia Breweries, Inc. and U.S. Trading Corp. (the franchiser for Coca Cola and Fanta), transport their own products.

Most importers handle a number of different kinds of products. Exclusive import agreements are more common among consumer goods than among pharmaceutical companies. Several of the larger wholesalers could handle socially marketed

products. The owner of one of the largest, a distributor of popular brands of cigarettes, expressed a sincere interest in participating in the project.

The consumer goods distribution chain tends to be longer than the pharmaceutical distribution chain. Goods pass from major wholesalers to sub-wholesalers (usually larger retailers) to smaller shops and finally to weekly market stalls and small village shops. In Monrovia, women and children sell cigarettes, matches, biscuits, candy, and gum from sidewalk stands.

An exact count of the number of retail outlets in Liberia has never been made. A 1970 estimate puts the figure at 1,750; most of these are general stores, and about 40 percent are in the GMA. A major consumer goods wholesaler independently "guesstimated" this same percentage. There are seven supermarkets in Monrovia; two or three other major urban centers also have a supermarket. Mid-size and smaller towns (an estimated 40 to 45) have central areas lined with general stores carrying identical items. Very few shops are located between towns or in small villages. In almost every region of the country, local farmers and itinerate traders gather each week to sell produce and a variety of everyday items (see Appendix C, Map 7).

Lebanese and Indian merchants control the retailing system in the GMA; up-country retailing is in the hands of Lebanese shopkeepers, although a few smaller stores and remote shops are run by Liberians, many of whom are Mandingo. The 90 pharmacies and medicine stores are owned and operated mainly by Indians and Liberians.

5. Advertising

There are five advertising agencies in Liberia. All can handle a full advertising and promotional campaign, either directly or by subcontracting, but most have a specialty. One, for example, produces films, another outdoor materials, and a third television ads. Usually only one agency handles an account and any necessary subcontracting.

Although newspaper advertising is rare, other familiar advertising modes--radio, television, cinema, billboards, bumper stickers, point-of-purchase, etc.--are used. There is one television station and two radio stations; the former is a medium for expatriates and upper-income Liberians (they own 15,000 sets), the latter for much of the remaining population. One radio station, run by a religious group, broadcasts widely but accepts no advertising. Station ELBC is government-owned and carries a wide range of advertising at high rates (e.g., \$31 for a 30-second spot aired 52-103 times). In two hours one morning 12 spots were broadcast for such items as Guinness, Colgate, Du Maurier, Marlboro, Palmolive, and Temple of Heaven Balm. ELBC broadcasts regularly to the coast and major towns near Monrovia. In addition, two hours of shortwave are broadcast each day. There are about 200,000 AM radio sets which reach 500,000-750,000 people. Shortwave radios are reportedly found in almost every up-country village. The government and USAID plan a massive expansion in radio broadcasting capability using six major dialects; this should make communication with the entire country possible by 1984.

Many Liberians, especially the young, attend cinemas which reportedly influence a large audience. Of the 18 theatres in Liberia, 10 are in the GMA. Admission is \$1.50-\$3.00, depending on the theatre and seat location. As many as 12 30- or 60-second ads are shown between movie reels. These ads, usually produced in Kenya, are effective and professional and are reputed to have a great impact on sales. Production costs are high, between \$10,000-\$12,000 for a 30-second ad; it costs \$40-\$80 to show the ad for one week in a theatre.

Billboards are new but quite popular in Monrovia, at this time the only area where they can be found. One mid-sized, hand-painted billboard can cost as much as \$1,000, plus annual site rental (up to \$300) and maintenance (\$200). Billboards could be quite effective in rural areas because they are unique and rely on visual impact.

Bumper stickers are inexpensive and widely used on the ubiquitous Monrovia taxi cabs, which frequently run up-country, and on trucks and vans. T-shirts are becoming popular promotional items, as are large and small decals and molded plastic signs. All of these items can be produced in Monrovia.

Point-of-purchase signs and stickers are common in general stores and small shops. Pharmacies and medicine stores tend not to display such materials, although attractive display boxes are common.

Large advertising accounts spend \$80,000-\$90,000 annually. The high-level, splashy advertising campaign for Marlboro cigarettes, for example, is budgeted at \$100,000. Marlboro stickers, radio ads, shop signs, posters, bumper stickers, etc., are everywhere. About 40 percent of the budget goes for radio spots; the rest is split among point-of-purchase and other promotional items.

RECOMMENDATIONS FOR A SOCIAL MARKETING PROJECT

RECOMMENDATIONS FOR A SOCIAL MARKETING PROJECT

A social marketing project will further the government's goals of decreasing maternal and child mortality and morbidity rates, improving the health of infants and pregnant women, and accelerating rural development. The objectives of the project would be to:

- encourage birth planning and child-spacing;
- decrease the incidence of adolescent pregnancy; and,
- help reduce the number of abortions.

Population Target and Baseline Marketing Research

Other than reported household income (which is most likely underreported) and average wages, no data on socioeconomic levels, degree of disposable income, or numbers in the cash economy are available. One assumes that despite the lack of excess income, the majority of Liberians makes regular cash purchases.

Given the percentage (5+) of fertile couples reached by the FPAL and the even higher percentage who buy oral contraceptives and condoms from the commercial sector, a target of 18,000 persons by the beginning of Sales Year Two would be an ambitious but plausible figure for making projections on market penetration. This number is derived from a rough calculation (20 percent of the 1.8 million population are fertile and 5 percent of these will be interested in the project products after one year of marketing) that closely matches more precise calculations based on census data (900,000 females x 47.6 aged 15-44 less 15 percent infertile x .05 = 18,207). The following is a suggested breakdown by target segments:

Percentage Breakdown of Year 1 Target:

- 40 percent users of oral contraceptives - 7,200 couples who are married, aged 15-44.
- 30 percent users of condoms - 5,400 males, especially those aged 15-25.
- 30 percent users of spermicidal tablets - 5,400 females, especially those aged 14-20.

Initial marketing research should provide specific information on precise ways to segment the market. The baseline marketing research should be geared to deriving information on knowledge and use of, and perceptions and opinions about, family planning and specific methods; preferred methods; reasons for planning or not planning pregnancies; buying habits; preferred places of purchase; information desired on products; preferred prices; preferred condom colors; etc.

Products and Packaging

The following products, units per sale pack, and packaging strategies are recommended:

1. Methods

- a. Oral Contraceptives (Noriday)
- b. Condoms (colored or clear, depending on research results)
- c. Spermicides (Neo Sampoo)

2. Unit Sales Packs

- a. 1 Cycle OCs per box
- b. 4 Condoms per box
- c. 3 Tablets per box

3. Packaging and Brand Name

Consideration should be given to using the same packaging materials produced for the social marketing project in Ghana. The brand names Floril, Panther, and Coral (for oral contraceptives, condoms, and spermicides) and package designs can be used for a universal, English-speaking market. Shipment of necessary quantities from Accra would have the following advantages:

- a. Local packaging capabilities for quality production are limited or non-existent; the cost of building a capability would be costly.
- b. Quality packaging is the norm for imported products now on the market in Liberia. The project products should impart a quality image, be distinguishable from other products, be easily identifiable by brand, design, logo, etc. These features are especially important, given low-literacy populations.
- c. The pharmaceutical distributor can handle over-packing only if finished goods are supplied.

4. Projected Quantities of AID Commodities, Year 1:

- a. OCs = 93,600 Cycles
- b. Condoms = 3,750 Gross, or 540,000 Units
- c. Spermicides = 540,000 Tablets (packed individually in aluminum foil)

Pricing

Among the reasons for setting high prices for project products are:

- current prices for common consumer items;
- the need to impart a high quality image, which is associated with the prices of commercial products now available;
- current FPAL prices for OCs, condoms, and spermicides;
- an average daily wage of \$4.75;
- data indicating that 11 percent to 12 percent of expenditures are for health and personal products;
- the belief that pharmacists and Lebanese shopkeepers will respond more positively to higher cash markups; and,
- the need to generate revenue to sustain the project after two or three years of AID support.

The following price ranges are suggested:

| <u>Product</u> | <u>Consumer Price</u> | <u>Project Price</u> | <u>Revenue</u> |
|----------------|-----------------------|----------------------|--------------------------------|
| OC | \$0.60-\$0.75 cycle | \$0.30-\$0.38 | \$28,080 - \$35,570 |
| Condom | 0.25-\$0.30/4-pack | 0.18-\$0.22 | 24,300 - 29,700 |
| Spermicide | 0.25/3-pack | 0.13 | 23,400 - 23,400 |
| | | | \$75,780 - \$88,670 |
| | | Less 10% Samples | 7,580 - 8,870 |
| | | | \$68,200 - \$79,800 |

Distribution

Both the pharmaceutical and consumer goods distribution and retailing systems should be used. All three products can be sold through the 90 drug outlets and stored and handled by one importer/distributor. Condoms and spermicides can also move through the consumer goods system; at least one major wholesaler/distributor can handle their distribution. Condoms and spermicides can be added to a product line of health and household goods sold door-to-door. Clave's Pharmaceuticals will begin door-to-door sales this year. Several other distribution mechanisms can be used. For example:

- o The FPAL can be offered products as part of its sales program.
- o Sales can be made from a promotional van purchased for the project.
- o Project staff can cooperate with youth groups serving as community workers.
- o Home extension agents of the Ministry of Agriculture can be enlisted.
- o Government-trained traditional midwives can provide information and supplies.

In addition to the distributors' salesmen, two project salesmen and one detailman/manager trainee should be involved in sales efforts. These three persons, who can be hired as pharmaceutical wholesaler staff, should be responsible only for promoting project products. The salesmen can contact retailers in general stores and pharmacies in designated territories, put up and maintain point-of-purchase promotional displays, and take orders. The detailman/manager trainee should assume responsibility for contacting the medical community and for coordinating door-to-door sales and the efforts of voluntary agencies. He should gradually assume responsibility for overall project management. An education and sales team operating from the promotional van might also sell products directly to consumers.

There are a number of good opportunities for promoting product sales to retailers. Plans and samples for an advertising campaign can be presented. Sales staff can train retailers, who usually are literate, in specific family planning methods and products. Discounts on bulk-quantity purchases, reduced prices on first orders, 2-for-1 offers, etc., sales tactics now used to market new products, should be employed. Special incentives--prizes, conference trips to Monrovia, etc.--can be offered to promote high sales.

Two of the largest importers/distributors--one for pharmaceutical goods and one for consumer goods--are enthusiastic about a social marketing project and willing to cooperate. Both businesses are owned by influential Liberians.

The owner of Clave's Pharmaceuticals is willing to assume a major role in initiating and supporting an on-going program. The mechanics and support for handling distribution, often a major problem in social marketing projects, are excellent in Liberia. Once the project is underway, the distributors should be able to handle the entire operation under day-to-day direction of a full-time manager (the former manager/trainee).

Promotion

The GOL officials who were contacted expressed no objections to public advertising of project products. The FPAL believes that more must be done to promote contraception and family planning, but its own funding for IE&C activities is limited. The Pharmacy Board will not oppose project advertising if the Ministry of Health and Social Welfare endorses a social marketing project. It will be up to the Minister of Health to clarify decisions on the advertising of OCs, condoms, and spermicides. (The Minister, who has already responded favorably to an informal project presentation, reported that she did not know about the Pharmacy Board chairman's mid-February letter on advertising.) An overview of advertising plans using examples from the Ghana CRS project will be presented in March to the Minister by Bright-Parker and Alston Sajery, Administrative Director, JFK Medical Center.

Clearance for full advertising of condoms and spermicides is expected. Discussion of acceptable promotion of oral contraceptives is pending. Messages should complement the government's current concern to encourage increased child-spacing and improved maternal and child health and for decreasing the rates of adolescent pregnancy and abortion.

A three-phase campaign would best suit the need for social marketing in Liberia. Pre-launch marketing research will provide guidelines for the best approaches. Initial promotion which stresses the concept and purpose of family planning and of project products will improve general knowledge and help correct current misconceptions. The project should shift gradually to brand advertising after the project has gained a solid footing. Reminder or maintenance advertising may not be possible until the project has matured fully.

Despite the expense, all available advertising methods should be used to promote the project and ensure its effectiveness. All the following methods can be used; some can be deemphasized or eliminated if there are budgetary constraints:

- o Point-of-Sale Promotion (posters, banners, decals, shop signs, displays)
- o Radio
- o Billboards
- o Cinema Sampling

- o Consumer Sampling
- o Educator/Sales Van (to include entertainment movies, instructional films, product sampling)

A full campaign would cost about \$85,000 for Year 1. Use of a sales van with audiovisual equipment will cost another \$25,000 (including operating expenses). This van can travel to towns and villages where staff can promote and sample project products, answer general questions on family planning, and refer Liberians to FPAL clinics. Staff could show the entertainment films usually seen in cinema theatres after dark. Such a promotional medium would certainly be popular and quickly become known. The general consensus is that a promotional entertainment scheme would be especially effective in rural areas and well worth the cost.

