

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE

A = Add
C = Change
E = Delete

Amendment Number

DOCUMENT CODE

3

2. COUNTRY/ENTITY

Kenya

PROJECT NUMBER

615-0241

4. BUREAU/OFFICE

Africa

06

5. PROJECT TITLE (maximum 10 characters)

Corat Child Survival and Family Planning

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)

MM DD YY
03 31 90

7. ESTIMATED DATE OF OBLIGATION

(Under "5" below, enter 1, 2, 3, or 4)

A. Initial FY 87

B. Quarter 2

C. Final FY 87

8. COLTS (1000 OR EQUIVALENT \$) =

A. FUNDING SOURCE	FIRST FY			LINE OF PROJECT		
	B. FX	C. LDC	D. Total	E. FX	F. LDC	G. Total
AID Appropriation Total	103	282	385	193	1,007	1,200
(Grant)	103	282	385	193	1,007	1,200
(Loan)						
Other U.S.						
Host Country						
Other (Non-U.S.) CORPAT/Communities	-	245	245	-	597	597
TOTALS	103	527	630	193	1,604	1,797

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODES	C. PRIMARY TECH. CODES	D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS AID YEAR		F. LIFE OF PROJECT	
			1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1)	533	510	-	-	1,200	-	1,200	-
(2)								
(3)								
(4)								
TOTALS								

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

440

11. SECONDARY PURPOSE CODES

12. SPECIAL WORK DUNS CODES (minimum 7 codes of 4 positions each)

A. Code	BRW	PART	FVON
Amount	947	947	1,200

13. PROJECT PURPOSE (maximum 450 characters)

To assist Kenyan churches to expand community based child survival and primary health care programs in the Diocese of Maseno South, Maseno West and Eldoret and the Tenwek Hospital region.

14. SCHEDULED EVALUATIONS

Interim	MM	YY	MM	YY	Final	MM	YY
						07	89

15. SOURCE/ORIGIN OF GOODS AND SERVICES

000 941 Local Other (Specify) 935

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a ___ page PP Amendment)

RPMC Clearance:

Robert Church

RPMC, DCD
DCD No. K70250
DATE RECEIVED 1/26

7. APPROVED BY

Signature: *AW Sinding*
Title: Steven W. Sinding
Mission Director

Date Signed

MM DD YY
02 03 87

17. DATE DOCUMENT RECEIVED IN AID, OR FOR AID, OR AMENDMENTS, DATE OF DISTRIBUTION

MM DD YY

ACTION MEMORANDUM FOR THE DIRECTOR, USAID/KENYA

FROM: *Douglas Kline*
Douglas Kline, Office of Projects

SUBJECT: CORAT Child Survival and Family Planning Project
(615-0241)

Date: January 14, 1987

Action:

Your approval is requested for a grant in the amount of \$1,200,000 from the FAA Section 104 Population and Health appropriation to the Christian Organizations Research Advisory Trust (CORAT). It is planned that the total amount of \$1,200,000 will be obligated in FY 87.

Background:

Kenya's Infant Mortality Rate (IMR) is estimated at 92, low by African standards; however, this masks wide district variations reaching 200/1000 in Western Kenya (one of the targetted areas covered under this proposal). The country's main health concerns are those diseases that affect child survival: diarrhea disease, malaria and those that can be prevented by immunization. Low birth weight and malnutrition exacerbate the low health status of children under five years of age. Kenya's present population growth rate is currently estimated to be 3.8 percent per year, one of the highest in the world. To respond to these needs the Ministry of Health has instituted the integrated rural health/family planning program focusing on community based health care (CBHC) with emphasis on child survival interventions.

The MOH plans to utilize both public and private institutions (including NGOs and churches) to deliver CBHC services to local communities. Churches contribute more than 40 percent of health care services in Kenya with the vast majority being centered in the rural, poorest communities. Religious institutions are widely recognized as one of the principal Kenyan entities (besides Government) with national scope, grassroots infrastructure and regional and national linkages that cut across tribal affiliations. The churches' system therefore enables widespread participation in the development process.

Christian Organizations Research Advisory Trust (CORAT) is a not-for-profit corporation, registered with A.I.D. in Kenya, which provides management services to Christian organizations in Africa so that they may be more effective in management and development

efforts. CORAT has, since its inception in 1975, been involved in the area of health and for many years has provided management and consultation to community based health and family planning programs, mission hospitals and other health related systems. CORAT activities include training courses, management consultancies and support, and research and development programs primarily in the area of health care.

For the last three years, CORAT has been involved in overseeing the implementation of four major community based health care/family planning subprojects in Kenya funded by an A.I.D. Operations Research Grant through the Johns Hopkins University School of Public Health. These subprojects are the Diocese of Maseno South and Mount Kenya East (Church of the Province of Kenya), Tenwek Hospital (Africa Gospel Church), and the Roman Catholic Diocese of Nyeri. The CBHC approach to the provision of health care, with emphasis on child survival/ family planning interventions, has been shown to be effective in these projects.

CORAT proposes to expand two of the present subprojects, Tenwek and Maseno South into three subprojects: Tenwek, Maseno South and Maseno West, and to support a fourth new project in the Diocese of Eldoret. These expanded and new subprojects will emphasize more sharply child survival and development activities.

Discussion:

The project is aimed at expanding health care and family planning services to many needy communities in rural Kenya, enabling members of the target communities to take responsibility for caring for and improving their own health. Special emphasis will be placed on improving the health of women and their children through focussed child survival activities and spacing of children. CORAT will make use of the existing extensive organizational network and presence in communities of local church organizations to accomplish these objectives. The proposed Grant will enable CORAT to: (1) continue the activities of two on-going community based health care/family planning subprojects and begin two new subprojects which will all focus on (a) identifying and training village health committees, (b) selecting and training community health workers, (c) supervising and retraining the health workers, (d) providing information and education to families on vital aspects of family health, (e) providing immunization services through staff supervisors; (2) provide oversight and technical/management assistance to the subprojects in management and health planning areas; (3) conduct management workshops for subproject managers; and (4) conduct impact evaluations through community surveys.

CORAT will provide management advisory services and technical (health related) advisory services to the subprojects on an as needed basis, provide project oversight and monitoring, report and liaise with AID, prepare cost effectiveness analyses, and conduct baseline and follow-up surveys for use in project evaluations. The responsibilities of each management and advisory unit are outlined in the attached OPG proposal.

Analysis has shown the project concept to be sound. Environmental analysis resulted in a finding of categorical exclusion which was concurred in by the Africa Bureau's Environmental Officer on September 25, 1986 and cleared by GC/AFR on September 26, 1986. The financial plans developed for the project are adequate to assure proper implementation and to meet the requirements of FAA Section 611(a). The Government of Kenya has concurred in the proposed activity (Ref: A/1/1/14 - 251).

Obligation Arrangements:

Funds will be obligated through an Operational Program Grant (OPG) to CORAT. Special provisions to be made part of the grant will include in substance the following:

1. Within sixty days of the date of signature of the grant Agreement, CORAT will submit to A.I.D. a detailed implementation plan for the first year's activity identifying major outputs, steps necessary to achieve those outputs, and a detailed plan for procurement and use of technical assistance, training, and commodities.
2. Three months prior to years 2 and 3, CORAT will submit implementation plans for activities to be financed in those project years.
3. CORAT is to be solely responsible for ensuring that each employee is legally employed and granted all benefits (including salary, lease and termination) in accordance with applicable laws of the Government of Kenya.

Responsible AID Officer:

The officer in USAID/Kenya responsible for the project is Linda Lankenau of the Office of Population and Health. The responsible officer in AID/W is Thomas Lofgren, AFR/PD/EA.

Waivers:

The blanket source-origin waiver approved by the A.I.D. Administrator on May 7, 1986 to allow procurement from geographic code 935 countries of right-hand drive vehicles and motorcycles of 125 cubic centimeters displacement or less will be applicable to vehicle procurement under this project.

Justification to the Congress:

A Congressional Notification (CN) for the project expired without Congressional objection on December 24, 1986. It is expected that another CN will be forwarded to Congress covering an additional \$85,000 in funds which were inadvertently omitted in the original CN.

Authority:

Authority for approval of the PID for the subject project by USAID/Kenya was provided by AA/AFR by cable (State 297438) on September 22, 1986. Delegation of Authority No. 551, dated December 23, 1986, provides to directors of Schedule A posts authority to authorize a project if the project: does not exceed 20 million dollars in life of project funding; does not present significant policy issues; does not require waivers which can only be approved by the Assistant Administrator for Africa or the Administrator; and does not have a project life in excess of 10 years. Authorization of the subject project is within your delegated authority.

Recommendation:

That you sign the attached project authorization and thereby approve life-of-project funding of \$1,200,000 in grant funds for the CORAT Child Survival and Family Planning Project.

Approved: *AW Binding*
Disapproved: _____

Date: 2/3/87

Attachments:

- 1. Project Authorization
- 2. OPG Proposal

Drafted: PRJ:VMacDonald:gmm:01/20/87

Clearances: RLA:KHansen *KH 1/21/87*
 PROG:JStepanek *[Signature]*
 PH:GMerritt *[Signature]*
 RFMC:HCollamer *[Signature]*
 D/DIR:LHausman *[Signature]*

PROJECT AUTHORIZATION

Name of Country: Kenya

Name of Project: CORAT Child Survival and Family Planning

Number of Project: 615-0241

1. Pursuant to Section 104 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the CORAT Child Survival and Family Planning Project, involving planned obligations of not to exceed One Million Two-Hundred Thousand United States Dollars in grant funds ("Grant") to be entirely obligated in FY 1987, subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the project. The planned life of the project is three years and three months from the initial date of obligation.

2. The project, which will be implemented through an Operational Program Grant to Christian Organizations Research Advisory Trust (CORAT) will support four major community based health care and family planning subprojects in Eldoret, Maseno South, Maseno West and the Tenwek Hospital region. The project will finance training, supplies for community health workers, oversight and management support of the subprojects and evaluation of impact as key components of the project.

3. The Operational Program Grant, which may be negotiated and executed by the officer to whom such authority is delegated in accordance with A.I.D. regulations and Delegations of Authority, shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate:

a. Source and Origin of Commodities, Nationality of Services:

Goods and services financed by A.I.D. under the Cooperative Agreement shall have their source and origin as prescribed in A.I.D. HBl, Supplement B, Paragraph 16Blb. Kenya is authorized as an eligible source for procurement of goods and services under the Agreement.

b. Special Provisions

The following special provisions will apply to the Operational Program Grant:

(1) Within sixty days of the date of signature of the Grant Agreement, CORAT will submit to USAID a detailed implementation plan for the first year's activity identifying major outputs, steps necessary to achieve those outputs, and a plan for procurement and use of technical assistance, training, and commodities.

(2) Three months prior to years 2 and 3, CORAT will submit implementation plans for activities to be financed in those project years.

(3) The Grantee is solely responsible for ensuring that each employee is legally employed and granted all benefits (including salary, leave and termination) in accordance with applicable laws of the Government of Kenya.

c. Waivers

The blanket source/origin waiver approved by the A.I.D. Administrator on May 7, 1986 to allow procurement from geographic code 935 countries of right-hand drive vehicles and motorcycles of 125 cubic centimeters displacement or less will be applicable to vehicle procurement under this project.

Date: 2/3/87

Steyer W. Sinding
Steyer W. Sinding
Mission Director

Drafted: PRJ:VMacDonald:gmm:01/20/86

Clearance: PRJ:DKline [Signature]
RLA:KHansen [Signature]
PROG:JStepanek [Signature]
PH:GMerritt [Signature]
RFMC:HCollamer [Signature]
D/DIR:LHausman [Signature]



TITLE : Christian Community Based Health Care
in
Kenya

Submitted to United States Agency
for International Development

by

CORAT AFRICA
P.O. Box 42493
NAIROBI
Kenya

Contact : Mr. W.R. Temu
Mr. K. Burbank Jr.

and

Diocese of Maseno South
Diocese of Maseno West
Diocese of Eldoret
Tenwek Hospital

Revision Submitted : September 26, 1986

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I. PROPOSAL SUMMARY

CHRISTIAN COMMUNITY BASED HEALTH CARE PROJECT

CORAT AFRICA is currently a project carrier to four major church-related Community Based Health Care/Family Planning (CBHC/FP) sub-projects in Kenya under a United States Agency for International Development (USAID) Family Planning (FP) Operations Research grant. The current sub-projects are the Dioceses of Maseno South and Mount Kenya East of the Church of the Province of Kenya (CPK); Tenwek Hospital of Africa Gospel Church; and the Diocese of Nyeri (Roman Catholic).

CORAT proposes to expand two of the present sub-projects - Tenwek CBHC/FP and Diocese of Maseno South CBHC/FP. In the meantime, the Diocese of Maseno South has now been split to become the Diocese of Maseno South and the Diocese of Maseno West. The Diocese of Maseno West will be an additional sub-project as will another sub-project in the Diocese of Eldoret (CPK). The Dioceses of Mount Kenya East and Nyeri are not seeking funding under this grant.

This proposed project will focus on Child Survival and Health Care Delivery with the project purposes of:

- a) reducing preventable disease and mortality among target groups in the project area by increasing immune status, knowledge of ORT, nutritional status, and general health knowledge;
- b) increasing the acceptance and usage of modern Family Planning practices among target groups and;
- c) expanding four church operated Community Based Health Delivery (CBHD) programmes in Western Kenya.

The sub-projects are all located in western Kenya and operate in the 11 districts of South Nyanza, Kisumu, Kericho, Kisii, Siaya, Nandi, Uasin Gishu, Elgeyo Marakwet, Turkana, Trans-Nzoia, and West Pokot. There are major health problems for children which are particularly amenable to primary health care in all these areas: measles, diarrhoea, malaria, enteritis, tetanus, and malnutrition.

The target populations are generally children under 5 years of age and women of child-bearing age (17-49 years) who are seen as the principal purveyors of health knowledge and services to children in the Kenyan family. The primary health beneficiaries are the estimated 98,300 households to be served by about 1,100 (EOPS) Community Health Workers (CHWs) managed by approximately 210 (EOPS) Village Health Committees in different locations throughout these districts.

The implementation of the project will be through full involvement of the target communities in the process of health care delivery at the level of each village and family. To increase the capability of the communities to participate in this health care delivery process, the projects will facilitate the selection and training of Community Health Workers (CHWs); identify and dialogue with Traditional Birth Attendants (TBAs) and Traditional Health Healers (THs) and identify and train Community Leaders. The project will also provide Immunizations; Information, Education and Communication (IEC) regarding growth monitoring, weaning, nutrition, sanitation, and how to prepare and use oral rehydration solution (ORS).

The implementation strategy will be based on a meaningful community involvement in planning, organizing and implementing the sub-projects with guidance and facilitation from trainers experienced in the Community Based Methods of training. Thus, the projects will aim at changing the attitudes of the target communities through appropriate methods of communication. Indicators to be used to monitor and evaluate progress towards accomplishing objectives are those which focus on changes in the target populations' access to and proper use of available health services, and changes in the health status of the target community. (A Logical Framework is included in Appendix A.)

Specifically, the sub-projects will: (i) encourage formation of Village Health committees (VHCs), who (ii) select Community Health Workers (CHWs). These CHWs are (iii) trained by the sub-project trainers to work in their own communities. They are, then, (iv) followed up by the trainers who are also their supervisors and (v) given appropriate refresher training.

The CHWs serve as community-based distributors of information and education regarding: immunization; sugar and salt solution for prevention of dehydration; and growth monitoring. This is the largest single element of the sub-projects. The CHWs also are equipped with a First Aid Kit of simple medicines and supplies. These are sold slightly above cost, and the surplus used to finance the local village health operation. The sub-projects also provide the health interventions such as immunization (supervisors carry out mobile clinics) growth monitoring and IEC on proper weaning, ORT, nutrition and sanitation practices. The mobile clinics carry services to remote areas and provide important coverage beyond MOH's present means and capabilities.

CORAT provides (i) oversight, (ii) management counsel (in data management, planning, financial management, cost-effectiveness analysis, workshops, etc.) for the sub-projects, and (iii) carries out baseline and follow-up surveys for all sub-projects. CORAT serves as the overall project carrier responsible to the donors for monitoring and evaluation of all sub-projects.

This proposal requests an OPG of \$1,285,000 (88%) from U.S.A.I.D. out of a total project cost of \$1,881,562 for three years. This funding will enable the following levels of expansion:

1. About 150 new VHCs will be trained and formed with a target of 208 active VHCs at end of project.
2. Over 710 new CHWs will be trained with a target of 1,087 CHWs at end of project.
3. About 1,819 CHW retrainings in CBHC/Child Survival will take place over the 3 years.
4. An estimated 585,000 CHW motivational visits to homes will be carried out resulting in:
5. Over 12,600 active Family Planning users (couples) at end of project.
6. About 372,500 training sessions in ORT for mothers.
7. Around 2,300 mobile clinics will be carried out resulting in the following:
8. Over 407,200 immunizations (doses of children and ante-natal mothers)..
9. An estimated 631,700 children weighings.
10. About 302,300 children checked at mobile clinics.

CORAT will carry out baseline and follow-up surveys for evaluation purposes. CORAT consultants will make over 48 sub-project visits for oversight and management consulting purposes. (See Appendix A for Logframes.)

Expected measurable impacts of the sub-projects will include:

- a significant percentage increase in children's immune status in target groups (versus control groups)
- a significant percentage increase in the knowledge and use of ORT to treat children's diarrhoea between start-up and EOP (versus control groups)
- a significant percentage decrease in childhood measles between start-up and EOP (versus control groups)
- a significant increase in well-nourished under-fives children as indicated by weight for height and arm circumference measures (versus control groups).

The overall project has great capacity for diffusion. CORAT is now being regularly approached for advice in planning and managing CBHC/FP projects. The Diocese of Eldoret is a current example. Others include the Mennonite Church, Shirati Hospital in Tanzania, and two other Anglican Dioceses in Kenya. The Church of the Province of Kenya (C.P.K.), alone, with 11 dioceses nationwide has the "grass-roots" infrastructure capable of carrying out CBHC programmes which could have a massive impact on child health and family planning practice throughout Kenya. Six of these dioceses are already embarked on CBHD programmes (3 under this project).

II. BACKGROUND

1. CORAT PURPOSE MANAGEMENT AND FUNCTIONS

The purpose of CORAT AFRICA is to enable better management within churches and Christian organizations in Africa, so that they may be more effective, particularly in their management and development efforts. CORAT activities include training courses, consultancies, research and development. CORAT began in 1975 when several Christian denominations initiated its formation. In its institutional structure, CORAT AFRICA is a not-for-profit corporation, limited by guarantee, and registered in Kenya. CORAT has a board of directors comprised of experienced Christian managers and leaders of Christian organizations in Kenya. CORAT has grown to include five full-time consultant staff, and numerous associate consultant staff (who are important resources of the organization). CORAT's financial basis is income received from fees for services. (Two staff are missionaries seconded by U.S. churches).

CORAT's policies are formulated by the Board of Directors although the day-to-day management is the responsibility of the Executive Director. The diversity of professions among CORAT's full-time staff and associate consultants give CORAT an ability to respond effectively to the needs of all church organizations and especially, those addressing the basic problems of poverty, disease and death.

The main functions of CORAT can thus be summarized as:

- Management consulting (including health care management)
- Training
- Research
- Development of publications and other tools.

2. PREVIOUS HEALTH MANAGEMENT EXPERIENCE

Among CORAT achievements are dozens of management training courses (from a few days to 12 weeks), workshops, consultancies, evaluations, and research investigations for churches and Christian organizations. A list of recent activities relevant to population, health and development is given in Appendix C. To illustrate, CORAT:

- Served as consultant to both Kenya Catholic Secretariat (KCS) Medical Services and Protestant Churches Medical Association (PCMA) in their preparation for involvement in the Government of Kenya, Integrated Rural Health and family Planning (GOK, IRH/FP) project (1979-1983).
- Facilitated the 1984 evaluation of Chogoria Hospital's Community-Based Health Care and Family Planning (CBHC/FP) programmes.
- Wrote the feasibility study for the Diocese of Mount Kenya East's primary health care programme.
- Served as sub-project carrier for and consultant to three major CBHC/FP sub-projects and one natural Family Planning (NFP) sub-project located in Kenya. (Grant No. AID/DSFE-C-0055).

The current 4 sub-projects are:

- Christian Community Services of Mount Kenya East CBHC/FP
- Diocese of Maseno South CBHC/FP
- Tenwek Community Health Programme, and
- Diocese of Nyeri's FP Programme.

These four have been funded by U.S.A.I.D. through the Johns Hopkins School of Public Health. All these funds have been administered successfully by CORAT. When these projects were initiated, U.S.A.I.D. officials promised that ongoing funds and support would be provided long-term if the projects were successful. They have been successful.

Further funding is now sought from U.S.A.I.D. in this proposal to enable CORAT to assist two of these sub-projects to continue and expand the work noted in the last illustration.

At least, one half of CORAT's work involves enabling church NGOs to fulfil their calling to improve the health of the communities which they serve. The people of CORAT find it exciting and deeply satisfying to be a part of such efforts.

CORAT's philosophy of Community Health Development is to assist people in the process of organizing themselves to better utilize their own available resources to improve the health of the most vulnerable members of the community. We believe that improvement in health status is a major part of overall development and integrally connected with economic development.

The most effective way to reach the poorest members of rural communities is to work with and through the agencies which are already sufficiently structured to reach the remotest people in the rural areas. In Africa, the church is well recognized as the only national or international agency (besides the government) with a broad scale, grass roots infrastructure with regional and national linkages that cut across tribal affiliations. The church's system can enable mass participation in the development process.

3. SUB-PROJECTS

Historically, the Christian church in Kenya has had a prominent role in health care. Currently, the churches contribute more than 40% of health care services in Kenya. Many of these services have now taken an innovative, and pioneering role in providing Primary Health Care Services throughout the nation.

In these projects, the intention is to share power with the people through an informed partnership in the processes aimed at reducing the effects of poverty, ignorance and ill health. Three sub-projects have a strong background in primary health care:

A. Maseno South. This sub-project is located in all three districts in Nyanza Province: Kisii, Kisumu and South Nyanza. The present proposal is to consolidate and intensify coverage in the present divisions and expand further south into South Nyanza and Kisii (where the current presence is small). Population densities in the districts range from 80 to over 200 per sq. km.

In 1975, the Diocese of Maseno South pioneered a primary health care programme in the Church of the Province of Kenya (Anglican). Since then, the Diocese of Maseno South has trained more than 250 CHWs who take care of an estimated 25,000 households (or an estimated 125,000 people) in the rural areas of Nyanza Province. These CHWs have been able to reach an estimated 62,500 children under the age of five years and the same number of women 15 to 49 years. Over 50% of these mothers have been taught one or more of the following: the home based ORT of salt and sugar solution; the benefit of growth monitoring and proper weaning in terms of weaning foods, food preparation and consistency and frequency of feeds which would ensure an adequate intake of energy; and the importance of immunization. The number of CHWs is increasing very rapidly and so the number of beneficiaries could more than double if the project continues for another three years.

The training of CHWs is organized as close as possible to where the CHWs live and work and does not require a Health Institution. This is done by the trainer for the local area. This lowers the cost of training both to the CHWs and to the Project and also keeps the training relevant to the functions of the CHWs. It also ensures that they are trained in a setting similar to where they are going to work. Two Nurse supervisors in the Maseno South project conduct mobile clinics at 10 locations monthly.

The achievements of this programme will be fully realized only when the evaluation survey is done in March, 1987, as part of current project funding. Judging from service data and reports on training, CORAT expects that there will be a substantial increases in: immunization coverage; number of children with access to regular weighing; and proportion of mothers who know and can use home based ORT.

The programme has trained 294 CHWs, has 63 active VHCs, and 2 Contact Community Health Workers (CCHWs). The programme is staffed by a coordinator, 2 nurses, logistics and statistics clerk, 2 secretaries, 1 driver, and a watchman.

B. Tenwek. This sub-project is located in one District of Rift Valley Province: Kericho District. Population densities vary between 17 and over 160 persons per sq. km.

Tenwek Hospital is located five miles from Bomet and 30 miles SE of Sotik. The medical work was first started in 1935 by World Gospel Mission and later handed over to Africa Gospel Church. The few government dispensaries and health centres often refer patients to Tenwek. The nearest hospitals are 30 miles north or 50 miles west. There are no hospitals to the south until far beyond the Tanzania border.

Tenwek Community Health Programme began the Primary Health Care outreach from the hospital in 1985. The project has a full staff consisting of: coordinator, senior supervisor, 4 supervisors, secretary, 1 book-keeper, and logistics officer. The programme has trained 145 CHWs, has 21VHCs, and has 13 regular mobile clinic centres where from June, 1985, to July, 1986, over 35,000 immunizations were given. There are currently 1,885 FP users in the programme. In the 1985/86, period, 6,289 CHW home visits were made and 1,800 groups received primary health instruction.

The Tenwek programme ran a 1984 baseline survey covering 597 households with 589 women interviewed. This research focused on FP and family health. A follow-up survey is planned in 1986 under current-funding.

Other research in this project has shown that non-monetary incentives (e.g., a badge for excellence) can contribute significantly to CHW performance. Tenwek has used a micro-computer in project management and demonstrated its usefulness for similar projects. The number of CHWs will double in the next three years if funds are obtained to enable the project to continue and in the same way the number of beneficiaries would also double.

C. Maseno West. The Diocese of Maseno West was created from part of the Diocese of Maseno South in 1985. This sub-project is located in Siaya District of Nyanza Province and has a presence in all four divisions of the district: Bondo, Yala, Boro, and Ukwala. This sub-project has the highest population densities of any of the sub-projects, varying from 140 to over 230 persons per sq.km. Intensification of coverage within these divisions is planned.

Experienced primary health care personnel from the Diocese of Maseno South (but living in Siaya) form the nucleus for this sub-project. These include 2 nurses, 130 CHWs, and 30 VHCs.