If cuts in advertising are necessary, the most logical choices appear to be the elimination of newspaper ads and reduced spending on billboards and on the number of radio and cinema spots. Purchase of the promotional van, while an extremely attractive advertising distribution technique, could be postponed pending a post-launch evaluation of the project.

Management

The project should be coordinated by a social marketing consultant for the first four or five months before the project is launched and for another two or three months after it begins. While it is possible to reduce consultant time by four to six weeks, there was consensus in Liberia on the critical need for a full-time person during the initial six or so months needed to get the project off to a good start and to keep it on schedule. Despite the enthusiasm of local business persons and the support of the Ministry of Health and USAID, there is no one who can devote exclusive time to the many details and necessary bridge-building which experience in other countries has shown is needed for launching a social marketing project.

A detailman/manager trainee, who will receive on-the-job training at this time, will take charge of operations when the consultancy period ends. The manager will function as part of the distributor's (Clave's Pharmaceuticals) staff and have responsibility for day-to-day management of the program. The owner of Clave's Pharmaceuticals will oversee the on-going project.

Costs and Budget

Funding needs for the first project year are based on the aforementioned recommendations and February 1980 local costs.

ESTIMATED YEAR 1 COSTS¹

| | |
|---|----------------------------|
| Consultant Costs (including 6 month-residence, plus one 2-3 week visit) | \$ 43,000-\$45,000 |
| Local Salaries | 29,000 |
| Local Travel | 9,000 |
| Office Space and Services | 10,000 |
| Marketing Research | 15,000 |
| Packaging (landed cost) | 41,000 |
| Advertising | 86,000 |
| Promotional Van | 27,000 |
| | <hr/> |
| | <u>\$260,000-\$262,000</u> |

Start-up and development costs for a two- or three-year project are estimated at \$350,000-\$400,000. Initial funds will be supplied by AID, Office of Population and Health, Washington, D.C. After the first year of marketing, some of the revenue generated from sales can be used to partially offset expenses. The funds required to continue the project will come from revenues from the base price and depend on the sales level for the two- or three-year period. Independence by Year 4 is based on the following estimated cost, sales and revenue projections for three years.

| | <u>Year 1</u> | <u>Year 2</u> | <u>Year 3</u> | <u>TOTAL</u> |
|-----------------------------|----------------------------|-----------------------------|------------------------------|-------------------|
| <u>Expenses</u> | \$ 260,000 | \$ 188,000 | \$ 162,000 ¹ | \$ 610,000 |
| <u>Revenue</u> | 68,000-80,000 ² | 98,500-115,000 ³ | 130,500-153,000 ⁴ | 297,000-348,000 |
| <u>Deficit</u> ⁵ | (192,000-180,000) | (89,500-73,000) | (31,500-9,000) | (313,000-262,000) |

1. Assumes an inflation factor of 20 percent over Year 2 costs.
2. Based on sales of 100,000 OC cycles, 540,000 condoms, and 540,000 spermicidal tablets at two price levels to 18,000 couples or 5 percent of fertile.
3. Based on sales of 135,200 OC cycles, 780,000 condoms, and 780,000 tablets to 26,000 couples or 7 percent of fertile (assuming a population growth rate of 3 percent).
4. Based on sales of 161,200 OC cycles, 930,000 condoms, and 930,000 tablets to 31,000 couples or 8 percent of fertile (assuming a growth rate of 3 percent).
5. Assumes that some revenues are allowed to accrue, with a maximum of \$297,000-\$348,000 available for future operating funds.

A basic assumption in the recommendations for a social marketing project in Liberia is that the pharmaceutical distributor, Clave's Pharmaceuticals Inc. will assume responsibility for managing the project after product launch. This intent was clearly explicated by the owner, Mrs. Bright-Parker. Relatively high prices were suggested on the additional assumption that sales by the end of three years could generate sufficient income for self-support. Accordingly, there should be no need for either the GOL or USAID to pick up any costs or management responsibilities at any time. This project, therefore, would be unique among AID centrally-funded projects and follow a model originally envisioned by AID for social marketing--an AID commodity-supplied, self-supporting, private sector operation managed by a local distributor.

LIBERIA SOCIAL MARKETING PROJECT

YEAR I BUDGET

(BASED ON FEBRUARY 1980 COSTS)

Consultant Cost (6 months), plus 1 site visit

| | | |
|-------------------------------------|----------|-----------|
| Salary | \$18,000 | \$ 20,000 |
| Housing Allowance | | 6,000 |
| International Travel | | 2,000 |
| Car Rental or Purchase | | 6,000 |
| Local Travel \$300 x 6 months | | 1,800 |
| 1 Round Trip and 3 week-consultancy | | 9,000 |
| | \$42,800 | \$ 44,800 |

Local Salaries

| | |
|----------------------------------|-----------|
| 1 Person \$1,000 x 12 | \$ 12,000 |
| 2 Persons \$450 x 12 | 5,400 |
| 1 Person \$300 x 12 | 3,600 |
| 1 Driver \$250 x 12 | 3,000 |
| Packing Labor | 5,000 |
| Bonuses (average 1 month salary) | 1,750 |
| | \$ 29,000 |

Local Travel

| | |
|---|----------|
| 8 Trips x \$100 x 3 Persons | 2,400 |
| \$180 Month Allowance x 3 Persons x 12 Months | 6,480 |
| | \$ 8,880 |

Office Space and Services

| | |
|----------------------|-----------|
| Space | 2,400 |
| Secretary \$400 x 12 | 4,800 |
| Phone | 2,000 |
| Supplies | 1,000 |
| | \$ 10,200 |

Van and Equipment

| | |
|--------------------------------------|-----------|
| Van Purchase (includes \$3,000 duty) | \$ 18,000 |
| Audiovisual Equipment | 3,000 |
| Running Expenses | 6,000 |
| | \$ 27,000 |

Cont.

Marketing Research

\$ 15,000

Packaging

| | |
|--------------------------------------|------------------|
| OCs x 100,000 Cycles a) .06 | 6,000 |
| Condoms x 135,000 packs4 a) .06 | 8,100 |
| Spermicidals x 180,000 packs3 a) .06 | 10,800 |
| Dispensers 36,500 a) .35 | 12,775 |
| Air Freight Accra | 3,000 |
| | <u>\$ 40,675</u> |

Promotion and Advertising

| | |
|---|------------------|
| Press (av. \$250/1/2 page x 10) | 2,500 |
| Radio (520 x \$24 for 30 seconds) | 12,480 |
| Cinema (production \$12,000 + 26 weeks x 18 theaters x \$40) | 30,720 |
| Pamphlets (35,000 x \$4.10/100) | 1,400 |
| Billboards (\$1,000 x 25 + \$100 each site rental) | 27,500 |
| Signs-Metal Shop (300 x \$10) | 3,000 |
| Canopies-Plastic (500 x \$3.50) | 1,750 |
| Posters and Buntings (1,000 x \$1.50) | 1,500 |
| "T" Shirts (1,000 x \$3.00) | 3,000 |
| Bumper Stickers (5,000 x \$0.50) | 2,500 |
| | <u>\$ 86,050</u> |

GRAND TOTAL

\$259,613

\$261,613

APPENDICES

Appendix A
PERSONS CONTACTED

Appendix A

PERSONS CONTACTED

Robert Smith, U.S. Ambassador to Liberia

USAID

Ed Anderson, Deputy Mission Director
Gilda DeLuca, Public Health
Donald DiAntonio, Comptroller
Remo Ray Garufi, Mission Director
Chuck Husick, Program Officer
Evelyn McCloud, Program Officer
Chuck Mantonie, Public Health Deputy
Irene Marshall, Administrative Assistant, Health
Fred William Whitten, Program Officer
Fred Zerzavy, Physician Public Health

Ministry of Health and Social Welfare

Wilfred Boayue, Deputy Minister and Chief Medical Officer
Henry Safidu, Assistant to Minister of Health

JFK Medical Center

Jacob N. Cisco, Chief Pharmacist and Member, Pharmacy Board of Liberia
Payne Dennis, Supplies Manager
Walter Gwinegale, Member, Pharmacy Board of Liberia, and Medical Director, Phebe Hospital
Mrs. Harrison, Administrator, Maternity Clinic
Bea Keller, Head Nurse, Maternity Clinic
Alston Sajery, Director of Administration

Appendix A cont.

Family Planning Association of Liberia

Ruth Bryant-Smith, Executive Director

Mrs. Caulker, Director IE&C

Cecelia Nemah, Director of Clinics

Geetor Sayde, Statistician

Advertising Agencies

Victor Ameyibor, Production/Area Manager, Afromedia
(Liberia) Ltd.

Lawrence Boateng, Client Service Director, Afromedia
(Liberia) Ltd.

Jacob Obetsebi-Lamptey, Director, Afromedia (Liberia)
Ltd. and Lintas (Ghana)

Marva Wotorson, Director, Creative Services, Malika

George E. Hadjioannou, Managing Director, Pearl & Dean
(Liberia) Ltd.

Importer/Distributors

Clave's Pharmaceutical Inc.

Clavenda Bright-Parker, President*

Seth K. Akiti, Sales Manager

Stanley W. George I, Medical Representative, Norwich

Julia Lavela, Medical Representative, Bristol Myer

Itly Chacko, Pharmacist, Mohan's Medical

Ramses Bright, President, Atlantic Marketing Co. (Atmark)

S. S. Dhaliwal, Manager, Shaheen Trading Corp., Inc.

*President, West African Pharmaceutical Federation, and President Pharmacy Board of Liberia.

Appendix A, cont.

Gordon P. Edwards, Pharmacist, Glaxo Liberia Ltd.

Mr. Moustafa, City Pharmacy

Other Contacts

Carrie Ball, Manager, Avon, Liberia

Richmond Draper, Director, Youth Federation of Liberia

Philip Gadegbeku, Assistant Minister for Statistics,
Ministry of Planning and Economic Affairs

John Hayes, Resident Manager, CRS Project, Accra, Ghana

Charles Herron, Assistant Manager, Central Press

Stanley Jarvis, General Manager, Central Press

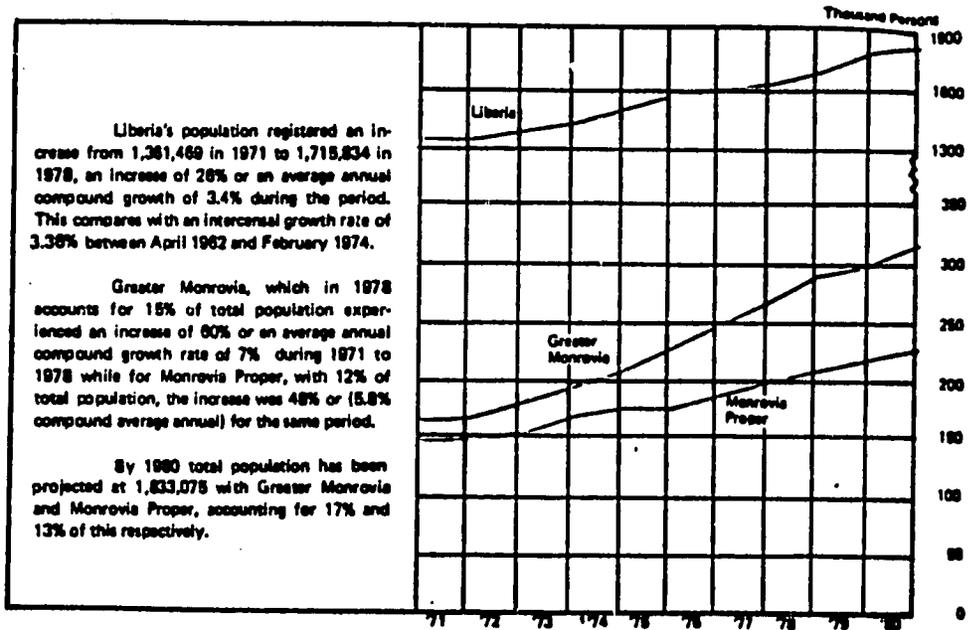
Mr. Ugboma, Information Officer, U.N. Information Center

David Wilson, AID Consultant, Public Broadcasting System,
Mississippi, USA.