The Maseno West programme area was included in previous Maseno South research and results for Maseno West are amenable to disaggregation.

D. Diocese of Eldoret. The Diocese of Eldoret was formed in 1983 from the Diocese of Nakuru, which exists to the south.

The Eldoret sub-project will operate in six districts of Rift Valley Province: Nandi, Uasin Gishu, Elgeyo Marakwet, Turkana, Trans Nzoia and West Pokot. It will begin in Sirikwa Parish (covering parts of Elgeyo Marakwet and Uasin Gishu), Nandi and Trans Nzoia. The sub-project has the widest range of population densities, varying from as low as 2/km² to over 120/km².

Dr. Dan Peterson, M.D., a missionary is the coordinator and has identified 2 nurses as probable supervisors.

4. PROBLEM STATEMENT. The four sub-projects ameliorate 7 major health problems.

1. The government districts in which the sub-projects are located rank among the highest in Kenya in terms of early childhood mortality (death during the first 2 years of childhood). The Kenyan 1979 census shows South Nyanza as having a rate of 216 early childhood deaths out of 1,000 births. Siaya has a 211 per 1,000 rate, Kisumu is 199 per 1,000 and West Pokot has a 188 ECM rate. These are extremely high compared to some Kenyan districts such as Nyeri district's 49 per 1,000.

The other sub-project areas fall in high ECM ranges. Turkana and Elgeyo Marakwet are in the 121-185 per 1,000 range while Kericho, Uasin Gishu, Nandi and Trans Nzoia are in the medium ECM range of 91-120 deaths per 1,000. Only Kisii ranks in the relatively low 61-90 deaths per 1,000 which is still high by western standards.

While infant mortality and early childhood mortality rates are historically dropping throughout Kenya, much work still needs to be done in these sub-project areas.

2. Preventable diseases are the cause of many early childhood deaths. Malaria is one of the area's most prevalent health problems --- especially in Siaya, Kisii, and S. Nyanza. In most sub-project areas little is done traditionally by way of prophylaxis. Treatment of existing malaria cases is often poor or non-existent --- especially, where people live over 2 kms from health facilities.

3. Enteritis and diarrhoea are also very prevalent and major causes of childhood (under 5 years) mortality. Diarrhoeal diseases are preventable through sanitation, hygiene, nutrition, and treatment with oral rehydration solution.

4. Tetanus and measles are also very prevalent and major causes of childhood mortality. Surveys in the Maseno and Tenwek areas revealed a low level of immunized children (under 2 years). Maseno South/West had 27% of 0-2 years immunized and Tenwek showed 15%. Eldoret areas are assumed to be like Tenwek.

5. Pneumonia and other respiratory diseases are major killers which are not necessarily preventable but which could be cured if diagnosed and treated quickly.

Late diagnosis and treatment of many diseases results in childhood deaths that could have been prevented if diagnosis had been made earlier and treatment started promptly.

Little data exists at the sub-project level about disease patterns except for that generated by Ministry of Health. This MOH data tends to be aggregated in national and provincial data levels. Tenwek Hospital is an exception. The Tenwek sub-project proposal contains disease pattern data gained from computer access to their hospital records. This data is reported in the sub-project proposal and supports this general analysis.

6. Malnutrition caused by ignorance and poor feeding practices is a largely preventable problem in the sub-project areas due to the high and medium potential agricultural land available.

Malnutrition causes wasting and stunting and is often a precursor to childhood mortality due to weakened resistance. The Kenyan government's 1983 "Nutrition Survey 3" reported that the sub-project areas had large estimated numbers of children with stunted growth due to poor nutrition. The survey reported Siaya with 37% of children stunted, Kisii - 31%, S. Nyanza - 25%, Kisumu - 20%, and the other sub-project areas had 18-19% stunted growth except Nandi District with 12%.

7. Kenya's high birth rate is a national problem that is well documented and a major priority for development efforts. During 1983-84, CORAT surveys among 1,600 women in the Maseno South/West and Tenwek areas indicated that more than the majority of women (55-56%) of child-bearing age have some knowledge about family planning but only 4-7% currently were using family planning methods. The Tenwek survey indicated that 22% of women did not desire additional children but only 4% were using family planning.

The 1984 National Contraceptive Prevalence Survey and other evidence from the field suggest that a growing number of women want to practise family planning but ignorance of modern methods and lack of supplies are major constraints. These constraints can be overcome by community based delivery systems as proposed in the sub-projects.

5. HOST COUNTRY ACTIVITY. Child Survival and Family Planning are major development programmes for the Republic of Kenya. The Ministry of Health and the National Council for Population and Development have major programmes in these areas which are supported by U.S.A.I.D.

Around 40% of health institutions in Kenya are church or mission operated. These receive ongoing support and funding from the government which recognizes that their support is vital.

Ministry of Health have supported the Maseno South (and West) and Tenwek programmes in the past. MOH (Dr. Maneno) has approved previous proposals to U.S.A.I.D. of this project. He has been asked to approve this project proposal.

III. PROJECT ANALYSIS

1. Economic Analysis

In this section an attempt will be made to show a few advantages (benefits) that will occur as a result of having this child survival project and related costs. This is despite the fact that a traditional cost benefit analysis is not possible for such a project. The proposed project will reach an estimated 560,000 people who will be serviced by CHWs and other project personnel.

A. Benefits

- a) The project aims at preventing death and promoting health among the target groups particularly mothers and children. Good health will mean that mothers and children will gain the time they would have lost through being tied down with illness and/or visiting health centres for curative care. The time saved will most probably be used in economic activities beneficial to the family and country in the final analysis. Better health for the child will result in better performance in her/his activities e.g., school performance which has potential economic benefits.
- b) CBHC projects focus on preventive health care which is estimated at 1/6th of curative care. Better preventive health can be seen as one way of ultimately reducing Government of Kenya expenditures on health.
- c) The project seeks to increase birth intervals as well as reducing total fertility rates. This will free the women from constant child rearing so as to allow them to contribute more to the labour force of the family, community and country.
- d) The community involvement in dealing with health issues will also pave the way for community involvement in finding ways to better their economic wellbeing. The community involvement in choosing health committees, CHWs and determining what happens in their village are motivation for realizing the 'power' they have in working together!

Specifics of benefits achieved in a number of CBHC programmes in Kenya are provided in Section 2, The Technical Analysis.

B. Cost-Effectiveness

This is a CBHC project which emphasizes a cost effective health care system compared to a curative system. Further attempts have been made to keep costs to the minimum through:

- a) having volunteer CHWs and committees

- b) having inbuilt flexibility such that insights gained and things that work in one sub-project will be quickly shared with the other sub-projects, hopefully to result in gains throughout the project.
- c) having cost control collection and analysis of unit cost data on a routine basis. This will tend to highlight areas of sudden cost increases so that corrective action can be taken.

Taking the benefits listed above and the cost strategy, it is expected that this project will yield some significant economic benefits.

C. Sustainability/Self-Reliance

The question is asked: Can the projects become self-financing at the end of the present funding? Three of the sub-projects will have been funded for six years at the termination of this project.

From past experience we have learnt that education takes a while to seep through. From the current projects some health committees both in Tenwek and Mt. Kenya East have embarked on income generating activities and have managed to raise some funds. Given Kenya's spirit of harambee and that people on the whole are used to paying for key services (e.g., building classrooms) it is possible that, if the projects are able to demonstrate success, people will be willing to pay part of the costs involved in CBHC. Also, if the dioceses are enabled to see the benefits of CBHC, allocating additional funds to this activity should become a reality.

2. Technical Analysis

A. The concept of CBHC has been introduced into a number of developing countries in the last 30 to 40 years with remarkable result. For example, the Alma Ata declaration of PHC as the strategy of achieving health for all by the year 2000 is a case in point. At that meeting it was recognized that community participation is a key element of effective community care.

In Kenya the CBHC approach has been shown in several areas to be effective in:

- i) Increasing completed immunization coverage from less than 20% to more than 90% in less than 5 years (Maua Community Based Project in Meru District).
- ii) Decreasing infant mortality from over 160 to 90 per 1,000 live births in Saradidi Health Project in Siaya District.
- iii) Decreasing early childhood (1-4 years) mortality from 25 to 18.2 per 1,000 mid-year population of children 1-4 years. It was observed in the same study that measles deaths declined in the same period of time and in the

same age group from 14.3 to 4.3 per 1,000 mid-point population (Saradidi Health Project).

- iv) Increasing family planning use from less than 15% to more than 30% of women 15 to 49 in the Diocese of Mount Kenya East and to more than 40% of women 15 to 49 in Chogoria CBHC/FP programme in five years. Tenwek Hospital's CBHC/FP programme deployed 73 CHWs in the programme's first year of service and saw 714 FP clients recruited in that year. Most (80%) of these were first time contraceptive users. (See CORAT/JHU Research Reports - Study No. 3).

One could say that in Kenya CBHC has been found to be effective in improving health status. CBHC is now taken seriously in Kenya with the Ministry of Health giving it full backing and support. It is also to be noted that the district focus for Rural Development strategy now in operation is based on the principles of community based approach to development. In a way the proposed CBHC programmes are going to add to the diffusion process which has gathered momentum and is well underway.

B. Specific Technical Interventions

1. Family Planning. This intervention involves the provision of IEC and commodities for contraception and motivating the families to use them for the spacing of their children and limitation of their family size. These services are provided through well trained CHWs under the supervision of Enrolled Community Nurses (trained in Family Planning Services) who in turn are supported by a Registered Public Health Nurse or a Medical Doctor who usually are the coordinators of CBHC at the level of each sub-project. In addition the sub-projects normally have additional support at all levels of health care delivery from the MOH system and from consulting physicians. In this way the safety and effectiveness of this intervention is ensured.

Contraceptive use has been shown to contribute significantly to mortality reduction. It is estimated that about 200 mothers out of 100,000 live births die in childbirth in Kenya every year. The risk of dying in childbirth and in infancy increases markedly over 35 years and after the fourth child and when birth intervals are less than two years. Therefore, providing and motivating couples to use contraception will reduce mortality. It has been shown that if Kenyan women had only 4 children or less then approximately 2,000 lives lost yearly in childbirth would be saved and IMR would decline by 25%.

2. Oral Rehydration Therapy (ORT). In our sub-projects providing this technology involves IEC, to the CHWs and through them to the rest of community with mothers as the main target. It is recognized that preventing diarrhoea is not possible to achieve in the communities with which we are working given their living environments. This is why our focus is on the management of diarrhoea to prevent death and to reduce duration of illness from diarrhoea and vomiting. The CHWs are trained on:

- a) how to assess the condition of a child with diarrhoea and make a decision on appropriate line of action;
- b) how to prepare a home-made salt-sugar solution (SSS);
- c) how to give it to the child with diarrhoea;
- d) how to train the mother to make SSS and give it to child with diarrhoea;
- e) to advise the mothers to continue breast-feeding and other available foods to the child and never to withhold food or drink.

The CHWs learn the preparation of ORT through demonstration and return demonstrations and they also teach the mothers in the same way.

With proper instruction and follow-up ORT is found to be effective in preventing diarrhoeal deaths. The sub-projects emphasize the use of SSS because the ingredients are usually available in the home.

This intervention is particularly appropriate because the target communities have a long tradition of cereal or banana oral fluids during diarrhoea. This makes the introduction of ORT in these areas relatively easy as the new ideas are built on old/existing ones.

Most of the sub-projects have had success with this intervention and so they have experience in it which they can also share with the new sub-project.

3. Immunization. Under the Expanded Programme for Immunization (EPI) the MOH, Government of Kenya, is spending a lot of effort and resources to strengthen the delivery of immunization services throughout the country. This involves the establishment of the cold chain, training of service providers, and supplying equipment supplies and vaccines. Various government and non-government agencies are also involved in the accelerated immunization activities. This is because vaccine preventable diseases (especially measles) are among the top three causes of death in infancy and early childhood. Strengthening the delivery of services is not enough without motivating the use. The sub-projects intend to motivate the community to use these services which are effective in reducing morbidity and mortality.

With the CBHC system in place the sub-projects are well able to provide IEC effectively and also to supplement the Government efforts in the delivery of the services. The sub-projects have an established cold-chain, trained personnel in EPI and trained CHWs as change agents within the communities. The system is able to deliver immunization services safely, effectively and efficiently, CHWs taking the major role of motivating the community.

4. Growth Monitoring. One of the most important indicators of the well-being of a child is the rate of weight gain which should increase steadily with age. The curve of

weight for age which indicates no gain in weight or weight loss shows that something is wrong with the child and hence the need for action. What is wrong may have to do with the feeding practices or an illness..

Weighing the child once may be useful as one can compare the weight with that of other children in the same age-group but it is much more important to see the trend of weight. This is why it is important to enable the mothers to understand the importance of having the children weighed regularly.

This is a simple and effective technology which the sub-projects can easily carry out if they have weighing scales. The CHWs would also be trained in weighing children and in discussing the weight with the mothers. This technology will prevent death and promote health among infants and children aged 1 to 5 years as it ensures timely interventions to combat any problem the child may have early.