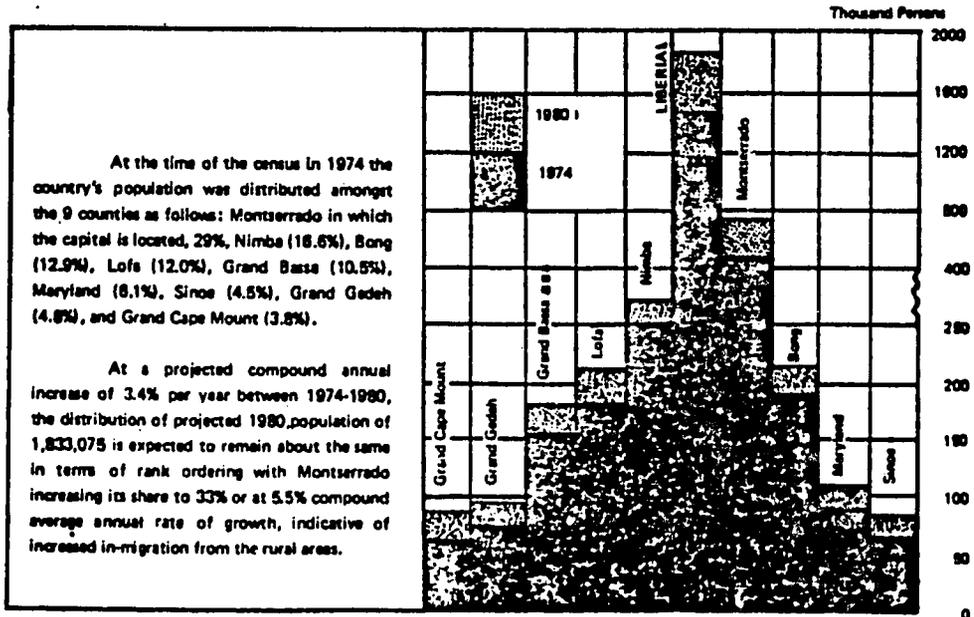
Appendix B

TABLES, CHARTS, AND GRAPHS

TOTAL POPULATION (1971-1980)



POPULATION OF LIBERIA AND NINE COUNTIES (1974 and 1980)



**PERCENT DISTRIBUTION OF POPULATION
BY BROAD AGE GROUPS AND SEX FOR LIBERIA
(1978)**

| Age Group | Both Sexes | Males | Females | Age Group | Both Sexes | Males | Females |
|-----------|------------|-------|---------|-----------|------------|-------|---------|
| 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 0-4 | 17.1 | 17.6 | 16.6 | 45-49 | 4.2 | 4.9 | 3.4 |
| 5-9 | 14.3 | 14.7 | 14.0 | 50-54 | 2.6 | 2.9 | 2.3 |
| 10-14 | 10.8 | 11.8 | 9.8 | 55-59 | 2.2 | 2.6 | 1.9 |
| 15-19 | 10.5 | 9.6 | 11.3 | 60-64 | 1.7 | 1.8 | 1.6 |
| 20-24 | 8.1 | 5.8 | 9.4 | 65-69 | 1.8 | 1.9 | 1.6 |
| 25-29 | 8.1 | 6.8 | 9.3 | 70-74 | 0.8 | 0.9 | 0.7 |
| 30-34 | 6.4 | 6.2 | 6.8 | 75-79 | 0.7 | 0.8 | 0.6 |
| 35-39 | 6.2 | 6.0 | 6.4 | 80-84 | 0.3 | 0.4 | 0.2 |
| 40-44 | 3.8 | 3.8 | 3.9 | 85+ | 0.3 | 0.4 | 0.2 |

**DISTRIBUTION OF POPULATION UNDER FUNCTIONAL AGE
GROUPS FOR MAJOR UNIVERSES OF LIBERIA
(1978)**

| Universe | Age | | | Group | |
|--|------|------|-------|-------|-----|
| | 0-4 | 5-14 | 15-34 | 35-64 | 65+ |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Liberia | 17.1 | 25.1 | 33.1 | 20.7 | 4.0 |
| Urban (including Greater Monrovia area) | 17.1 | 25.1 | 40.5 | 15.5 | 1.8 |
| Greater Monrovia | 16.3 | 23.3 | 43.2 | 15.3 | 1.4 |
| Urban (excluding GM) | 17.8 | 26.3 | 38.2 | 15.7 | 2.1 |
| Rural Areas | 17.1 | 25.2 | 30.1 | 22.8 | 4.8 |

Notes: Ages are symbolic of children, pre-adulthood, early adulthood, late adulthood, and old persons.

SEX RATIO (FEMALES PER 1,000 MALES) IN URBAN AND RURAL AREAS
OF LIBERIA

(1974)

| County | URBAN | | | RURAL | | |
|------------------|----------------|----------------|------------|----------------|----------------|--------------|
| | Male | Female | Sex-Ratio | Male | Female | Sex-Ratio |
| Bong | 9,891 | 8,712 | 881 | 85,371 | 90,212 | 1,067 |
| Grand Bassa | 19,344 | 17,293 | 894 | 56,666 | 57,841 | 1,021 |
| Grand Cape Mount | 6,839 | 5,948 | 870 | 22,760 | 21,054 | 925 |
| Grand Gedeh | 3,157 | 2,937 | 930 | 30,702 | 35,027 | 1,141 |
| Lofa | 9,428 | 9,296 | 986 | 77,078 | 84,935 | 1,102 |
| Maryland | 12,522 | 12,266 | 980 | 32,844 | 33,966 | 1,034 |
| Montserrado | 139,447 | 118,524 | 850 | 96,699 | 85,321 | 882 |
| Nimba | 25,892 | 24,823 | 959 | 96,323 | 102,654 | 1,066 |
| Since | 6,423 | 5,427 | 844 | 27,723 | 28,001 | 1,010 |
| Total | 232,943 | 205,228 | 881 | 526,166 | 539,031 | 1,024 |

Source: Population Division, Bureau of Statistics, Ministry of Planning and Economic Affairs, Monrovia, Liberia.

**CRUDE BIRTH RATE, GENERAL FERTILITY RATE
CRUDE DEATH RATE, AND NATURAL RATE OF INCREASE
(1978)**

| | Universe | CBR | CDR | % Natural Rate of Increase | GFR |
|----|----------|------|------|----------------------------------|-------|
| | 1 | 2 | 3 | 4 | 5 |
| 1. | LR | 50.3 | 19.7 | 3.06 | 91.8 |
| 2. | GM | 52.4 | 13.4 | 3.90 | 102.0 |
| 3. | UB | 50.8 | 14.1 | 3.67 | 97.1 |
| 4. | RU | 49.8 | 14.6 | 3.52 | 99.1 |
| 5. | RL | 45.7 | 22.1 | 2.36 | 101.2 |

Notes: CBR = Crude Birth Rate (Number of births per 1,000 population per annum)

CDR = Crude Death Rate (Number of deaths per 1,000 population per annum)

NRI = Natural Rate of Increase - Difference of CBR and CDR

GFR = General Fertility Rate (Number of births per 1,000 women aged 14-44)

AGE-SPECIFIC FERTILITY RATES
FOR MAJOR DIVISIONS OF LIBERIA
(1978)

| Age Group | LB | UB | GM | RU | RL |
|-----------|-------|-------|-------|-------|-------|
| 1 | | | | | |
| 15 - 19 | 112.0 | 97.7 | 98.6 | 97.2 | 119.7 |
| 20 - 24 | 170.7 | 154.4 | 175.8 | 162.2 | 181.7 |
| 25 - 29 | 134.5 | 119.7 | 147.7 | 122.2 | 142.8 |
| 30 - 34 | 79.7 | 79.2 | 90.6 | 88.1 | 80.1 |
| 35 - 39 | 58.7 | 47.1 | 44.7 | 49.6 | 63.1 |
| 40 - 44 | 37.1 | 26.7 | 15.3 | 37.7 | 40.5 |
| 45 - 49 | 13.4 | 11.9 | 15.3 | 9.1 | 13.6 |

**DISTRIBUTION OF CURRENT BIRTHS
BY AGE OF MOTHER FOR MAJOR DIVISIONS OF LIBERIA
(1978)**

| Age Group | LB | UB | GM | RU | RL |
|------------------|--------------|--------------|--------------|--------------|--------------|
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 15 - 19 | 24.8 | 24.2 | 23.7 | 24.7 | 25.1 |
| 20 - 24 | 29.4 | 34.1 | 35.8 | 32.4 | 27.3 |
| 25 - 29 | 23.0 | 23.4 | 24.2 | 22.7 | 22.8 |
| 30 - 34 | 10.9 | 10.6 | 9.7 | 11.5 | 11.0 |
| 35 - 39 | 7.7 | 5.2 | 4.8 | 5.7 | 8.8 |
| 40 - 44 | 3.0 | 1.7 | 1.0 | 2.5 | 3.6 |
| 45 - 49 | 1.2 | 0.7 | 0.8 | 0.5 | 1.4 |
| 50+ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

DISTRIBUTION OF CURRENT BIRTHS
BY MARITAL STATUS OF WOMEN FOR MAJOR DIVISIONS OF LIBERIA
(1978)

| | Area | Total | Never Married | Married | Widowed, Divorced, and Separated |
|----|------|-------|---------------|---------|--|
| | 1 | 2 | 3 | 4 | 5 |
| 1. | LB | 100.0 | 12.2 | 84.3 | 3.5 |
| 2. | UB | 100.0 | 13.3 | 83.0 | 3.7 |
| 3. | GM | 100.0 | 14.2 | 83.5 | 2.3 |
| 4. | RU | 100.0 | 12.5 | 82.5 | 5.0 |
| 5. | RL | 100.0 | 11.6 | 84.9 | 3.4 |

LB = Liberia
 UB = Urban (including Greater Monrovia Area)
 GM = Greater Monrovia Area
 RA = Urban (Excluding GM)
 RL = Rural Areas

**AGE-SPECIFIC DEATH RATES
FOR MAJOR DIVISIONS OF LIBERIA
(1978)**

| Age Group 1 | Age Specific Death Rate | | | | |
|----------------|-------------------------|---------|---------|---------|---------|
| | Liberia 2 | GM 4 | UB 3 | RU 5 | RL 6 |
| Below 1 | 159.5 | 160.7 | 206.6 | 125.1 | 183.3 |
| 1 - 4 | 27.7 | 20.7 | 18.9 | 19.8 | 30.1 |
| 5 - 9 | 2.4 | 3.6 | 4.3 | 4.8 | 2.0 |
| 10 - 14 | 5.1 | 1.4 | 4.8 | 7.8 | 5.1 |
| 15 - 19 | 6.1 | 2.6 | 4.8 | 7.0 | 7.0 |
| 20 - 24 | 7.8 | 2.4 | 4.1 | 6.1 | 10.4 |
| 25 - 29 | 4.4 | 5.4 | 5.4 | 4.6 | 3.9 |
| 30 - 34 | 8.8 | 7.1 | 4.9 | 2.6 | 10.5 |
| 35 - 39 | 11.1 | 6.3 | 7.0 | 7.3 | 13.3 |
| 40 - 44 | 12.0 | 8.3 | 9.2 | 9.9 | 12.9 |
| 45 - 50 | 15.3 | 15.8 | 18.5 | 20.9 | 14.5 |
| 50 - 54 | 26.5 | 20.6 | 14.5 | 9.0 | 29.1 |
| 55 - 59 | 21.8 | 50.2 | 41.0 | 31.6 | 18.4 |
| 60 - 64 | 68.9 | 38.1 | 78.7 | 105.4 | 67.0 |
| 65 - 69 | 43.0 | 42.3 | 26.5 | 17.2 | 45.4 |
| 70 - 74 | 96.2 | 57.1 | 80.1 | 105.6 | 99.3 |
| 75 - 79 | 52.9 | 103.0 | 80.9 | 68.2 | 50.0 |
| 80 - 84 | 111.7 | 132.4 | 51.2 | 0.0 | 117.5 |
| 85+ | 223.4 | 191.1 | 155.6 | 132.3 | 229.3 |

**SEX RATIO, CHILD/WOMAN RATIO, AND DEPENDENCY RATIO
FOR MAJOR DIVISIONS OF LIBERIA
(1978)**

| Universe | Sex Ratio | CW Ratio | Dependency Ratio |
|----------|-----------|-------------|---------------------|
| 1 | 2 | 3 | 4 |
| LB | 1,038 | 666.6 | 266.5 |
| UB | 926 | 718.8 | 214.9 |
| GM | 914 | 642.5 | 215.0 |
| RU | 938 | 806.1 | 249.6 |
| RL | 1,088 | 657.3 | 280.9 |

Notes: Sex Ratio = Number of females per 1,000 males

Child Woman = (CW) Ratio = Number of children
0-4 per 1,000 women aged 15-49

Dependency Ratio = Number of persons aged 0-4
and 65+ against 1,000 persons
aged 15-64

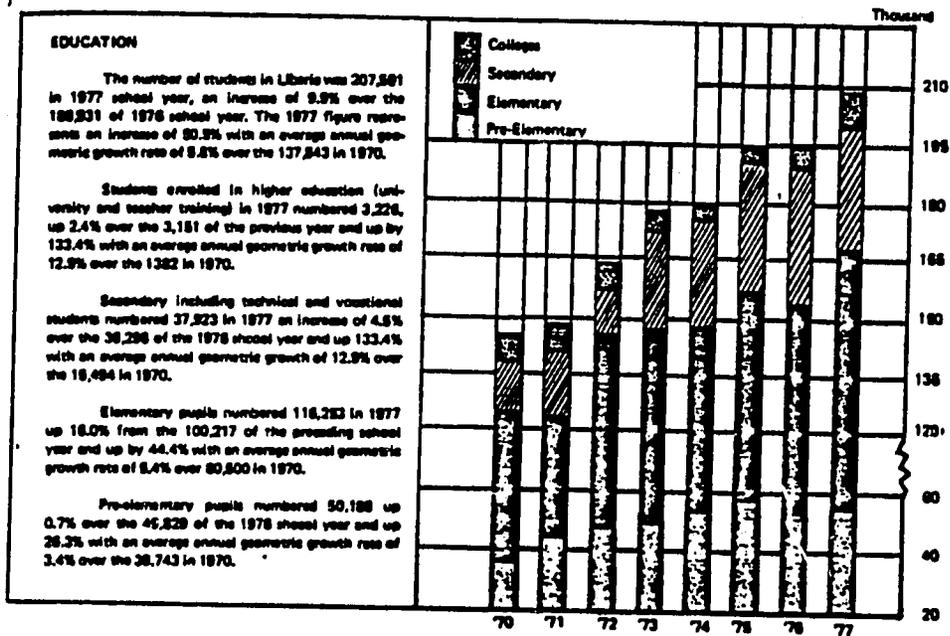
DISTRIBUTION OF HOUSEHOLDS BY HOUSEHOLD SIZE
FOR MAJOR DIVISIONS OF LIBERIA
(1978)

| Universe | Total | Size of Household | | | | | | | |
|----------|-------|-------------------|-----|------|------|------|------|------|------|
| | | Number of Persons | | | | | | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7-9 | 10+ |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| LB | 100.0 | 2.5 | 5.4 | 8.0 | 10.1 | 10.7 | 11.0 | 24.3 | 28.0 |
| UB | 100.0 | 4.2 | 7.2 | 10.6 | 12.2 | 11.7 | 11.0 | 27.9 | 27.4 |
| GM | 100.0 | 4.1 | 8.0 | 12.2 | 12.7 | 12.2 | 10.8 | 21.3 | 18.6 |
| RU | 100.0 | 4.0 | 6.5 | 9.2 | 11.7 | 11.2 | 11.1 | 22.4 | 23.9 |
| RL | 100.0 | 1.9 | 4.7 | 7.0 | 9.2 | 10.3 | 11.0 | 25.3 | 30.7 |

DISTRIBUTION OF POPULATION AGED 5 YEARS AND OLDER
CLASSIFIED ACCORDING TO LITERACY
FOR MAJOR DIVISIONS OF LIBERIA
(1978)

| Universe | Total | English Alone | Other Languages Excluding English | English And Other Languages | Illiterate |
|----------|-------|---------------|-----------------------------------|-----------------------------|------------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| LB | 100.0 | 22.9 | 0.9 | 1.1 | 75.1 |
| UB | 100.0 | 45.0 | 1.5 | 2.8 | 50.7 |
| GM | 100.0 | 49.3 | 1.3 | 3.4 | 46.0 |
| RU | 100.0 | 40.9 | 1.7 | 2.3 | 55.2 |
| RL | 100.0 | 13.7 | 0.7 | 0.4 | 85.1 |

COMPARISON OF EDUCATION STATISTICS (1970-1977)



**EDUCATION IN LIBERIA
(1970 to 1977)**

| Year | Pre-Elementary Pupils | Elementary | | Secondary | |
|------|-----------------------------|-----------------------|---------------------|-----------|---------------------|
| | | Pupils | Number of Teachers | Pupils | Number of Teachers |
| 1970 | 39,748 | 80,900 | 3,384 | 18,484 | 918 |
| 1971 | 43,058 | 88,730 | 3,304 | 17,803 | 1,012 |
| 1972 | 48,853 | 90,192 | 3,657 | 21,411 | 1,167 |
| 1973 | 48,700 | 100,030 | 3,718 | 23,900 | 1,195 |
| 1974 | 48,847 | 100,840 | 3,418 ^{2/} | 26,428 | 1,018 ^{2/} |
| 1975 | 53,785 | 104,038 | 3,832 | 32,978 | 1,288 |
| 1976 | 49,829 ^{2/} | 100,217 ^{2/} | 4,330 | 38,288 | 1,275 |
| 1977 | 50,785 60,660 | 118,253 | 4,471 ^{3/} | 38,783 | 1,588 |
| 1978 | 62,409 | 129,776 | 4,142 | 45,668 | 2,885 ^{4/} |

- Notes:**
- 1 Kindergarten and pre-grade.
 - 2 Decline resulted from reorganization and consolidation at both levels.
 - 3 Decline due to incomplete questionnaire.
 - 4 Estimate resulting from adjustments to the incomplete returns of 3,701 published surveys.

Source: Division of Statistics, Ministry of Education, Monrovia, Liberia

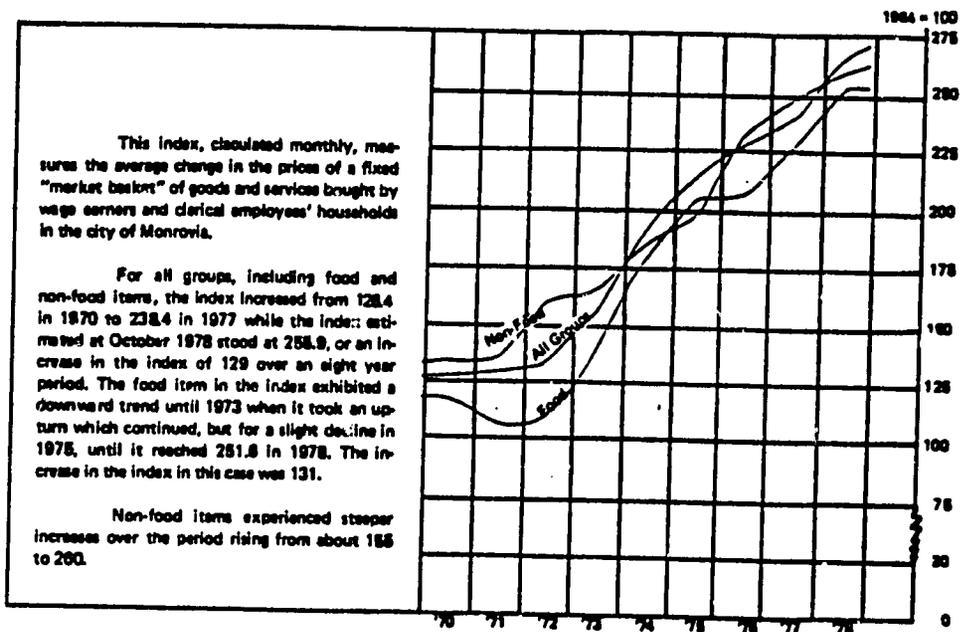
**EDUCATION IN LIBERIA
(1970 to 1977)**

| Year | Teaching Training | | | Technical & Vocational | | | University | | | Total Number of |
|------|-------------------|----------|-------|------------------------|-------------------|------------------|-------------|----------|-----------|------------------------|
| | Number of | | | Number of | | | Number of | | | |
| | Institution | Students | Staff | Institution | Students | Graduates | Institution | Students | Graduates | Students in All Levels |
| 1970 | 2 | 308 | NA | 3 | 722 | NA | 2 | 888 | 188 | 137,843 |
| 1971 | 2 | 388 | NA | 3 | 816 ^{4/} | 118 | 2 | 888 | 138 | 148,488 |
| 1972 | 2 | 388 | 88 | 3 | 787 | 138 | 2 | 1,413 | 138 | 168,881 |
| 1973 | 2 | 387 | NA | 3 | 884 | 138 | 2 | 1,888 | 188 | 178,478 |
| 1974 | 2 | 423 | 41 | 3 | 878 | 48 ^{5/} | 2 | 1,711 | 888 | 178,187 |
| 1975 | 2 | 422 | 88 | 3 | 748 ^{5/} | 78 | 2 | 1,888 | 388 | 188,888 |
| 1976 | 3 | 488 | NA | 3 | 1,888 | 148 | 2 | 2,187 | 388 | 188,881 |
| 1977 | 3 | 538 | NA | 3 | 1,148 | 188 | 2 | 2,888 | 388 | 207,881 |

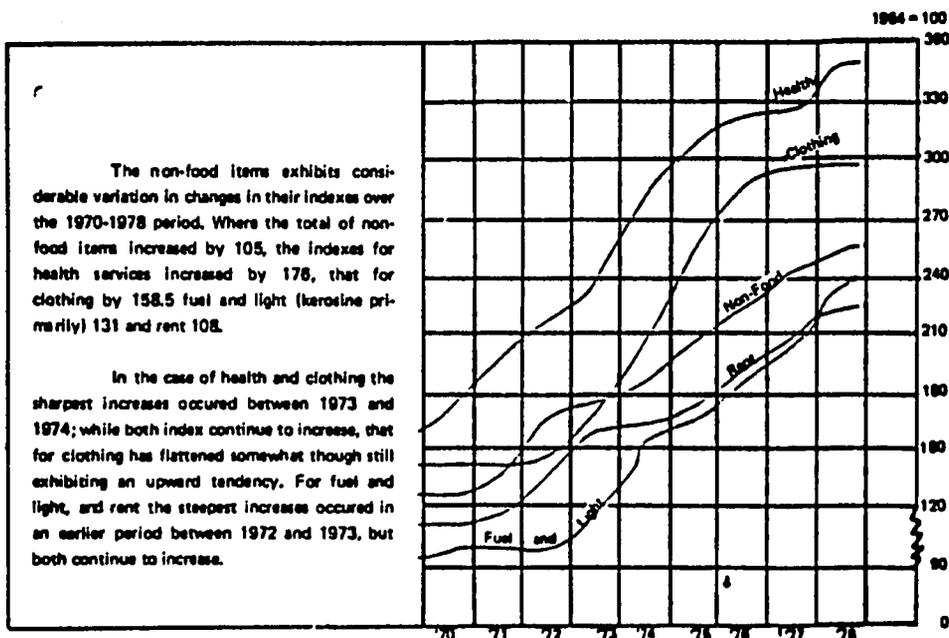
- Notes:**
- 3 Booker T. Washington Institute was temporarily closed in 1974.
 - 4 Enrollment was reduced in 1971 to avoid overcrowding.
 - 5 Figures listed for 1975-1977 apply to Booker T. Washington Institute only.
- NA=Not Available.

Source: Division of Statistics, Ministry of Education, Monrovia, Liberia.

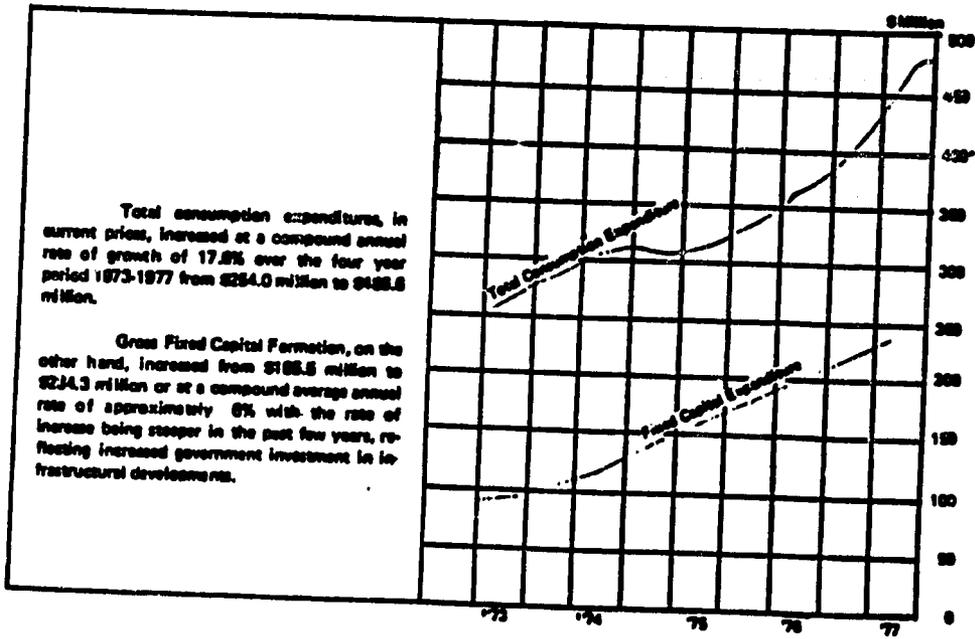
CONSUMER PRICE INDEX, 1970-1978 (Base Year 1967 = 100)



COMPARABLE ANNUAL AVERAGE INDICES FOR NON-FOOD ITEMS (1970-1978)



CONSUMPTION EXPENDITURES AND GROSS FIXED CAPITAL FORMATION (CURRENT PRICES)