5. Ante-natal Care (ANC). The purpose of ANC is to ensure that a pregnancy ends successfully with a healthy mother and a healthy baby. This is done through:

- a) regular visits to the clinic by pregnant mothers as early in the pregnancy as possible;
- b) giving a tetanus toxoid to prevent neonatal tetanus;
- c) giving malaria chemoprophylaxis in malarious areas;
- d) screening the pregnant women by identifying risk factors and ensuring that they deliver under adequate supervision.

The sub-projects provide some ANC to supplement the existing MOH system but more importantly they train the CHWs to educate the women regarding the use of ANC. They are able to encourage the women to visit the clinic, at least twice, to get immunized, checked and advised. They are also trained to recognize high risk factors and to refer the women for care. They are also trained to assist TBAs in their work in the community.

6. Training of CHWs. The CHWs are the change agents in the community. They are trained in simple interventions that prevent disease, promote health and prevent death. Their main role is IEC to the community. Thus, their main training need is communication. The project coordinators and supervisors are all trained in non-formal methods of training and are able to transfer this skill to the CHWs. This method of training has been shown to be very effective, not only to increase their knowledge but also to change attitude and behaviour.

The few supervisors are able to reach many more families through training of CHWs. The impact of their activities has been mentioned above.

The technical quality is assured in all the sub-projects by:

- hiring qualified staff;
- training the staff in the main interventions of the project;
- regular information gathering to enable continuous evaluation from service data and reports and periodic surveys;
- supportive supervision.

The supervisory system is ensured by having enough staff at various levels. Because the number of CHWs are increasing rapidly, their supervision is strengthened by appointing Contact CHWs from among the best ones. These are trained in supervisory skills and are able to support fellow CHWs in this way.

The CCHWs work under the guidance of the supervisors (the Community Nurses). The community nurses are supervised by the coordinators who are supervised/supported by CORAT consultants. The supervisory activity is designed to be supportive i.e. to identify gaps in knowledge and skills and to correct them by an appropriate action. The cold chain is checked regularly by the coordinators to ensure that it meets W.H.O. standards. This checking includes the equipment and the skills and activities of the staff responsible for the cold chain and the immunization programme.

In areas where the population density is very sparse or keeps moving, the mobile clinic strategy is the only one used at the moment. Semi-mobile clinics have been proposed but have not been tried in Kenya. Mobile clinics in Kajiado and Narok serving the Masai communities have been very successful at a reasonable cost per beneficiary. It would appear that when run efficiently the cost of services per user may not be higher than static clinics in the same areas.

Drop-outs/Volunteerism: Our three years' experience in support of the CBHC activities indicates that the problem of "drop-outs" among CHWs is not a major one because:-

- a) CHWs may be inactive in terms of not submitting reports or attending meetings. For reporting purposes, the CHW becomes inactive. But, if she does not leave the community, she is still a resource to her neighbours.
- b) CHWs are not the only volunteers in our communities. There are many others who perform voluntary functions. CHWs need not be treated as a special category but more of them should be trained to reduce their workload to a minimum.
- c) They work on a part-time basis. Most of them only contribute 4 to 8 hours in a week.
- d) Many CHWs appreciate the training they receive and this is often a sufficient incentive.

- e) Some programmes have tried non-financial incentives and have found them effective.
- f) Many CHWs have a spiritual motivation for their work.

In general, the drop-out rate (or CHWs who become inactive) is well below 10% in the sub-projects. Financial motivation would create more problems than it will solve and needs to be discouraged unless organized by the community themselves.

A good supportive supervision is crucial if the CHWs are to continue being active and effective.

C. Administration

The sub-projects have developed good CBHC systems that enable the communities to play a major and effective role in meeting their health needs. The churches' infrastructure reaches the most peripheral people known in Kenya. CBHC will make appropriate and essential care to be made universally available and accessible to the majority of community members.

The most important factors in utilization of services involve more than the distribution or delivery of those services. Equally important is motivating the community to use the services. It is because of this that the CBHC achieve more than can be measured by project service data as many mothers motivated by CHWs could still use alternative sources of services. Thus, the most important service delivery aspect of these programmes is appropriate and effective IEC (Health Education) aimed at creating a consciousness in the mothers as to the importance of the services being offered.

Each of the sub-projects has an adequate health team consisting of:-

- The project coordinators who are either Registered Public Health Nurses or Medical Doctors.
- The supervisors who are Enrolled Community Nurses and their equivalents.
- Contact CHWs who are more experienced CHWs that assist with the supervisory support of the other CHWs and also collect reports from CHWs.

Various levels of staff in the MOH system are usually available to provide: referral back up, manpower, and material support to the sub-projects.

All staff at various levels are trained in the skills they need to communicate effectively with the communities, to train CHWs and community leaders, and to deliver other preventive and promotive activities of immunization, ORT and growth monitoring.

The projects have also developed health information systems which enable the sub-projects and CORAT to monitor

the project activities on a continuous basis.

The projects are appropriately scaled given the management capacity that the sub-projects have developed or are developing. Health care services are available through a network of Government and Church facilities and are strengthened by the community based programmes that enable the community members not only to utilize these services but to participate as active partners.

There is a unique commitment by church workers to provide the essentials of PHC as a group and individually. By their very nature, they should take their work seriously.

The mobile clinics are manned by Enrolled Community Nurses (ECN) who are assisted by CHWs. They are visited once a month by the ECN, but the MOH Nurses are always available to them.

Thus, the church system provides a framework for community involvement and a spiritual inspiration for active involvement. It provides a system that reaches the grass-roots effectively. Services provided through the system reach the majority of the rural poor. It provides dedicated workers who are also religiously motivated to work for the benefit of the under privileged. They are prepared to work in hardship areas without demanding special support or remuneration. The church is constantly in dialogue with the people and usually has an established, positive reputation. This becomes a very useful starting point for a community based programme.

Management skills may not always match the resources to be managed hence the need for CORAT assistance. This assistance includes training so that the sub-projects can develop their own competent management system and personnel. Thus, the role of CORAT during the next three years will be to enable the sub-projects to continue to run their project by the end of the funding period.

3. Social Analysis.

Although this project covers 10 major tribal groups (Basuba, Luhya, Luo, Kalenjin, Kipsigis, Kuria, Kikuyu, Nandi, Pokot, and Turkana), the programme is for the most part executed by local people fully cognizant of local customs, attitudes, and beliefs. In three of the sub-projects CBHC has been in operation for at least three years. The three sub-projects have covered the Luo, Kalenjin, Kipsigis, Kuria and Kikuyu tribes without insurmountable social problems. The learning gained there will be utilized as new tribal groups enter the picture. The importance given in this project to moving with the community should be very beneficial in defusing tense situations.

The focus of the programme is on women's traditional role as the family person responsible for children's health. The programme makes full use of the Kenyan's traditional love for children. Family Planning may free the women to take more active roles in the economy. This is likely to elevate her position within the family and community.

High population growth is a recognized problem and unless checked by an effective Family Planning programme is likely to lead to social and economic disaster in the future. A fair population of Kenya's rural people already realize and appreciate this problem. Thus, the project provides local services and commodities for which there is already a growing demand. The demographic transition theory describes the well known fact that the decline in mortality always precedes that of fertility with a rapid rate of population increase before the fertility also begins to fall. It therefore seems that this phase is a necessary part of our development. The CBHC project may accelerate the rate of natural increase in the short run but will also reduce fertility in the long run.

Family Planning and increased knowledge of health are likely to change the size of families and to reduce the emotional trauma of losing loved ones. At the same time, Family Planning and health knowledge are likely to increase women's status in the family and community.

Increased women's status and knowledge could lead to some familial dislocations and even breakups. However, the ready availability of pastoral counselling through local church sources and other community sources for non-church goers ought to minimize what is likely to be a very small number of cases with real problems. Family planning has also been found to reduce stress and anxiety in many families and even to renew marital relations in some cases.

Collaboration with other agencies. There is no overlap of the target groups themselves. (CHWs from different programmes don't cover the same families or even the same areas). In each case, there are, however, other significant groups operating in the general target areas covered. Cooperation is achieved through direct contact and through Provincial and District Offices and Development Committees. For example, in Maseno South and West there is strong cooperation with the Kisumu PHC project of the Aga Khan Health Services, Maseno South is also teaching CHWs jointly with Roman Catholic and Red Cross projects in Nyanza. (The Diocesan CHWs are then further trained in FP motivation and supply).

Tenwek and Eldoret will both be operating in West Pokot, but will liaise directly through this project as well as with district committees. Tenwek and the Litein Village Health Programme work closely, even holding joint teaching sessions, as both are in the Kericho District.

So far there has been no conflict with the traditional healing systems. They are usually encouraged in their work, particularly the bone setters, herbalists and TBAs. These are the backbone of care in many communities and cannot be pushed aside.

The only hinderance that we have is inherent in the CBHC approach is that communities respond at their own pace and we must not push them. If allowed their own time and speed then chances of creating a negative impact are minimized. The best way to maximize the positive impact is to listen to the community and only guide them according to their needs. If they grow to take the initiative then they

can also bear the responsibility. This ensures social acceptability of all activities since they are subject to the community's decisions, priorities, planning and implementation.

A. Beneficiaries

The projects aim at the following groups of beneficiaries.

i) Direct

a) The estimated 560,000 people in households regularly served by CHWs.

b) An estimated 105,400 under 5 years children in homes regularly visited and served by each project CHWs.

c) An estimated 116,400 mothers and other women in the homes regularly visited, trained, and served by project CHWs.

d) About 1,200 Family Planning acceptor couples regularly utilizing CHW FP education and logistics services. These couples are probably partially or totally included in the women of no. 2.

e) The management and personnel of 4 church CBHD sub-projects who will benefit from employment, training, and CORAT oversight, management consulting and training.

f) The 716 new CHWs, 70 CCHWs, and over 700 VHC members who will be newly trained during this project as well as the CHWs retrained throughout the project.

ii) Indirect

a) People in about 208 villages served by a project Village Health Committee.

b) The CORAT staff who will be further trained and employed in this project.

c) The families whose mothers and children are touched by this project.

d) The churches will benefit from seeing a CBHC being implemented in their own areas with the learnings happening right there in their areas. The inflow of resources, knowledge persons and the sharing of ideas with other sub-projects, will strengthen inter-church cooperation.

e) The U.S.A.I.D., M.O.H., and NGO personnel who learn through reports and workshops from the experiences gained in the project.

These beneficiaries will be reached through the following health interventions:

1. Home Visits. CHWs will make an estimated 585,000 house visits to educate mothers and families on immunization, nutrition, FP, ORT, sanitation, hygiene.

CHWs will take arm-circumference measurements or height/weight for children under 5 years.

2. ORT Training. CHWs will train and re-train mothers in oral rehydration therapy techniques during an estimated 372,500 of the above home visits.

3. Arm Circumference/Weighings. An estimated 631,700 arm-circumference or height/weight measurements will take place with appropriate teaching on nutrition where needed.

4. New FP Users. CHWs will recruit an estimated 8,000 new FP users who will receive their supplies from the CHW. Many of these FP users will be first time contraceptive users. At the end of project, CHWs are expected to be serving an estimated 12,600 FP users.

5. Mobile Clinics - Supervisors, coordinators and enrolled nurses are expected to have held over 2,300 mobile clinics.

6. Children seen at Clinics. An estimated 302,300 under 5 years children will be examined at these mobile clinics.

7. Immunizations. An estimated 387,400 immunizations (doses) will be administered to under 5 years children at these mobile clinics. (See Appendix D for details on Immunization Schedule).

8. Ante-natal Mothers. An estimated 60,500 ante-natal mothers will be examined at mobile clinics and over 19,800 neo-natal tetanus immunizations will be given.

9. CHWs Training. Approximately 710 new CHWs will be trained and 1,819 CHWs will be retrained (some more than once).

10. New Village Health Committees. The sub-projects will start and train an estimated 150 new village health committees.

B. Population

The population in the area covered by the project is estimated at 5.6 million people.

IV. PROJECT DESIGN AND IMPLEMENTATION

1. Implementation Plan

This proposed project is the continuation and expansion of two existing health programmes, and the initiation of two new ones. All the four proposed sub-projects are Community Based Health Care (CBHC) programmes each with a strong Child Survival and Family Planning component (CBHC/FP). The initial overall project began with four sub-projects in January, 1983, funded under a FAMILY PLANNING OPERATIONS RESEARCH GRANT from U.S.A.I.D. through Johns Hopkins University. Currently, CORAT provides local oversight and management consulting. The experience gained in these current four sub-projects will enable rapid expansion and consolidation of the impact of both the existing and new sub-projects on the health of the community.

A. The Importance of a Management Component

In our experience, projects of this type benefit greatly from external management assistance. For example, the day-to-day implementation problems tend to lead to a loss of interest in service data (and thus loss of ability to quantify results). Similarly, there can too easily be a loss of interest in assuring excellence in financial control or in thinking about long-range self-reliance. The people who most effectively serve as health and CBHC coordinators are often not comfortable taking on such responsibilities. Their concerns (and their abilities) are on the field working with trainers/supervisors and CHWs to assure impact on the health of the community. Such key activities as carrying out surveys can easily be perceived by the project staff as getting in the way of the "real" work. Often, the surveys can be done more effectively if managed externally with cooperation of field staff, rather than managed by the sub-projects.