**PERCENT WORKING TO TOTAL LIBERIAN POPULATION AGED 10 YEARS AND OLDER
BY AGE AND SEX
(1978)**

| Age Group | Both Sexes | Males | Females |
|--------------|-------------|-------------|-------------|
| 1 | 2 | 3 | 4 |
| Total | 52.6 | 62.6 | 42.5 |
| 10 - 14 | 11.6 | 9.3 | 13.9 |
| 15 - 19 | 23.3 | 21.6 | 24.9 |
| 20 - 24 | 45.2 | 55.7 | 34.6 |
| 25 - 29 | 64.8 | 85.2 | 44.4 |
| 30 - 34 | 74.3 | 93.0 | 55.5 |
| 35 - 39 | 78.8 | 97.6 | 59.9 |
| 40 - 44 | 80.4 | 94.6 | 66.2 |
| 45 - 49 | 79.5 | 96.0 | 63.0 |
| 50 - 54 | 76.1 | 93.8 | 58.4 |
| 55 - 59 | 76.1 | 92.7 | 59.4 |
| 60 - 64 | 62.4 | 86.8 | 37.9 |
| 65+ | 46.7 | 69.9 | 23.4 |

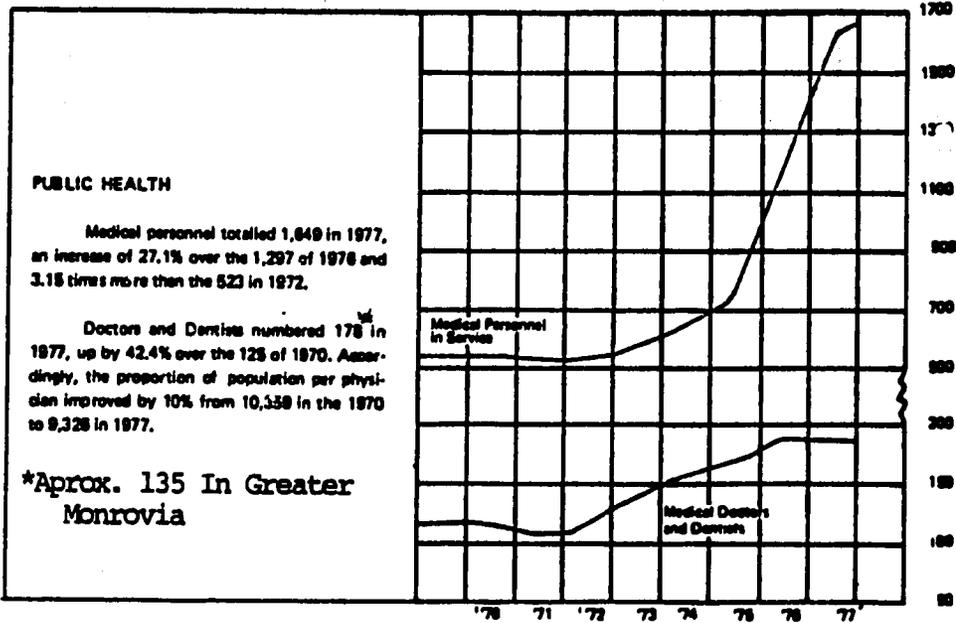
PERCENT DISTRIBUTION OF POPULATION 10 YEARS AND OLDER
 BY ECONOMIC ACTIVITY FOR MAJOR DIVISIONS OF LIBERIA
 (1978)

| Universe | Working | Student | House-keeping | Retired | Others |
|----------|---------|---------|---------------|---------|--------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| LB | 50.9 | 18.8 | 16.9 | 2.5 | 10.8 |
| UB | 34.7 | 28.9 | 21.0 | 1.5 | 12.7 |
| GM | 34.2 | 28.1 | 21.3 | 0.9 | 13.8 |
| RU | 35.1 | 29.6 | 20.6 | 2.0 | 11.6 |
| RL | 61.4 | 14.6 | 15.3 | 2.7 | 10.0 |

PERCENT WORKING TO TOTAL POPULATION AGED 10 YEARS AND OLDER
 BY SEX FOR MAJOR DIVISIONS OF LIBERIA
 (1978)

| Sex | U n i v e r s e | | | | |
|------------|-----------------|------|------|------|------|
| | LB | UB | GM | RU | RL |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Both Sexes | 52.6 | 34.7 | 34.2 | 35.1 | 61.4 |
| Males | 62.6 | 53.8 | 54.8 | 52.7 | 66.8 |
| Females | 42.5 | 15.6 | 13.6 | 17.5 | 56.0 |

COMPARISON OF MEDICAL PERSONNEL IN SERVICE TO MEDICAL DOCTORS AND DENTISTS



**COMPARISON PUBLIC AND PRIVATE HOSPITAL AND CLINIC SERVICES
(BY YEAR)**

H E A L T H

| Year | No. of Hospitals ^{1/} | | | No. of Clinics | | | No. of Hospital Beds | No. of Medical Doctors | Population Per Hospital Beds | Population Per Physician | No. of Medical Personnel ^{2/} |
|------|--------------------------------|------------|------------------|----------------|------------|------------------|----------------------|------------------------|------------------------------|--------------------------|--|
| | Total | Government | Private | Total | Government | Private | | | | | |
| 1970 | 31 | 13 | 18 | 297 | 223 | 74 | 2216 | 128 | 984 | 16389 | N.A. |
| 1971 | 33 | 13 | 20 | 312 | 251 | 61 | 2383 | 113 | 976 | 13946 | N.A. |
| 1972 | 33 | 13 | 20 | 312 | 251 | 61 | 2383 | 127 | 988 | 11688 | 823 |
| 1973 | 33 | 14 | 19 ^{3/} | 300 | 228 | 72 | 2448 | 146 | 984 | 10831 | 688 |
| 1974 | 32 | 16 | 17 ^{4/} | 294 | 208 | 86 | 2123 | 188 | 788 | 9888 | 884 |
| 1975 | 32 | 16 | 17 | 291 | 212 | 79 | 2388 | 178 | 881 | 8148 | 728 |
| 1976 | 33 | 16 | 18 | 288 | 213 | 75 ^{5/} | 2488 | 188 | 884 | 8888 | 1387 |
| 1977 | 34 | 16 | 18 | 284 | 217 | 77 ^{6/} | 2888 | 178 ^{**} | 848 | 8338 ^{**} | 1648 |

- Notes:
- 1 Includes health centers with beds for at least 20 in-patients.
 - 2 Includes dentists.
 - 3 Includes doctors, dentists, pharmacists and their assistants, midwives, and nurses.
 - 4 Result of reclassification of certain clinics or hospitals.
 - Estimate resulting from adjustment based on past trends.
 - Drop in the number of doctors is a result of more rigorous enforcement of requirement for certification.

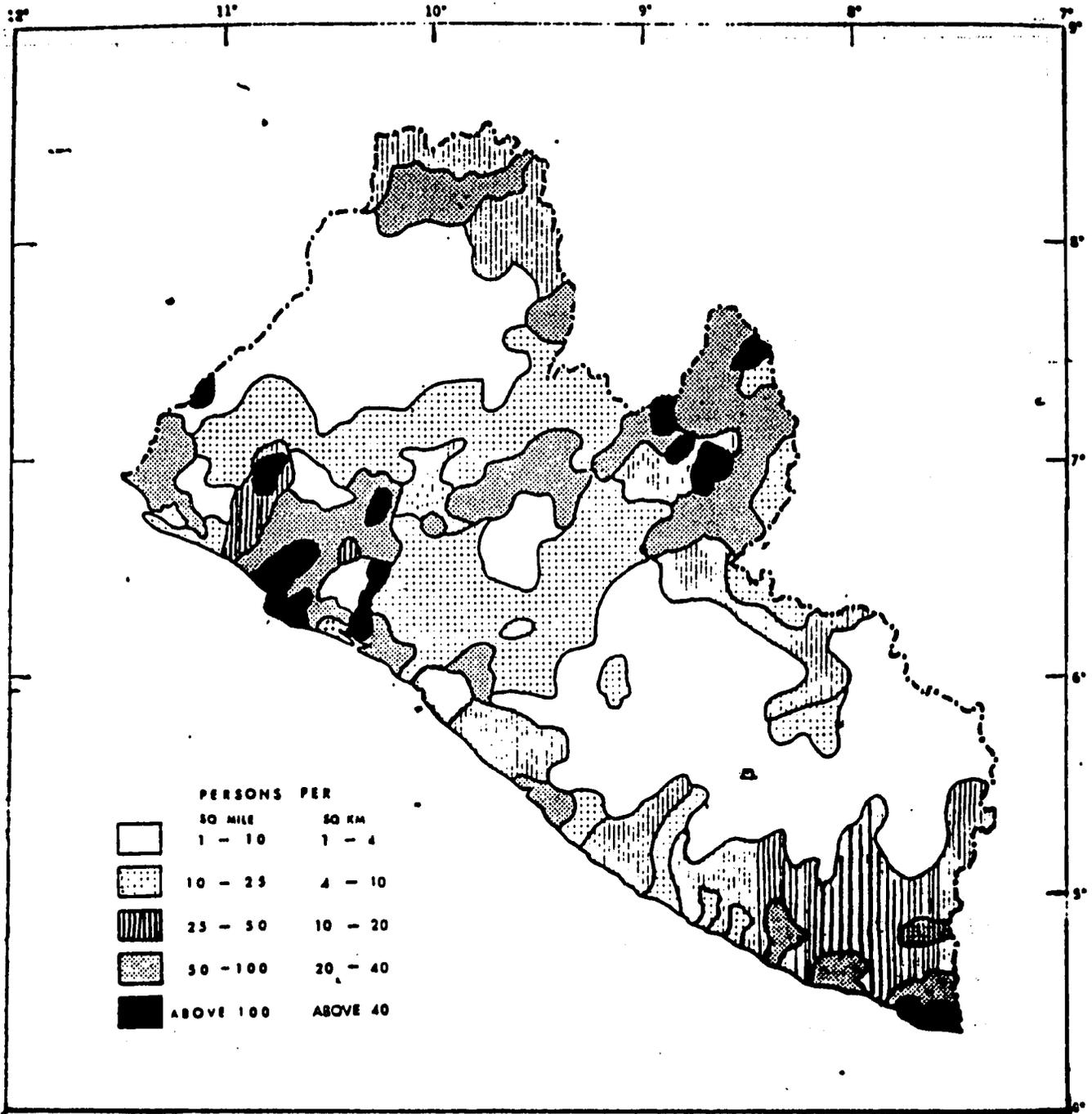
Source: Ministry of Health and Social Welfare, Monrovia, Liberia.

Appendix C

MAPS

MAP 1

DENSITY OF POPULATION



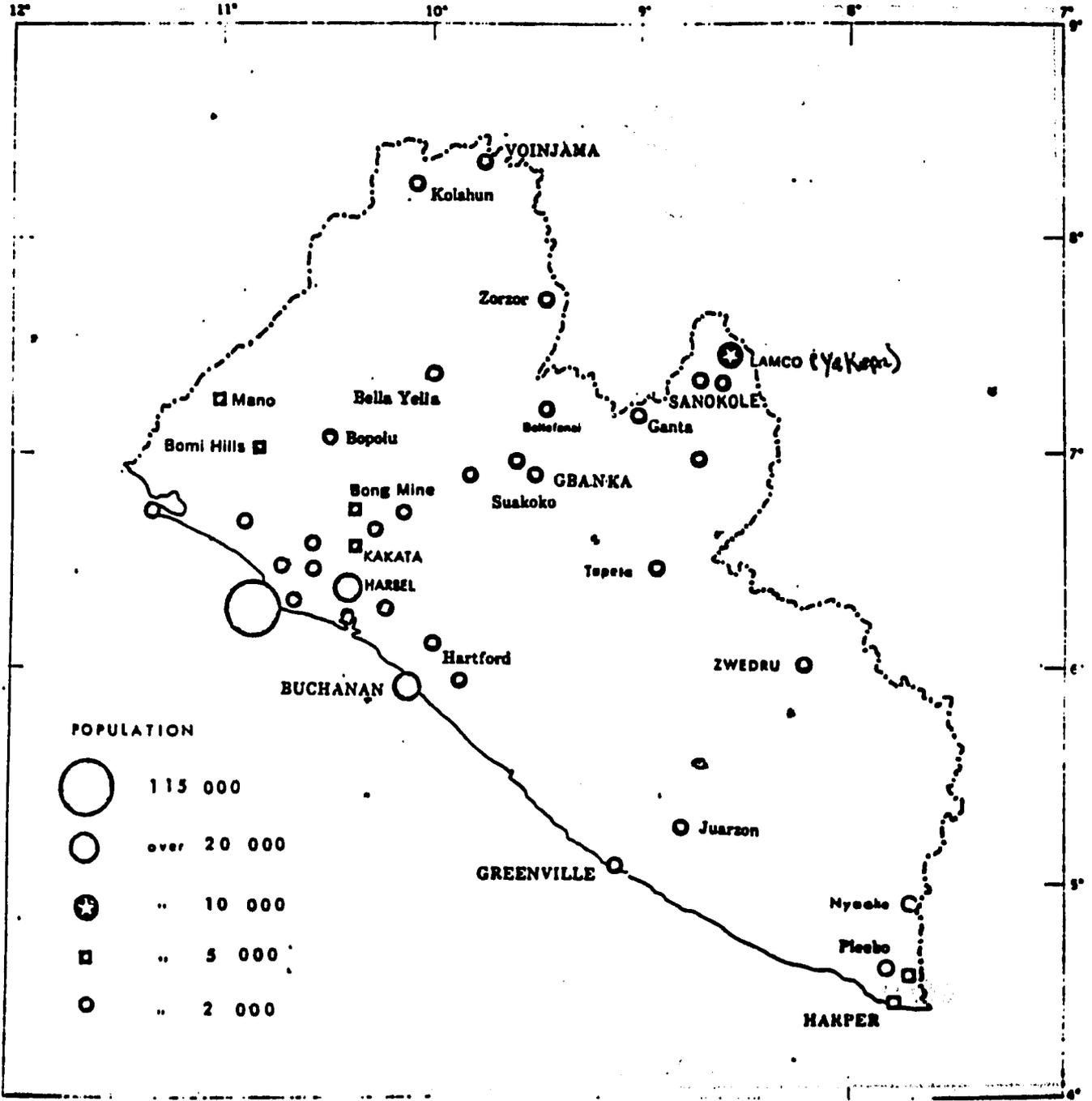
0 25 50 75 100 KILOMETRES

0 25 50 75 100 MILES

SCALE 1:1,000,000

MAP 2

SIZE AND DISTRIBUTION OF TOWNS



POPULATION

○ 115 000

○ over 20 000

★ .. 10 000

□ .. 5 000

○ .. 2 000

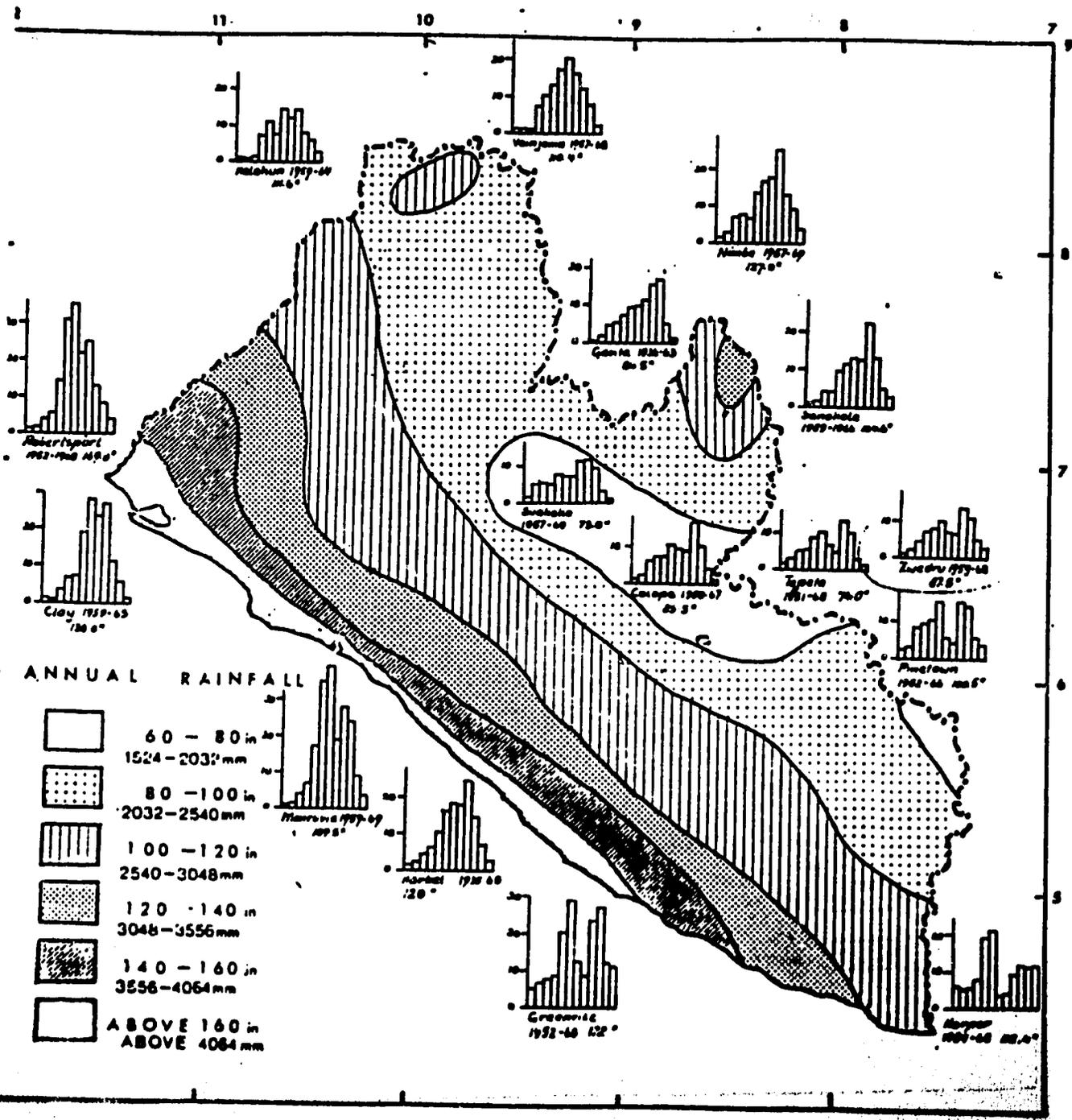
0 25 50 75 100 MILLIMETRES

0 25 50 75 100 METRES

SCALE 1:250,000

MAP 3

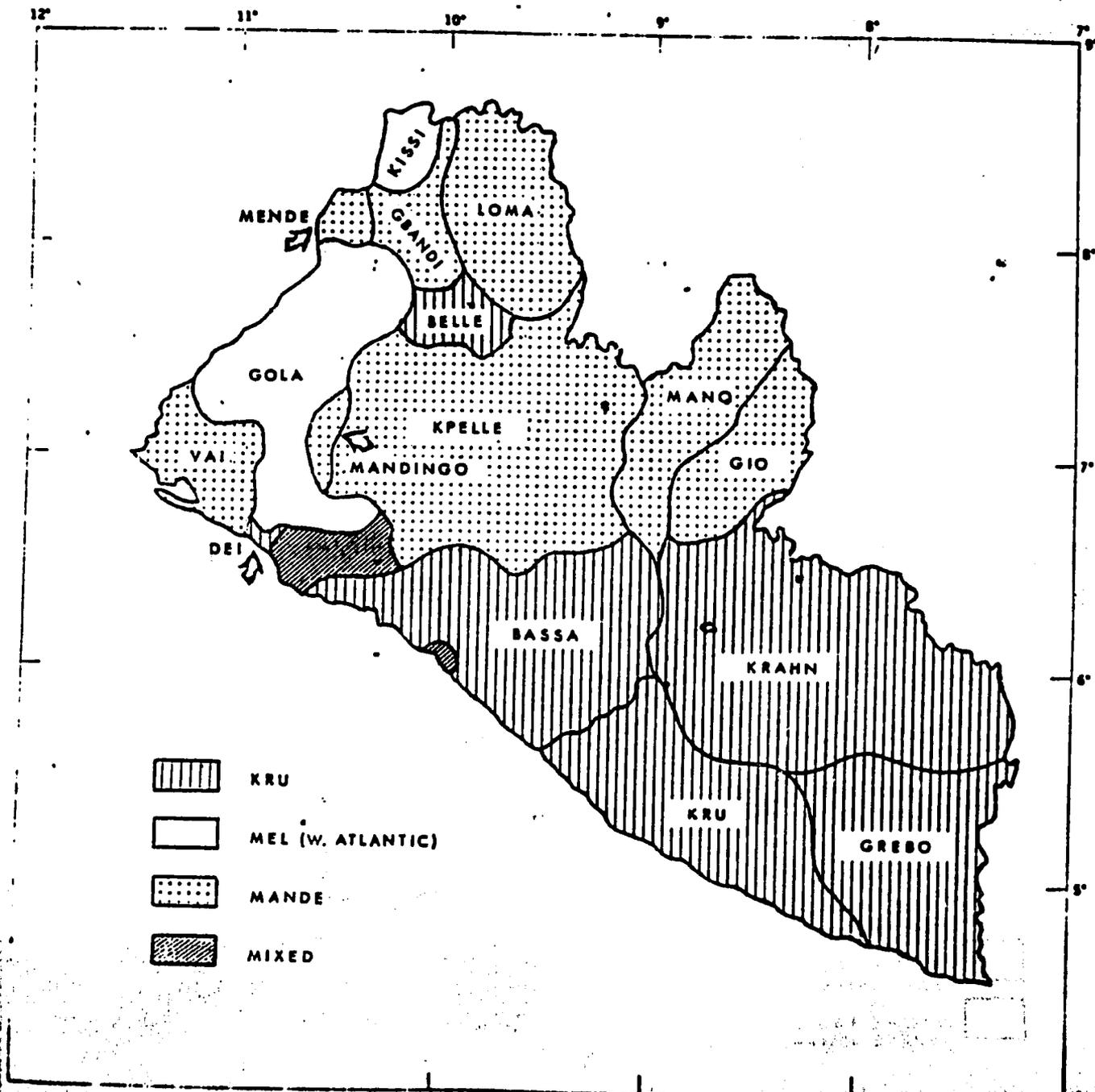
RAINFALL



ANNUAL RAINFALL

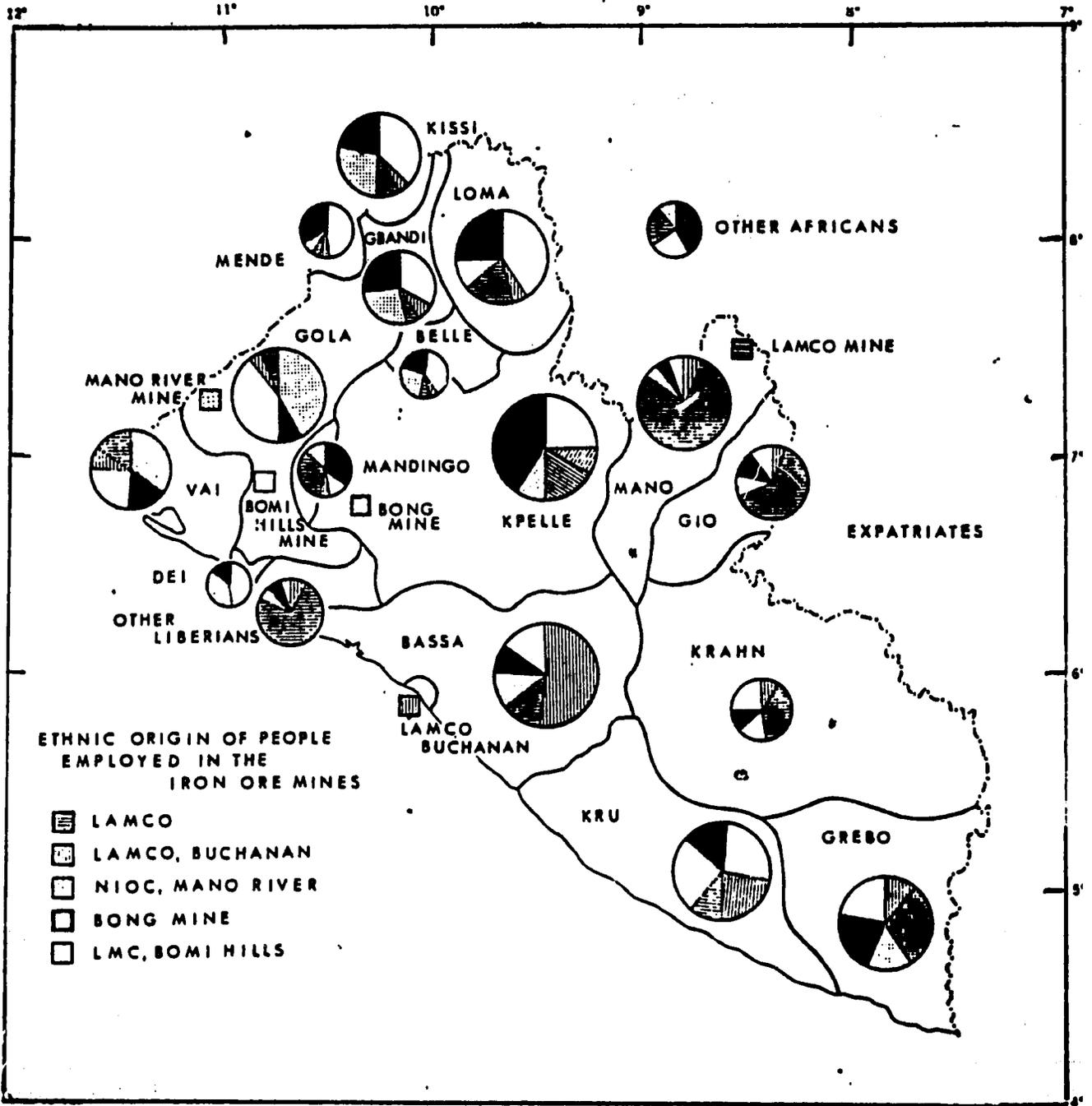
-  60 - 80 in
1524 - 2032 mm
-  80 - 100 in
2032 - 2540 mm
-  100 - 120 in
2540 - 3048 mm
-  120 - 140 in
3048 - 3556 mm
-  140 - 160 in
3556 - 4064 mm
-  ABOVE 160 in
ABOVE 4064 mm