It is difficult to build objective oversight into such projects in a sustainable way. Our experience suggests the value of supplying such service externally, especially when good historical relationships exist between projects and the agency providing external assistance. Some of this might be built into the project itself, but there are substantial advantages to retaining the greater objectivity of such help from organizations such as CORAT. Such external management help and oversight can also ease the burden on the child survival project as it seeks to assure that its funded projects are producing worthwhile, cost-effective results.

(Indeed, that is a part of the cost just referred to: i.e., without external management help built in, the programme would have to provide it at great staff time cost and/or deterioration of project management.) It is for these reasons that these projects are being submitted under the umbrella of CORAT oversight.

B. CORAT's Services

CORAT will provide the following services:

1. Management Oversight and Reporting. CORAT chooses sub-projects, helps them to plan, writes proposals, negotiates with U.S.A.I.D., contracts with sub-projects to perform services, makes at least quarterly visits to sub-projects, reviews project reports and accounts, receives U.S.A.I.D. grants, disburses and accounts for grant monies, and writes summary reports.

This activity requires the following estimated amounts of time:

Summary Project Reports, Accounts and U.S.A.I.D. Liaison - 24 days/year

Project Reports, Visits, Planning and Travel - 24 Days/Sub-Project/Year.

2. Management Consulting and Technical Health Services. CORAT provides general management consulting and technical CBHC advisory services to help sub-projects with specific technical and management problems. For example, Tenwek Hospital needed help finding sources of FP films and asked CORAT to help. They also asked for help structuring training on "Supervising People". Such activity is estimated to require 1 day per month per project or 123 total mandays for the three years.

3. Baseline and Evaluation Surveys. CORAT designs, plans, implements, and summarizes the 5 baseline and evaluation surveys required for the sub-projects. This includes questionnaire design and supervision of interviewers. This work requires at least 20 days per major research study per project. Eight surveys are planned.

An additional 10 consultant days per year are budgeted for interval organizational evaluations for the sub-projects and their parent organizations to help build internal support for long-range self-reliance.

4. Survey and Service Data Analysis. In 1986, Johns Hopkins University budgeted 50 programmer days and 50 data analyst days to handle the data analysis of 2 surveys and ongoing cost and service data for CORAT and 4 sub-projects. CORAT has no previous experience providing this service for major surveys. Therefore, additional "learning" time needs to be built in for data analysis.

Two types of data will be analyzed: 1) survey data from baseline and evaluation surveys; and 2) service data from CORAT and sub-projects reports. Additional data analysis may be required for advisory services and any "mini-surveys" undertaken.

5. CORAT Time Records. CORAT senior staff and associates record daily time usage in half - hourly units.

Only time actually worked is recorded. Travel time is considered work time. Fourteen units are considered one "workday" for charge out purposes. The hours may have been put in different days. CORAT senior staff and associates do time sheets daily and give reports bi-monthly.

C. The Work of the Sub-Project.

Each of the proposed CBHC/FP sub-project will do the following:

- Senior sub-project staff encourage the formation of Local Village Committees (VHCs). Sub-project coordinators and supervisors continue to visit VHCs to revitalize and train them.
- VHCs make village health plans and priorities.
- VHCs select and oversee Community Health Workers (CHWs).
- Sub-project staff train selected CHWs for at least eight weeks.
- Sub-project staff or supervisors periodically visit, supervise, encourage, and re-train CHWs.
- CHWs (with VHC and staff help) select 100 households which they regularly visit and service. The CHWs also provide health and FP interventions including: ORT training, growth monitoring, immunization motivation, breast-feeding/weaning education, nutrition education, sanitation/hygiene training, education on preventable/controllable diseases, including provision of simple drugs, and family planning motivation and supply.
- CHWs serve their larger community as needed.
- CHWs make referrals as needed.
- Supervisors/trainers operate regular mobile clinics to provide immunization services that the CHWs cannot provide on their own. Maseno West, Maseno South, and Eldoret also provide ante-natal clinics at the same time. Tenwek will add a nurse to do ante-natal clinics.
- Contact Community Health Workers (CCHWs) are selected by sub-project staff to monitor 10 other CHWs. CCHWs visit 2-3 CHWs per week and help them with visits, training, reports, and problems. (Tenwek does not have CCHWs).

D. CORAT Technical Assistance

As noted before, CORAT has been providing technical assistance to 4 CBHC sub-projects for the last 4 years.

The resources already available in CORAT include:

- Project Management Experts
- Community Health Specialists with Specific Interest and Experience in Primary Health Care and Community Based Health Care System in Africa.
- Financial Management Experts
- Training and Training Materials Experts

This project can be managed by the CORAT systems in place and backed up by ongoing mutually supportive relationships between CORAT and the sub-projects' management.

CORAT has ability to produce training and educational materials and has already produced numerous monographs and similar materials on simple management and accounts for rural community based projects and workers. These materials are in high demand throughout the developing world.

The CORAT courses and workshops attract participation from all of the English-speaking Africa. CORAT courses have developed a good reputation in this field over the years because of the appropriateness and effectiveness of the courses developed out of practical experience in the African setting.

1. Key people who will carry out CORAT activities, are:

Mr. William Temu, CORAT Executive Director

Dr. Dan C.O. Kaseje, CORAT Medical Consultant
(Associate)

Dr. Mark L. Jacobson, CORAT Medical Consultant
(Associate)

Dr. Gordon W. Brown, CORAT Senior Consultant

Mr. Pascoal A.S.A. Denis CORAT Training
Consultant

Mr. Kershaw Burbank Jr., CORAT Consultant

Miss Margaret W Mwaura, CORAT Training and
Administrative Officer.

(Their abbreviated curriculum vitae are found in Appendix C.)

CORAT will appoint a programme director to co-ordinate this programme's activities. CORAT's expanding involvement in community health programmes suggests the need for CORAT to seek a full-time Medical Consultant with a community based health delivery background. Until such a person is found, Dr. Dan Kaseje, a CORAT Associate, will continue to provide the necessary technical medical

consulting needed. Dr. Kaseje, Dr. Jacobson and Mr. Burbank all have "hands on" experience in managing CBHC field systems.

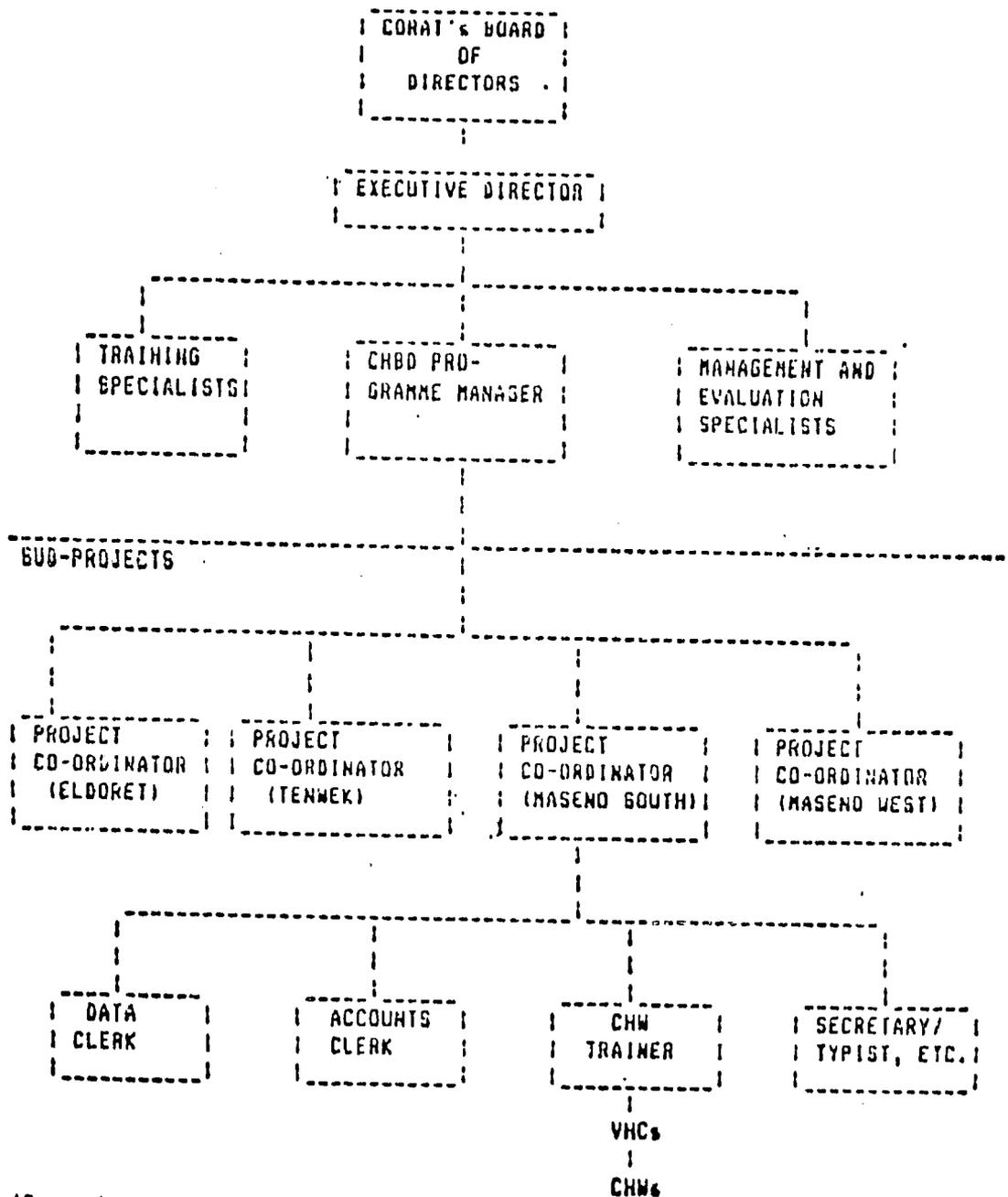
CORAT uses a task force management approach to such projects. Additional consultants and associates will be involved as necessary.

Data analysis of some service records and all survey results has in the previous project been performed by Johns Hopkins University. Their statistical expertise and computer equipment will not be available in this project except by consultation. Therefore, CORAT needs to develop its own capabilities in this area or find competent contract services. Dr. Brown, Mr. Burbank, Dr. Jacobson, and Dr. Kaseje all have broad research design and analysis experience. However, CORAT will seek a full-time Data Analyst and Computer Operator to upgrade CORAT's competencies in this area. (Dr. Brown and Mr. Burbank, current CORAT Consultants, are computer literate and one secretary is a trained micro-computer operator. Dr. Brown, Dr. Jacobson, and Dr. Kaseje, have broad experience with statistical analysis.)

CORAT staff already operate 3 Epson PX-8 computers and one staff member has a personal IBM compatible Toshiba portable micro-computer. CORAT will add additional mini/micro-computer capabilities and software to handle the data analysis requirements of the project. This project will utilize at least 60% of two computers' time.

2. CORAI Structure for Project Implementation

The project implementation team relationships are shown in the following diagram:



(See sub-project proposals for their details.)

F. Sub-Project Technical Assistance

Each sub-project will have a core of staff similar to other sub-projects. These "core" posts are:

1. Coordinator
2. Supervisors
3. Contact Community Health Workers (except Tenwek)
4. Administrative staff
 - i) Accounts Clerk
 - ii) Data Officer
 - iii) Logistics Officer
 - iv) Junior staff

Key technical assistance posts are:

a) Coordinators. Senior Kenya Registered Nurses, missionary nurses, and missionary doctors serve in these major management posts.

The coordinators plan, supervise, and evaluate the activities of other staff. They are key people in establishing new Village Health Committees in villages. They also manage the supervisors and periodically spend time with them in visiting CHWs.

The coordinators also represent their programmes with external agencies (including government) and often attend District Development Committee meetings.

b) Supervisors are the key field management posts in that they oversee and support day-to-day field operations. Supervisors spend 4-5 days each week in the field visiting CHWs or holding immunization and ante-natal clinics.

The Maseno South, Maseno West, and Eldoret sub-projects have (or plan) mostly female nurses as supervisors. These supervisors spend five days per month on immunization and ante-natal clinics. Tenwek has male supervisors who are not nurses. These supervisors also hold immunization clinics but not ante-natal clinics. Tenwek intends to hire one Enrolled Community Nurse specifically to hold ante-natal clinics when supervisors hold immunization clinics. The other projects are experimenting with some male supervisors who also do not hold ante-natal clinics.

Non-nurse male supervisors require lower pay and can ride motorcycles but cannot perform ante-natal clinics and have lower medical qualifications.

One possible evaluation question is whether or not non-nurse male supervisors significantly lower CHW knowledge and performance levels.

c) Contact Community Health Workers. Each sub-project (except Tenwek) is developing Contact Community Health Workers to provide mentoring of CHWs at low cost. Each CCHW is an experienced CHW chosen by sub-project staff to help CHWs learn their duties and to make monthly household

visits with the CHW. A CCHW has a maximum of 10 CHWs assigned to her/him. The CCHW is paid 10 Ksh. per CHW assigned per month. This salary is paid by the sub-project and not the community.

d) Village Health Committee and CHW are key local village technical assistance agents. They are paid by the local community. CHW time input varies from person to person and situation to situation. CHWs are asked to contribute 2 to 3 half days per week.

The CHWs are selected from the local community by the village health committees to undergo training in centres designated by the Diocese under the guidance of a Diocesan Coordinator. The CHWs are usually housewives with families of their own - people who have already earned the villagers' trust and respect.

e) Nature of Training. CHWs are trained locally, in order to facilitate their availability and to limit expense and to avoid the subsequent temptation for them to seek or admire paid posts at urban hospitals which are in fact not available to them. At the end of training, each person receives a drug kit in accordance with Ministry of Health specifications, containing common medications and contraceptive supplies.

Oral rehydration solution is included for management of diarrhoea to prevent rehydration, but more often people are taught to make it themselves.

Their training emphasizes skills rather than knowledge. They are also prepared in methods that they may use to change attitudes. The training aims at developing self-respect, commitment, humility, confidence to dispel fears and explain taboos, tact, trust, sensitivity and a personal conviction of the necessity for change. Everyday life is the chief teacher. An ability to communicate with parents, with youth and with other extension workers is of paramount importance. Health workers are taught how to use communication aids such as stories, role plays, pictures, proverbs, songs and so on. They are encouraged to organize meetings, to attend church meetings, women's meetings and all kinds of community meetings. They learn how to choose suitable collaborators and, primarily, how to make home visits.

CHWs are taught how to improve child survival by training the parents in the importance of immunization, nutrition, growth monitoring, proper breast-feeding, weaning, oral rehydration, personal and home hygiene. They learn to promote the use of latrines; to use simple, home-made plate racks; and to dig and use garbage pits. CHWs learn how to check a child's nutrition by measuring the circumference of the upper arm.

f) Family Planning. The CHWs promote FP through education and the distribution of information material, by making services and supplies available, and by subsequent guiding of acceptors. The health workers are taught to...

stress the benefits of suitably spaced births to children, mothers, fathers, households, the community and hence, the nation. They learn that the possible side effects of various methods of birth control are insignificant in comparison to the risks of frequent pregnancies and deliveries.

Details of different methods of contraception are discussed, and they learn how to order, store and supply the products and the importance of client follow-up.

The CHWs are able to record simple case-histories and to make census records of their own village: numbers of males, females and children under five in each household, how many children have been immunized, number of latrines built and percentage in use, number of plate-racks, and number, type and quality of local water sources. For family planning, they keep records of contacts made, acceptors, supplied, potential acceptors, defaulters, complications, women of child-bearing age and high-risk families. They make monthly reports.

g) Evaluation of CHWs. The health coordinator, and the trainer in cooperation with the village health committee, assesses the ability of the CHWs based on the CHWs knowledge, skills, practice of health in her home and her impact in the villages.

h) Problems Health Workers Face. In principle, these CHWs serve their communities on a voluntary basis. The CHWs are motivated by a genuine interest in health work and a sincere desire to help their fellow-man which is often reinforced by religious conviction.

The CHWs are faced with a mammoth task, as they are often the only health workers in an area which may cover about 18 square kilometres, containing about 10 villages which, with an estimated 74 households per village and five people per household, gives each worker a possible population of nearly 40,000 people. CHWs may be able to spare only seven hours per week from home and family obligations to help these people, although some spend up to five hours per day when visiting homes, churches and conducting demonstrations. Obviously, even the most devoted worker cannot visit all homes. Hence, the need to train more CHWs.

(Appendix E has details on assignments.)

G. WORKPLAN

WORKPLAN	1987	1988	1989	STAFF RESPONSIBLE
Recruitment of additional staff	xx	x		CORAT Executive Director & Sub-project Directors
Conduct Baseline follow-up surveys	x		x	Health Specialist
Establish MIS and HIS with sub-project staff participation	x			Health and Management Specialists and Sub-project Co-ordinators
Receive quarterly service data	xx xx	xx xx	xx xx	Health and Management Specialists
Compile and write semi-annual results	x	x x	x x	Health specialist
Conduct Management workshops	x	x		CBHD Manager Health and Management Specialists
Make supervision on site visits	xx xx	xx xx	xx xx	CBHD Manager Health and Management Specialists
Consulting with Project Co-ordinators & Supervisors	xx xx	x xx	x x	Health Specialists
Develop Implementation plan with each Sub-project team	xx			CBHD Managers Health and Management Specialists
Develop a collaborative network with other Government and Non-Government Agencies	xx xx	xx xx		CBHD Manager Health Specialist and Executive Director

I. Work Schedule

The timetables are as follows:

January - March, 1987

CORAT negotiate final contracts with sub-projects.

Request USAID cash advance.

Begin Eldoret project. Assist Eldoret with development of service data management methods, logistic methodology, and planning. Assist in setting up CHW training.

CORAT oversight visit to each sub-project (at least once). Advisory services as needed. Review management and follow-up problems.

Design and carry out Eldoret Baseline survey. Plan other needed baseline surveys at other sub-projects.

Update cost-effectiveness analysis mechanisms at each sub-project.

Create awareness within parent bodies of availability of evaluation. Prepare for evaluation if requested.

Sub-project monthly expenditure reports to CORAT.

Recruit new CORAT and sub-projects' staff.

Cash request to U.S.A.I.D. (March).

Major initial purchases of commodities complete (March).

Continue monthly CHW training/retraining. Select and train new CHWs for Maseno South area, for Maseno West, Eldoret, and Tenwek.

Form VHCs in Maseno South, and Maseno West.

All sub-projects continue supervision of CHWs, follow-up of VHCs (supervisors responsible).

Continue monthly mobile clinics by each supervisor.

Select and train Contact CHWs (CCHWs) for Maseno South, and Maseno West.

Eldoret:

Identify and form first 3 to 5 VHCs. Select first group of CHWs (estimate 10 to 15).

Choose/identify training materials.

Train first CHWs.

Establish CHW supervision.

Eldoret (Cont.)

Establish initial mobile clinic schedules.

Maseno West. Maseno West is planned to continue under care of Maseno South until May, 1987.

Recruit Coordinator.

Recruit 2 additional supervisors.

Tenwek

Tenwek project fully operational on this funding (March).

Establish 4 new VHCs, selecting 7 new CHWs from each VHC for training.

Continue improvements in record-keeping and collection begun in early 1986.

March - June, 1987

Annual workshop for sub-project sharing and goal-setting (March).

Survey of Maseno South/West under Johns Hopkins funding. Attach baseline survey questions if possible.

Maseno South and Maseno West fully operational on this project (June).

Oversight visit to each project (at least once). Advisory Services as needed. Review expenditure flows, data management, logistics management and follow-up on problems.

Continue updating cost-effectiveness analyses for each sub-project.

Begin parent-body evaluation (if requested previously).

July, 1987 and after:

Activities similar to above, ONLY MAJOR EVENTS NOTED.

Semi-annual reports preparations begun.

July, 1987 and after:

Sub-projects send in semi-annual reports (August).

CORAT compiles and drafts semi-annual report to U.S.A.I.D. (September).

Previous quarter's expense reports submitted to U.S.A.I.D.

CORAT cash request to U.S.A.I.D. (September).

Maseno_South. Same activities as above. Recruit second new supervisor. Expand further into Migori-Kisii and South Nyanza. Select and train 11 CCHWs for Maseno South; train 60 new CHWs; form 10 VHCs.

Maseno_West. Smooth transition to operation as separate sub-project. Select and train 7 CCHWs.

Select and train 40 new CHWs.

Eldoret. Evaluate first round of efforts and plan needed modifications. Set schedules for training, supervision, mobile clinics, VHC mobilization.

Mobilize second group of VHCs (3-5). Train second group of CHWs (10-15).

Recruit additional supervisors.

Tenwek. Activate 4 VHCs. Choose 28 new CHWs.

Train 21-28 CHWs.

Continue supervision, mobile clinics, etc.

Hold celebration for VHCs/CHWs.

September - December, 1987

First year's annual report sent in by sub-projects (October) and summary drafted by CORAT (November). CORAT audit of CORAT and sub-project accounts under this contract.

Other details similar to above.

Prepare funding options for end of project.

January - March, 1988

Similar to above.

April - June, 1988

Similar to above.

Design and prepare for evaluation studies.

July - September, 1988

Similar to above.

Finalize continuing funding for project.

October - December, 1988

Similar to above

Four evaluation surveys planned and executed.

January - March, 1989

Final report preparation. Final accounts prepared (March).

2. MONITORING AND EVALUATION

A. Monitoring

There are two monitoring levels to be considered:

- (i) at the sub-project level; and
- (ii) at the project (CORAT) level.

At the sub-project level the existing CBHC/FP projects have established monitoring, health and management information systems. (Eldoret will establish its system along similar lines). With minor variations, they are as follows:

- CHWs keep notebooks or logbooks and summarize them monthly on sub-projects designed forms. Verbal reports are given as needed.
- The Contact Community Health Workers (CCHWs) collect reports from CHWs and pass them on (in some cases, summaries) to the supervisors. This is done monthly. The CCHWs summarize the information received and add their own narrative report problems, constraints and successes. Verbal reports are given as needed. As project use of CCHWs grows, this will increasingly shift to summaries. CHWs also add their own narrative report of problems and successes. Verbal reports are given as needed.
- Supervisors collect reports from CCHWs and from CHWs who do not report through CCHWs. Supervisors analyse all CHWs and CCHWs reports. Verbal reports are given as needed.
- VHCs meet irregularly. Minutes are sent to the co-ordinator.
- Mobile Clinics' leaders summarize each clinic's activities and provide monthly aggregate reports to Data Clerks.
- Data Officers summarize information from the CHWs, VHCs, mobile clinics and supervisors for study by the co-ordinator. Semi-annual and annual summaries are prepared.
- Logistics Officers summarize supplies information monthly as well as prepare semi-annual and annual summaries.
- Co-ordinators prepare semi-annual and annual reports summarizing the results, opportunities and problems. Quantitative forms, a sample of which is given on the next page, are used as well as narrative reports. New forms will have to be prepared for this project. These reports are sent to CORAT.
- Accounting Staff post ledgers monthly and send monthly reports of expenditure to CORAT. Advances

-PROJECT RESULTS FORM

NOTE: Please report for 1 JAN and 1 JULY

ITEM	JAN 83	JULY 83	JAN 84	JULY 84	JAN 85	JULY 85	JAN 86	JULY 86	JAN 87	JULY 87
CHWs:										
Total number of CHWs trained since start of the project										
Total active CHWs currently distributing contraceptives										
RETRAINING:										
Number of CHWs retained during last 6 months										
HEALTH COMMITTEES:										
Total presently active										
FAMILY PLANNING:										
Active client (new and continuing) now using pills										
Active clients now using foam or condoms										
Total new IUD (only actual users, not merely referrals) during last 6 months										
Total new clients for injectables during last 6 months										
IMMUNIZATIONS:										
Total doses last 6 months										
CHW ACTIVITY:										
Total home visits last 6 mos.										
Total number of groups taught during last 6 months*										
LOGISTICS:										
Total cycles of pills issued to CHWs during last 6 months										
Total condoms issued to CHWs during last 6 months										
Total foaming tablets issued to CHWs during last 6 months										

* Number of groups taught should be the number of sessions (church groups, women's groups, barazas, etc.) not total number of people.

Revised Jan 86

This form will be revised to include Growth Monitoring activities and training of mothers in the use of ORT.

to sub-projects are reviewed monthly. Accounts are audited annually and reports prepared, along with revised budgets.

CORAT receives, analyses, summarises, and synthesizes reports from the sub-projects in its semi-annual written reports to U.S.A.I.D.

CORAT currently reports to the donors semi-annually (expenditure summaries monthly). CORAT personnel will visit each project at least once a quarter. Typical over the last three years has been 5-7 visits to most projects each year. Because close relationships have been established, there is a large amount of telephone contact. CORAT typically contacts each project several times per month.

Each year, a 3 to 5 day workshop is held with participation of all sub-projects (co-ordinators, supervisors, and others) to share activities, plans and dreams...and to set targets for the next year. This important motivating, planning, and monitoring activities will continue.

B. Evaluation

There are two information aspects that will be studied: (i) service data; and (ii) surveys.

Measurements for the CBHC/FP sub-projects will be as follows (subject to some variation and modification):

Result Indicators

<u>Result area</u>	<u>Service Data</u>	<u>Survey Information</u>
Family Planning	Commodities supplied; tubal ligations/IUDs supplied (Tenwek); Number individuals served.	%Change in prevalence; utilization rates; changed in desired family size, etc. Change of knowledge of FP
Immunization	Number of doses given	Changes in immunization coverage (percent of 2 year olds immunized)
ORT	Number of mothers taught	Changes in percent of mothers who know how to make and use ORT.
Health Educ. (nutrition, ORT hygiene etc.)	Number of counselling visits; number of latrines, dish racks etc.	Changes in utilization of latrines, gardens, dish racks etc. in the community
Growth monitoring	Number of children under 5 years weighed monthly or number of arm circumferences taken.	Change in percent children with accept-weight/age ratios. Change in percent children with cards showing weight taken in previous month

Recent follow-up surveys under current funding will be adequate as baseline surveys for only the FP aspects of this proposed project. Additional baseline surveys are planned to provide better information on immunizations, ORT, growth monitoring and other health parameters. Survey timing will be staggered so as to limit the number of surveys in any one month.