MAP 4
ETHNIC GROUPS



MAP 5
LABOR FORCE

ETHNIC ORIGIN OF PEOPLE EMPLOYED IN THE IRON ORE MINES



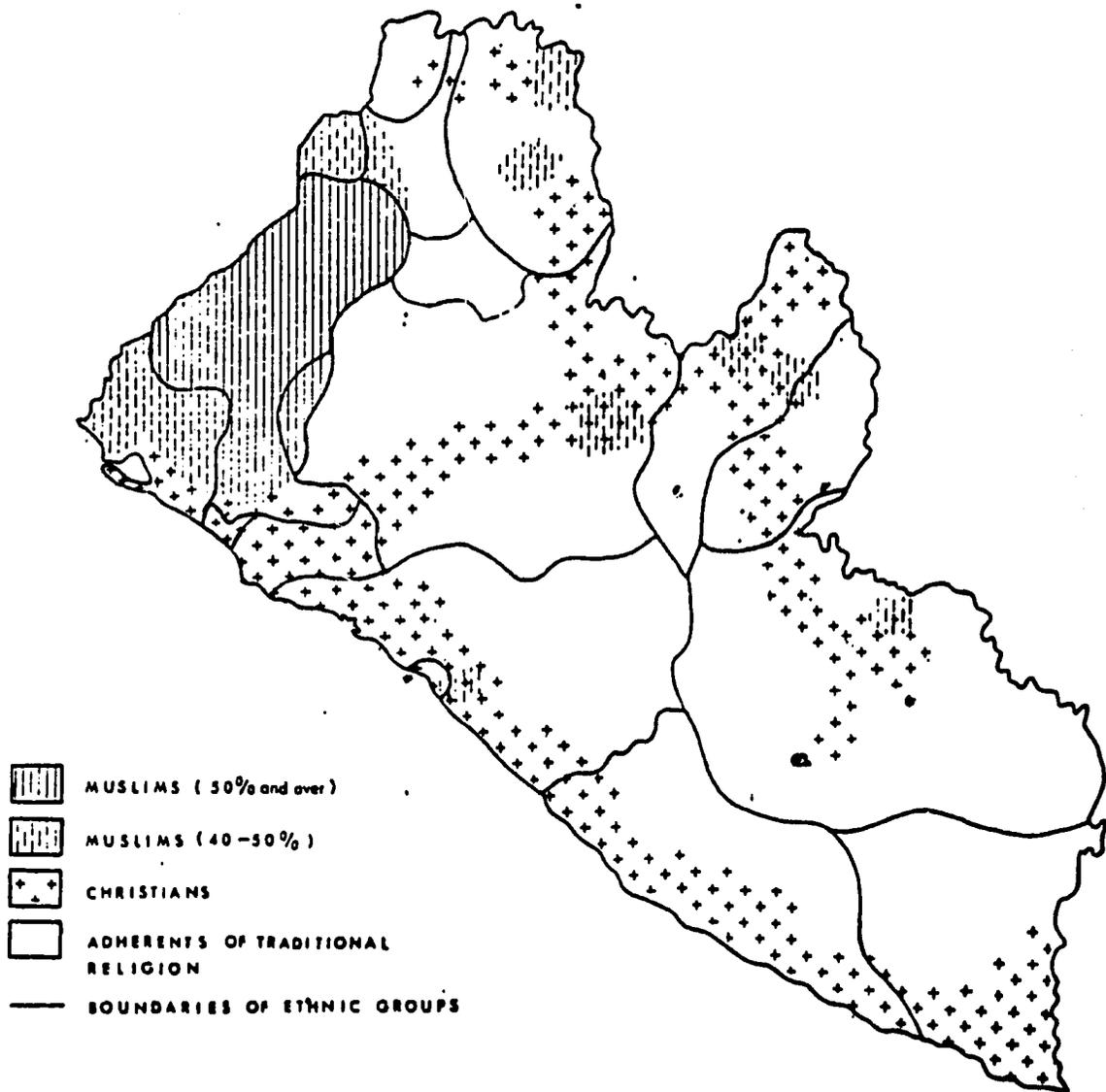
ETHNIC ORIGIN OF PEOPLE EMPLOYED IN THE IRON ORE MINES

- LAMCO
- LAMCO, BUCHANAN
- NIOC, MANO RIVER
- BONG MINE
- LMC, BOMI HILLS

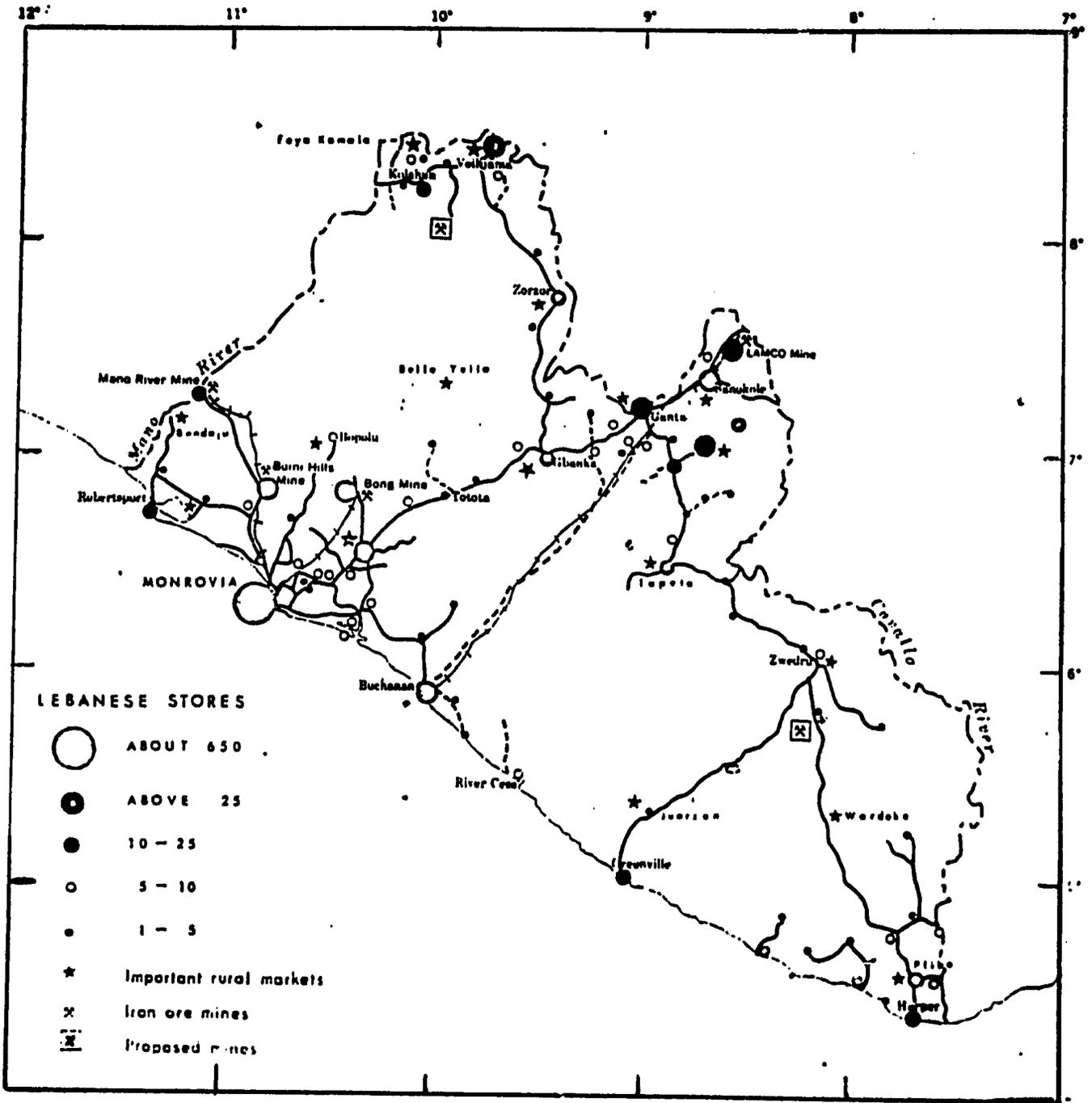
0 25 50 75 100 KILOMETERS

0 25 50 75 100 MILES

MAP 6
RELIGIOUS LIFE



MAP 7
DOMESTIC TRADE



Appendix D
FPAL MATERIALS

Date: _____ Clinic Area: _____

Clinic No. _____ Service: _____

Patient's name: _____ Address _____

Religion(Specify) _____ Occupation: _____

Age: _____ Tribe: _____ EDUCATION: Elem. _____ Jr. High _____ Sr. High _____
above _____

MARITAL STATUS: Single _____ married _____ Separated _____ Divorced _____

Spouse/Relative _____ Address _____

PHYSICAL HISTORY

INFLAMATION VEINS: Yes _____ No _____ TB: Yes _____ No _____

D I A B E T E S: Yes _____ No _____ VD: Yes _____ No _____ EPILEPSY: Yes _____ No _____

HEART DISEASE: Yes _____ No _____ LIVER DISEASE: Yes _____ No _____

B R E A S T S: Normal _____ Abnormal _____ B/P _____ Wt. _____

REPRODUCTIVE HISTORY

No. OF PREGNANCIES: _____ full term _____ premature _____ stillbirth _____

A B O R T I O N S: _____ No. LIVING _____ M _____ F _____ No Dead _____ M _____ F _____

TERMINATION OF LAST PREGNANCY _____

INTERVALS BETWEEN LAST TWO PREGNANCIES: _____

LAST MENSES: _____ Regular _____ Irregular _____

DURATION: _____

INTERMENSTRAL PAINS: Yes _____ No _____ SPECIFY PAINS _____

INTERMENSTRAL BLEEDING: None _____ Spotting _____ Other _____

P E L V I C EXAMINATION

UTERUS: Antiverted _____ Midline _____ Retroverted _____

S I Z E: Normal _____ Small _____ Large _____

Adrenia: Normal _____ Abnc. _____

CERVIX: Erosion YES _____ NO _____ Discharge _____ SPECIFY _____

COMMENTS:

SIGNED: _____
DOCTOR, NURSE, MIDWIFE, ETC.

**THE FAMILY PLANNING ASSOCIATION OF LIBERIA
LABORATORY REQUEST**

NAME _____ DATE _____

C. B. C. _____

MAL. SMEAR _____

DIFFERENTIAL _____

BLOOD SMEAR *Referred to Central Lab. J.F.K*

URINALYSIS-SP. GR. _____

Protein _____

Microscopic _____

Sugar _____

STOOL-OVA _____

Parasite _____

Blood _____

M. T. T. _____

PAP. SMEAR _____

VAGINAL SMEAR _____

URETHRAL SMEAR *Referred to Central Lab*

DOCTOR _____ LAB. TECHNICIAN _____

SERVICES

(Check One Applicable)

- 1. Contraception _____ ()
- 2. Infertility _____ ()
- 3. Gyn. _____ ()
- 4. Nutrition _____ ()
- 5. Routine Lab _____ ()
- 6. Other Specify _____ ()

Date _____ 197- _____

APPOINTMENT DATE

- | MONTHS | REMARKS |
|-----------|---------|
| 1. Jan. | _____ |
| 2. Feb. | _____ |
| 3. March | _____ |
| 4. April | _____ |
| 5. May | _____ |
| 6. June | _____ |
| 7. July | _____ |
| 8. August | _____ |
| 9. Sept. | _____ |
| 10. Oct. | _____ |

Period of Report

CONTRACEPTIVE USAGE

FPA of

From: Month To: Month Year

| Line | Contraceptive Type: | Unit (please specify) |
|------|-------------------------------|-----------------------|
| 1 | Opening balance date: | |
| 2 | Receipts - from IPPF | |
| 3 | Receipts - from other sources | |
| 4 | Issues - to acceptors | |
| 5 | Issues - otherwise disposed | |
| 6 | Closing balance date: | |

| Line | Contraceptive Type: | Unit: |
|------|-------------------------------|-------|
| 1 | Opening balance date: | |
| 2 | Receipts - from IPPF | |
| 3 | Receipts - from other sources | |
| 4 | Issues - to acceptors | |
| 5 | Issues - otherwise disposed | |
| 6 | Closing balance date: | |

| Line | Contraceptive Type: | Unit: |
|------|-------------------------------|-------|
| 1 | Opening balance date: | |
| 2 | Receipts - from IPPF | |
| 3 | Receipts - from other sources | |
| 4 | Issues - to acceptors | |
| 5 | Issues - otherwise disposed | |
| 6 | Closing balance date: | |

| Line | Contraceptive Type: | Unit: |
|------|-------------------------------|-------|
| 1 | Opening balance date: | |
| 2 | Receipts - from IPPF | |
| 3 | Receipts - from other sources | |
| 4 | Issues - to acceptors | |
| 5 | Issues - otherwise disposed | |
| 6 | Closing balance date: | |

| Line | Contraceptive Type: | Unit: |
|------|-------------------------------|-------|
| 1 | Opening balance date: | |
| 2 | Receipts - from IPPF | |
| 3 | Receipts - from other sources | |
| 4 | Issues - to acceptors | |
| 5 | Issues - otherwise disposed | |
| 6 | Closing balance date: | |

N.B. Contraceptives supplied to other agencies should be included in Line 5 of the appropriate box ("Issues - otherwise disposed"). Line 5 should also be used to account for contraceptives lost, damaged or destroyed. All "Issues - otherwise disposed" should be explained on a separate sheet.