Given that current funding for some projects lasts into 1987 and that some follow-up surveys will be carried out under that funding, surveys will be less than 2 years after the last survey and one survey may be only 2 years after the baseline. This will minimize the sub-projects' "effect" in these surveys due to a collapsed (less than 3 year) evaluation period. Thought needs to be given to how late the follow-ups can be done. Surveys are planned as follows:

SURVEY PLANS THROUGH 1988/89

SUB-PROJECT	86/87	87/88	88/89
Maseno South	**X (Mar)		XXX
Maseno West	**X (Mar)		XXX
Eldoret	XXX		XXX
Tenwek	**X(Sept)		XXX

- ** Surveys under current funding
- X Smaller baseline surveys under requested funding and added to surveys under current funding where possible.
- XXX Surveys under requested funding

C. Cost-Effectiveness Analyses

CORAT has been instrumental in developing improved approaches to analysis of the cost-effectiveness of CBHC/FP projects, and plans to make this a central part of evaluation in the proposed project.

Evaluation will also include comparative analyses of sub-projects data, administration and approaches. The annual workshops are part of the evaluation process.

D. Diffusion

CORAT's ongoing communication with churches, development agencies, and other organizations will result in the diffusion of much project learning in this project. These communications include:

- A. CORAT newsletter sent to organizations all over the world.
- B. CORAT consultancies and training courses throughout Africa.
- C. CORAT publications on church organizations and development issues.

However, CORAT also plans a major workshop on CBHD systems to present the results of these (and previous) sub-projects efforts. This workshop will take place at the end of the project and include sub-project management. CORAT will invite appropriate government, NGO, church, and private sector individuals and organizations to participate at an appropriate venue.

Sub-projects will also share results within their denominations and at suitable opportunities in their local areas (e.g. DDC's, etc.).

V. PROJECT REQUIREMENTS AND FINANCIAL PLAN

1. Financial history for the last three years. As noted previously in the discussion of the genesis of this project, the CORAT programme, the Diocese of Maseno South (and, under it, the Diocese of Maseno West), and Tenwek Hospital have been receiving money from U.S.A.I.D. via the Johns Hopkins University for operations research in Family Planning (Contract AID/DSPE-COO55). Two other sub-projects were part of this contract too.

From 1983 to 1986, CORAT and the sub-projects have received a total of US\$746,398: \$160,000 in fiscal 1983/84, \$248,860 in fiscal 1984/85 and \$337,538 in fiscal 1985/86.

During the last three years, CORAT's income has predominantly (81%) come from its fees for services from management consulting, training seminars, and other CORAT activities.

Another 18% of income has come from donations and grants (principally represented by salary and benefits for one U.S. missionary on CORAT staff paid by a U.S. church). Slightly more than 1% of CORAT income has come from other sources and the sale of fixed assets.

The sub-projects receive income in money, goods, services, etc. from a variety of sources: local church funds, community support, and other funding agencies. Sub-projects expect income from these sources toward the expenses of this project. Each sub-project's local contribution is detailed in the detail budget for that sub-project.

2. Financial management and accounting system. CORAT and each of the sub-projects have externally audited annual accounts for U.S.A.I.D. money spent under the previous project. CORAT's staff includes two professional accountants and auditors (CPA's). CORAT annual accounts have been externally audited by Carr Stanyer Sims & Co. in Nairobi since CORAT's inception in 1975.

In the past, CORAT and the sub-projects have each been given a 2 month cash advance. Johns Hopkins has automatically replenished this advance every 2 months.

Each sub-project renders monthly accounts to CORAT which reimburses them for expenses to the level of the previous cash advance. These accounts are in accordance with U.S.A.I.D. guidelines. Each sub-project and CORAT keep receipts, cash books, and ledgers to ensure the proper accountability of funds.

CORAT assists sub-projects to set up proper financial accounting and control systems and is an important management consulting service rendered to the sub-projects.

CORAT and sub-project funds from this grant (as with the previous work with Johns Hopkins/U.S.A.I.D.) will be kept in separate bank accounts operated by no less than 2 signatories to any instrument.

3. Project Requirements

Personnel. All the sub-projects and CORAT will need funding for personnel. It is assumed that suitable personnel will be found locally because similar personnel have already been found. All sub-projects will need some local consultants to assist in training CHWs.

Training. Partial support of training is required for all sub-projects and CORAT. More details can be found in sub-project proposals. CORAT needs to train personnel in statistics and micro-computer operation.

Project vehicles. This proposal requests 9 new vehicles and 20 motorbikes during the three year period to complement the 3 vehicles and 7 motorbikes already operational in the sub-projects. (We feel sure that there are other vehicles which the sub-projects have not reported.)

Reasons for the expansion in the number of vehicles are:

- 1) The sub-projects are targetting remote areas. Public transport is extremely time consuming and/or non-existent on a regular basis in many areas. Project staff without vehicles can easily spend 100% more time in travel by public means.
- 2) Project vehicles allow central coordination and planning with a minimum number of staff who otherwise would have to be posted in decentralized locations raising enormous management and logistics problems.
- 3) Many project staff are women. It is culturally unacceptable in most project areas for a woman to ride a motorbike. Otherwise, motorbikes are preferable for economy.
- 4) New and replacement vehicles and motorbikes are needed for the following positions:

	<u>Vehicles</u>		<u>Motorbikes</u>	
	<u>New</u>	<u>Replace</u>	<u>New</u>	<u>Replace</u>
Coordinators	1	2	0	0
Supervisors	5	0	8	11
Data or Logistics				
Clerks	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>
	6	2	9	11
CORAT CBHD Manager	1	0	0	0

- 5) Supervisory mobility. The preponderance of vehicles (100%) and motorbikes (95%) are needed for project coordinators and supervisors whose mobility is key to project success. The mobility of a supervisor/trainer will determine the maximum number of CHWs with whom a supervisor/trainer can work. Experience suggests the following supervisory limits:

TABLE 4

Population Density	Approximate Maximum No. of CHWs per supervisor for Indicated mobility		
	Car	Motorbike	Public Transport
200	50-80	45-75	20-30
100	40-60	35-50	15-25
50	30-40	15-25	10-25
10	15-25	5-15	Few
5	10-20	3-08	Few

(The table assumes that the supervisors do the bulk of the travel, and few travel demands are made of the CHWs to report, etc.). Cars protect against rain and inclement weather and make a big difference in lost time during the rainy season (or rainy days).

In our planning we have tried to maximize the use of motorbikes, and minimize the use of cars for supervision. However, at population densities below about 100, a car is essential for effective supervision due to distances and weather. From an overall cost-effectiveness stand point, our experience strongly supports the idea that each trainer/supervisor must have a vehicle.

For example, the planned project expansion into South Nyanza and Kisii in Maseno South represents a two-fold increase in the project area, the target population and the number of CHWs. The 2 additional supervisory staff must be supported with means of transport in order to be effective in this large area. Both supervisors will be women.

The CORAT vehicle is needed for the CORAT CBHD programme manager (and other CORAT staff) to use in servicing the projects. A sedan or station wagon with 4 wheel drive is optimal for long drives over Kenya's main roads and the ability to reach less accessible projects like Tenwek and Eldoret areas where 4WD is an important factor.

CORAT and Tenwek will need to pay duty and sales tax on their vehicles. Therefore, U.S.A.I.D. pays for only 50% of the total vehicle cost. The other sub-projects enjoy duty and sales tax exemption through the National Council of Churches of Kenya (N.C.C.K.). Vehicle purchase will require third country foreign exchange.

Bicycles. Sub-projects with Contact Community Health Workers will provide CCHWs with bicycles where appropriate to assist in their supervision of CHWs.

Transport and Travel. All sub-projects will need support of transport and travel costs. CORAT will also need some air travel in Kenya expenses for "emergency" visits to sub-projects.

Office Equipment. Maseno West and Eldoret will need office equipment. Other projects have been budgeted for replacement costs of office equipment. All will need support of office running costs.

Immunization Equipment. Eldoret will need large immunization equipment (fridges, etc.) and other sub-projects will need syringes, etc., but these are expected to be obtained from KEPI, the Ministry of Health, Kenya.

Tenwek will need to purchase immunization equipment (syringes, needles, etc.) due to its distance from MOH supply sources.

CHW Kits and Supplies. Each project will need CHW Kits and equipment to start new CHWs. Drugs will not be purchased with U.S.A.I.D. funds but with local funds.

Computers. Tenwek has successfully used a micro-computer which has been of great value to the project. (See Annex F for a research report.) Current equipment will probably need replacement by 1988. Tenwek will have to pay customs duty and sales taxes.

CORAT needs micro-computers, a printer, software and peripherals for the CBHD Programme Manager and to assume data analysis responsibilities currently handled by Johns Hopkins University. The computers will also be used for accounting and word processing for this project. CORAT will have to pay sales tax and customs duty on the equipment which means CORAT will bear about 50% of total cost. The computers will be used 50% or more on project work and less than 50% on other CORAT work (which should more than justify U.S.A.I.D.'s input).

Both Tenwek and CORAT will need support for computer supplies (tractor feed forms, printer cartridges, floppy disks, tapes, etc.).

Data Analysis Expenses. CORAT will need support for data analysis expenses which principally consist of: special printing and copying costs for forms and bound survey reports; extraordinary amounts of paper, binding materials; computer supplies; electricity; etc.

Workshops. Each sub-project and CORAT will need support for annual workshops for dissemination of results and local planning.

Evaluation Surveys. CORAT and the sub-projects will need support for the major community surveys and for minor annual internal operations research surveys. (See Evaluation.) Field expenses for interviews are the principal cost in this area.

Audits. CORAT and the sub-projects will need support for annual external auditing of project funds.

Contingency. CORAT and the sub-projects will need contingency funds (15% CORAT and 20% sub-projects of total budget). These funds will replace overhead funds in the current CORAT-JHU/USAID Contract. CORAT will release these funds to the sub-projects for extraordinary opportunities or problems not budgeted but which are directly related to CORAT/sub-project operations under this OPG grant. Contingency funds will be justified in writing for the record prior to release.

(These funds may be used for reasonable non-line item expenses at CORAT's discretion.)

Special Needs. Tenwek Hospital has three special needs not included in this proposal. First, supervisor housing is unavailable, and the sub-project needs to construct simple housing to enable the supervisors to be as productive as possible. Second, although the hospital is getting increasing demands for FP services (a substantial fraction of that demand is created by the CBd/FP project), it has no FP examination and counselling space available in the hospital, and needs to add and equip a room for these functions. Finally, housing is needed for the Assistant Coordinator.

SUMMARY BUDGET

This proposal requests a U.S.A.I.D. operating programme grant (OPG) of \$1,285,000. The total estimated cost of the project is \$1,381,562. (DETAILED SUB-PROJECT BUDGETS FOLLOW). The contribution of Kenya (CORAT, sub-projects, communities, and other agencies) is estimated at \$596,562 or 32% of the total cost.

	FX	LC	TOTAL	
AID	\$ 193,399	\$1,091,601	\$1,285,000	68%
KENYA	\$ -	\$ 596,562	\$ 596,562	32%
TOTAL	\$ 193,399	\$1,688,163	\$1,881,562	100%

The U.S.A.I.D. request is rounded to \$1,285,000 from the following figures.

FINANCIAL PLAN (US\$)

	<u>AID CONTRIBUTION</u>		<u>OTHER CONTRIBUTIONS</u>		<u>TOTALS</u>	
	FX	LC	FX	LC	FX	LC
Technical Assistance	-	449,163	-	481,861	-	931,024
Training	-	57,989	-	14,286	-	72,275
Commodities	193,339	66,562	-	83,865	193,339	150,427
Other Costs	-	275,982	-	16,550	-	292,512
Evaluation	-	37,588	-	-	-	37,588
Contingencies/ Inflation	-	204,438	-	-	-	204,438
TOTALS	193,339	1,091,702	-	596,562	193,339	1,668,264

Financial and Reporting Relationships:

Grant funds will be dispersed to CORAT according to the following procedure:

(a) A.I.D. will make quarterly payments to CORAT during the life of the Grant, based on CORAT's quarterly estimate of costs to be incurred in the performance of grant requirements. The estimate of the costs to be incurred for each quarter will be submitted to A.I.D., on Standard Form 1034. Any amounts paid to CORAT in excess of actual costs for the quarter will be deducted from the following quarter's request for payment. Any costs that CORAT may incur in addition to those for which payment has been requested may be included in the following quarter's estimate of costs to be incurred.

(b) Payments received pursuant to the above paragraph shall be considered advances. Such advances shall be accounted for quarterly by CORAT furnishing to A.I.D. the just-completed quarter a summary statement reconciling advances against actual expenditure for that month.

(c) Except as A.I.D. may otherwise agree in writing, no disbursement shall be made against documentation received by A.I.D. after forty-five months from the date of this agreement.