PLEASE USE ADDITIONAL SHEETS AS NECESSARY.

OTHER SERVICES AND ACTIVITIES

| SERVICES | NEW | OLD | TOTAL | EXAM. | TREATED | REF. | REC. PILLS | TOTAL CYCLES | BRAND RECEIVED | | | | | REPORTED FREQUENCY | |
|----------------|-----|-----|-------|-------|---------|------|------------|--------------|----------------|------|---------|---------|-------|--------------------|--|
| | | | | | | | | | ORAL | INJ. | HOLIDAY | OVERLAP | OTHER | | |
| CON. | | | | | | | | | | | | | | | |
| INJECT. | | | | | | | | | | | | | | | |
| EXTRACT. | | | | | | | | | | | | | | | |
| IMP. MAN. TICS | | | | | | | | | | | | | | | |
| MAN. TICS | | | | | | | | | | | | | | | |
| OTHER | | | | | | | | | | | | | | | |

ACTIVITIES

Laboratory attendance _____ including _____ pregnancy test.

Home visits _____ with _____ contact to _____ homes.

Post partum visit _____ with _____ contact and _____ actual contraceptive acceptors.

IUD Removal _____.

IUD Expelled _____.

Other (specify) _____.

Specialist _____.

FAMILY PLANNING ASSOCIATION OF LIBERIA, INC.
DAILY ACTIVITIES & CASH INTAKE RECORD

Name of Clinic _____
 Reporting Officer _____

DATE _____ 19__

| CONTRACEPTIVES | | OTHERS | | CASH INTAKE | | | |
|-----------------------|------|-------------------|------|---------------------------|------|-----|------|
| TALLY | NOS. | TALLY | NOS. | METHOD | AMT. | PD. | BAL. |
| ORAL: | | I U D | | INFERTILITY/SUBFERTILITY: | | | |
| NEW ACCEPTORS | | NEW ACCEPTORS | | NEW | | | |
| CONT'D " | | CONT'D " | | OLD | | | |
| REVISIT FOR SUPPLY | | REVISIT | | TOTAL | | | |
| OTHER VISIT | | OTHER VISIT | | CHECK UP | | | |
| TREATMENT | | TOTAL VISITS | | TREATMENT | | | |
| SIDE EFFECTS | | TOTAL SUP. ISSUED | | RECD. PILLS | | | |
| CHECK-UP | | JELLY: | | CYCLES | | | |
| CHANGE | | NEW ACCEPTORS | | PREGNANT | | | |
| DISCONTINUED | | CONT'D " | | REFERRED | | | |
| TOTAL VISITS | | REVISIT | | GYNECOLOGY: | | | |
| TOTAL SUPPLIES ISSUED | | TOTAL VISITS | | NEW | | | |
| D E P O: | | " SUP. ISSUED | | OLD | | | |
| NEW ACCEPTORS | | DIAPHRAGM: | | TOTAL | | | |
| CONT'D " | | NEW ACCEPTORS | | CHECK-UP | | | |
| REVISIT FOR SUP. | | CONT'D " | | TREATMENT | | | |
| OTHER VISIT | | REVISIT FOR SUP. | | RECD. PILLS | | | |
| TREATMENT | | TOTAL VISITS | | CYCLES | | | |
| SIDE EFFECTS | | TOTAL SUP. ISSUED | | PREGNANT | | | |
| CHECK UP | | NEO-SAMPON: | | REFERRED | | | |
| CHANGE | | NEW ACCEPTORS | | PRE-NATAL: | | | |
| DISCONT'D | | CONT'D " | | NEW | | | |
| TOTAL VISITS | | REVISIT | | OLD | | | |
| TOTAL SUP. ADM. | | OTHER VISIT | | TOTAL | | | |
| SIDE FEES: | | TOTAL VISITS | | TREATED | | | |
| NEW ACCEPTORS | | TOTAL SUP. ISSUED | | POST PARTUM: | | | |
| CONT'D " | | CONDOMS: | | NEW | | | |
| REVISIT | | NEW ACCEPTORS | | OLD | | | |
| TOTAL VISITS | | CONT'D " | | TOTAL | | | |
| | | REVISIT | | | | | |
| | | TOTAL VISITS | | | | | |
| | | TOTAL SUP. ISSUED | | | | | |

| METHOD | AMT. | PD. | BAL. |
|---------------|------|-----|------|
| PILLS | | | |
| DEPO. | | | |
| I U D | | | |
| DEL-FER | | | |
| JELLY | | | |
| DIAPHRAGM | | | |
| NEO-SAMP. | | | |
| TOTAL | | | |
| DRUGS: | | | |
| INJ. | | | |
| IRON TABS. | | | |
| VITAMIN " | | | |
| CHOLORQ. | | | |
| FLAGYL " | | | |
| SULPA " | | | |
| AMP. CAP. | | | |
| SUPPOSITION | | | |
| OTHERS | | | |
| TOTAL | | | |
| MUT. SUP. | | | |
| Inj. | | | |
| SYRUPS | | | |
| TOTAL | | | |
| REGISTRATION: | | | |
| CONTRACEPTIVE | | | |
| NUTRITION | | | |
| INF./SUBFER. | | | |
| GYN. | | | |
| TOTAL | | | |
| LAB. FEES | | | |

SUPPLIES ISSUED OUT, OTHER SERVICES RENDERED, TOTAL ATTENDANCE AND REMARKS

ORAL PILLS:

ORAL _____

HOLIDAY _____

ORULEN _____

MONIHY _____

(RECEIPT) OTHERS _____

DATE _____

REF'D _____

EXAMIN _____

DICTIONARY _____

JELLY _____

W/O - SOAP _____

I M D _____

A

B

C

D

OTHERS

INSTITUTION ATTENDANCE: NEW _____ OLD _____ TOTAL _____ TREATED _____ IMMOCULATED _____ REFERRED _____

PREP. CONF.: NEW _____ OLD _____ TOTAL _____ TREATED _____ REFERRED _____

REMARKS:

Appendix E

**PROJECT OUTLINE PRESENTED TO USAID, MONROVIA
FEBRUARY 29, 1980
(DEBRIEFING)**

Appendix E

PROJECT OUTLINE PRESENTED TO USAID, MONROVIA FEBRUARY 29, 1980 (DEBRIEFING)

Rationale

To take family planning messages and methods to people in contrast to family planning clinic-based programs, which normally concentrate on providing services at clinic locations.

Basic to social marketing is:

1. Increased awareness and knowledge of family planning and contraception methods.
2. Improving distribution of information and supplies, especially to rural populations.
3. Providing supplies which are at a low enough price to be affordable by the masses.

Objective

To increase the use of birth planning and child-spacing, to reduce adolescent pregnancy and illegal abortion in Liberia in order to assist government efforts to reduce maternal and child mortality and morbidity, and to improve rural development.

Recommendations For Project

A. Population Target

1. 18,000 persons by the end of one year after product launch (05 percent of fertile), 27,000 by end of Year Two (07.5 percent of fertile)
2. Percentage breakdown, Year 1 Target:
 - a. 40 percent users of oral contraceptives - couples who are married, aged 15-45, or 7,200
 - b. 30 percent users of condoms - males, especially those aged 15-25, or 5,400
 - c. 30 percent users of spermicidal tablets - females, especially those aged 14-20, or 5,400
3. Prelaunch consumer research to be conducted on perceptions and opinions of family planning and specific methods, preferences for methods, reasons for planning/not planning pregnancies, buying habits, preferred places or purchases, information desired on products, price preferences, preferred condom colors, etc.

3. Products

1. Methods:

- a. Oral Contraceptives (Noriday)
- b. Condoms (colored or clear, depending on research results)
- c. Spermicides (Neo-Sampoon tablets)

2. Unit Sales Packs:

- a. 1 Cycle OCs per box
- b. 4 Condoms per box
- c. 3 Tablets per box

3. Packaging and Brand Name:

Consideration should be given to using the same packaging materials produced for the social marketing project in Ghana. The brand names Floril, Panther, and Coral, for OCs, condoms, and spermicides, and present package designs can be used for universal, English-speaking market. Shipment of necessary quantities from Accra would have the following advantages:

- a. Local packaging capabilities are very limited or nonexistent for quality production; building a capability would be extremely costly.
- b. Quality packaging is the norm for imported products now on the market in Liberia. The project products should impart a quality image, be distinguishable from other products, be easily identifiable by brand, design, logo, etc. This is especially important, given low-literacy populations.

4. Projected Quantities of AID Commodities, Year 1:

- a. OCs = 93,600
- b. Condoms = 3,750 Gross, or 540,000 Units.
- c. Spermicides = 540,000 Tablets (packed individually in aluminum foil)

C. Price

1. The following ranges are suggested:

| <u>PRODUCT</u> | <u>CONSUMER PRICE</u> | <u>PROJECT PRICE</u> | <u>REVENUE</u> |
|----------------|-----------------------|----------------------|------------------------|
| OC | \$0.60-\$0.75 cycle | \$0.30-\$0.38 | \$28,080-\$35,570 |
| Condom | \$0.25-0.30/4-pack | \$0.18-0.22 | 24,300-29,700 |
| Spermicide | \$0.25/3-pack | \$0.13 | 23,400-23,400 |
| | | | \$75,780-88,670 |
| | | Less 10% Samples | <u>7,580- 8,870</u> |
| | | | <u>\$68,200-79,800</u> |

2. Consumer retail price control will be maintained by including prices in promotional materials and other publicity.

D. Purchase Points

1. Two kinds of retailing systems will be used:
 - a. OCs, condoms, spermicides - pharmacies and medicine stores; and,
 - b. Condoms and spermicides - pharmacies and medicine stores, all retail stores, supermarkets, door-to-door sales, one sales van (a possibility exists for midwives and youth groups to assist in sales).
2. Referrals will be made to the FPAL for IUD, Depo-Provera, female problems, including sterility; goods will be offered to the FPAL to sell with their present wares.
3. Training for retailers on family planning and products will be provided by project salesmen/educators.
4. Incentives, such as prizes, trips to Monrovia for conferences, etc., will be offered to retailers for high sales.
5. Discounts on products will be offered, such as bulk quantity purchases, reduced prices for first orders, 2-for-1, etc., to retailers.

E. Distribution

1. Suggested Distributors:
 - a. OCs, Condoms, Spermicides: Clave's Pharmaceutical Inc., Mohans, etc.
 - b. Condoms and Spermicides: Atmark, Metco, or other consumer goods distributors.
2. Sales Effort:

- a. One detailman/manager trainee;
- b. Two salesmen to cover specific territories in all counties who will promote products to retailers, put up and maintain promotional materials, and take orders;
- c. Door-to-door sales persons who sell health and beauty products as part of Clave's Pharmaceutical operations (to be initiated in mid-1980); and,
- d. One educator/sales team to visit rural villages.

F. Promotion

1. All forms of advertising and promotion will be used for condoms and, most likely, spermicides. Clarification from the Ministry of Health and Social Welfare is necessary before OCs can be promoted.
2. Messages used will conform to GOL policy and stress child-spacing, healthy babies, postponement of pregnancy by adolescent girls, and mother's health.
- . A three-phase campaign is suggested:
 - a. Phase 1 (launch) - information on family planning and methods;
 - b. Phase 2 - brand advertising; and,
 - c. Phase 3 - maintenance or reminder advertising.
- . The following methods are suggested for maximum effectiveness:
 - a. Point-of-sale promotion - posters, banners, decals, shop signs, displays;
 - b. Radio;
 - c. Billboards;
 - d. Cinema film;
 - e. Consumer sampling; and,
 - f. Educator/sales van (to include entertainment movies, instructional films, and product sampling).

G. Management

The project will be coordinated by a consultant experienced in social marketing for 5-6 months pre-launch and an additional 2-3 months post-launch. A detailman/manager trainee will receive on-the-job training at this time and take charge of

operations when the consultancy period ends.

The manager will function as part of the distributor's staff and have responsibility for day-to-day management of the program.

H. Cost

Start-up and development costs for a two- or three-year project are estimated at \$350,000 - \$400,000. Funds for this phase will be supplied by AID, Office of Population and Health, Washington, D.C. Funds required to continue the project will be generated by revenues received from the base price and depend on the level of sales over the two- or three-year period.

Appendix F
BIBLIOGRAPHY

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