(d) Final reconciliation of amounts due to CORAT from A.I.D., or vice versa, shall be made within four months of the completion of all services under this Grant. Such reconciliation shall be based on the financial section of the CORAT final report.

CORAT ASSISTED CBHD PROJECT
OPG REQUEST
LOGICAL FRAMEWORK

FROM: OCTOBER, 1988
TO : SEPTEMBER, 1989
TOTAL U.S.A.I.D. FUNDING: \$1,285,000
DATE PREPARED: AUGUST 22, 1988

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
SECTOR GOAL: BETTER COMMUNITY HEALTH IN KENYA	A) Reduced Early Childhood Mortality Rate B) Reduced Birth Rate C) Expanded CBHD coverage regionally.	A) MOH Surveys B) MOH Reports	A) MOH Surveys will cover Project Areas. B) Increased MOH commitment to CBHD.
PROJECT PURPOSE: A) TO ASSIST KENYAN CHURCHES TO EXPAND COMMUNITY BASED CHILD SURVIVAL AND PRIMARY HEALTH CARE PROGRAMMES IN: 1. Diocese of Maseno South 2. Diocese of Maseno West 3. Tenwek Hospital Region 4. Diocese of Eldoret B) To Provide Education on Health to Mothers C) To Increase Nutritional Status of Children under 5 Years D) To Increase Use of ORT E) To Increase Knowledge and Use of FP	In Project areas: Purposes A-D to be measured in baseline and evaluation surveys. Also: 1) <u>Maseno South</u> E) - @ 2,337 New FP Users and - @ 3,750 EOPS FP Users. 2) <u>Maseno West</u> E)-@ 2,133 New FP Users and - @ 3,500 EOPS FP Users 3) <u>Eldoret</u> E) - @ 1,170 New FP Users - @ 1,170 EOPS FP Users 4) <u>Tenwek</u> E) - @ 2,320 New FP Users and - @ 4,200 EOPS FP Users	A) 4 Baseline and 4 Follow-up Surveys in 4 Project Areas B) Project Service Data C) MOH District Reports D) Project Reports E) Site Visits F) CORAT Reports and Visits office	A) Research Methodology is able to reflect shifts in early childhood mortality, FP acceptance rates despite small bases and short time interval. B) Disease patterns do not alter significantly. C) Continued political and economic stability. D) Continued Government support for CBHD and FP in 4 project areas.
PROJECT OUTPUTS: A) Immunizations B) Motivational Home visits by CHWs C) Oral Rehydration Training for Mothers D) Child Weighings or Arm Circumference Measurements CONTINUED NEXT PAGE	*Four project area totals are: A) - @ 387,000 immunizations (doses) to children - @ 19,800 Neo-Natal tetanus doses to ante-natal mothers - @ 2,300 Mobile Clinics B) - @ 585,000 visits by CHWs CONTINUED NEXT PAGE	1. PROJECT REPORTS: A) Mobile Clinic Reports B) CHW Reports C) Supervisor and Project Coordinator Reports D) CORAT Reports 2. Site Visits by CORAT	A) MOH/KEPI to supply vaccines and maintain cold chain B) Good Community participation continues C) CHWs continue to volunteer to help local communities at no/low pay. D) Qualified Nursing personnel will be available to manage projects.

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NARRATIVE SUMMARY	OBJECTIVE VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>PROJECT OUTPUTS (CONT'D)</p> <p>E) New Village Health Committees (VHCs)</p> <p>F) New Community Health Workers (CHWs)</p> <p>G) Retrained CHWs</p> <p>H) Surveys</p>	<p>*Four project area totals are:</p> <p>C) - @ 372,500 New and Repeat ORT for Mothers</p> <p>D) - @ 631,700 child weighings and/or arm circumference age measurements</p> <p>E) - @ 148 New VHCs</p> <p>- @ 210 Active VHCs (EOPS)</p> <p>F) - @ 710 New CHWs</p> <p>- @ 200 Active CHWs (EOPS)</p> <p>G) - @ 1,800 CHW Retrainings</p> <p>H) - @ 8 Surveys complete</p> <p>* See sub-project proposals for details</p>	<p>3. Surveys and Survey Reports</p>	
<p>PROJECT INPUTS:</p> <p>A) Technical Assistance (CORAT Mandays = 743)</p> <p>B) Training</p> <p>C) Commodities</p> <p>D) Other Expenses</p> <p>E) Evaluation Expenses</p> <p>F) Contingency/Inflation</p>	<p>U.S.A. I.D INPUTS:</p> <p>A) Technical assistance = \$ 449,146</p> <p>B) Training = \$ 57,984</p> <p>C) Commodities = \$ 259,896</p> <p>D) Other Expenses = \$ 275,583</p> <p>E) Evaluation Expenses = \$ 37,587</p> <p>F) Contingency/Inflation = \$ 201,131</p>	<p>A-F) - Audited Accounts</p> <p>- Bank Statements</p>	

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APPENDIX A
ORGANIZATIONAL INDICATORS

OUTPUT (-SUBPROJECT)	1986/ 1987	1987/ 1988	1988/ 1989	3 YEAR TOTALS
NEW VHCS				
-MASENO SOUTH	12	25	25	62
-MASENO WEST	11	20	20	51
-TENWEK	2	4	4	10
-ELDORET	5	10	10	25
TOTAL NEW VHCS	30	59	59	148
NEW CHWS				
-MASENO SOUTH	50	80	60	190
-MASENO WEST	66	100	85	251
-TENWEK	30	60	60	150
-ELDORET	25	50	50	125
TOTAL NEW CHWS	171	290	255	716
CHWS RETRAINED				
-MASENO SOUTH	119	278	330	727
-MASENO WEST	43	195	275	513
-TENWEK	85	171	226	482
-ELDORET	0	25	72	97
TOTAL RETRAINED CHWS	247	669	903	1819
NEW CCHWS				
-MASENO SOUTH	12	12	12	36
-MASENO WEST	6	8	9	23
-TENWEK	0	0	0	0
-ELDORET	1	4	6	11
TOTAL NEW CCHWS	19	24	27	70
NEW SUPERVISORS				
-MASENO SOUTH	2	0	0	2
-MASENO WEST	2	0	0	2
-TENWEK	2	0	0	2
-ELDORET	1	1	1	3
TOTAL NEW SUPERVISORS	7	1	1	9
TOTAL YEAR END ACTIVE VHCS				
-MASENO SOUTH	58	75	90	
-MASENO WEST	39	53	66	
-TENWEK	23	27	31	
-ELDORET	5	14	21	
TOTAL YEAR END ACTIVE VHCS	125	169	208	
ACTIVE CHWS YEAR END				
-MASENO SOUTH	278	330	357	
-MASENO WEST	195	275	333	
-TENWEK	171	226	230	
-ELDORET	25	72	117	
TOTAL YEAR END ACTIVE CHWS	669	903	1087	

APPENDIX A (CONT.)
CORAT PROPOSAL TO USAID
SERVICE OUTPUT INDICATORS

OUTPUT (-SUBPROJECT)	1986/ 1987	1987/ 1988	1988/ 1989	3 YEAR TOTALS
HOME VISITS				
-MASENO SOUTH	18913	69364	86639	174916
-MASENO WEST	13254	53169	76662	143085
-TENWEK	35910	76224	100188	212322
-ELDORET	6000	14550	34042	54592
TOTAL HOME VISITS	74077	213307	297531	584915
NEW/REPEAT CRT TRAINING				
-MASENO SOUTH	11348	41618	51983	104949
-MASENO WEST	7953	32171	45997	86121
-TENWEK	25137	53357	70132	148626
TOTAL CRT TRAINING	3600	8730	20425	32755
TOTAL CRT TRAINING	48038	135876	183537	372451
YEAR END FP USERS				
-MASENO SOUTH	1947	2854	3752	
-MASENO WEST	1364	2380	3497	
-TENWEK	2223	3164	4200	
-ELDORET	150	648	1171	
TOTAL YEAR END FP USERS	5684	9046	12620	
NEW FP USERS				
-MASENO SOUTH('87:+M.WEST)	583	881	873	2337
-MASENO WEST(**INCLUDED ABOVE)	(**)	1016	1117	2133
-TENWEK	338	941	1036	2315
-ELDORET	150	498	523	1171
TOTAL NEW FP USERS	1071	3336	3549	7956
MOBILE CLINICS				
-MASENO SOUTH	140	220	220	580
-MASENO WEST	150	220	220	590
-TENWEK	158	300	348	806
-ELDORET	55	110	165	330
TOTAL MOBILE CLINICS	503	850	953	2306
CHILD IMMUNIZATIONS (DOSES)				
-MASENO SOUTH	14000	66000	27500	107500
-MASENO WEST	22500	66000	34375	122875
-TENWEK	19750	29325	29580	78655
-ELDORET	8250	33000	37125	78375
TOTAL IMMUNIZATIONS	64500	194325	128580	387405
EXPECT. MOTHER IMMUNIZATIONS				
-MASENO SOUTH	840	1650	1980	4470
-MASENO WEST	1800	3300	3960	9060
-TENWEK	714	1346	1571	3631
-ELDORET	330	825	1485	2640
TOTAL MOTHER IMMUNIZ. DOSES	3684	7121	8996	19801
CHILD WEIGHINGS/ARM CIRCUMFERENCE				
-MASENO SOUTH	27313	89164	99839	216316
-MASENO WEST	26754	73419	93162	193335
-TENWEK	29805	58812	70974	159591
-ELDORET	8550	18630	35275	62455
TOTAL CHILD WEIGHINGS	92422	240025	299250	631697

APPENDIX A (CONT.)
 CORAT PROPOSAL TO USAID
 SERVICE OUTPUT INDICATORS

OUTPUT (-SUBPROJECT) -----	1986/ 1987 -----	1987/ 1988 -----	1988/ 1989 -----	3 YEAR TOTALS -----
CHILDREN SEEN AT CLINICS				
-MASENO SOUTH	1000	33000	22000	56000
-MASENO WEST	22500	33000	27500	83000
-TENWEK	19750	34500	34800	89050
-ELDORET	16500	24750	33000	74250
TOTAL CHILD WEIGHINGS	59750	125250	117300	302300

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APPENDIX A
CORAT PROPOSAL TO USAID
CORAT OUTPUTS

CORAT MANDAYS OF TIME FUNCTION/SUB-PROJECT	OT, '86/ SE, '87	OT, '87/ SE, '88	OT, '88/ SE, '89	3 YEAR TOTALS
-----	-----	-----	-----	-----
PROGRAMME OVERSIGHT/REPORTING	M/D	M/D	M/D	M/D
MASENO SOUTH	12	24	24	60
MASENO WEST	12	24	24	60
TENWEK	15	24	24	63
ELDORET	24	24	24	72
OVERALL PROJECT MANAGEMENT	24	24	24	72
MANAGEMENT ADVISORY				
MASENO SOUTH	4	12	12	28
MASENO WEST	4	12	12	28
TENWEK	7	12	12	31
ELDORET	12	12	12	36
EVALUATIONS FOR PARENT ORGANIZATIONS	-	10	10	20
SURVEYS				
MASENO SOUTH	20	-	20	40
MASENO WEST	20	-	20	40
TENWEK	20	-	20	40
ELDORET	20	-	20	40
SURVEY DATA ANALYSIS	75	0	75	150
SERVICE DATA ANALYSIS	60	48	36	144
TOTAL CORAT MAN-DAYS	329	226	369	924
TOTAL CORAT CONSULTANT DAYS	215	192	269	676
TOTAL CORAT ASSOCIATE DAYS	114	34	100	248

APPENDIX B
CORAT PROPOSAL TO USAID
CORAT COMPONENT BUDGET

BUDGET ITEM	OT, '86/ SE, '87	OT, '87/ SE, '88	OT, '88/ SE, '89	3 YEAR TOTALS
1. TECHNICAL ASSISTANCE	(US\$)	(US\$)	(US\$)	(US\$)
CORAT CONSULTANT COSTS (\$220/MANDAY)	47031	46200	71201	164432
CORAT ASSOCIATE COSTS (\$170/MANDAY)	19238	5738	16875	41851
TOTAL TECHNICAL ASSISTANCE	66269	51938	88076	206283
2. TRAINING	1563	-	-	1563
3. COMMODITIES				
VEHICLE	13000	-	-	13000 FX
COMPUTER, PRINTER, SOFTWARE	10000	1100	-	11100 FX
TOTAL COMMODITIES	23000	1100	-	24100
4. OTHER EXPENSES				
VEHICLE OPERATION (\$.25/KM)	1250	2750	3025	7025
AIR TRAVEL	-	1250	1375	2625
TRAVEL	313	1375	1513	3201
ANNUAL WORKSHOP	938	1031	1134	3103
DISSEMINATION WORKSHOPS	-	-	3781	3781
AUDIT	2188	3125	4094	9407
TOTAL OTHER EXPENSES	4669	9531	14922	29142
5. EVALUATION				
SURVEY FIELD EXPENSES	12500	-	15125	27625
DATA ANALYSIS EXPENSES	1400	715	2821	4936
TOTAL EVALUATION	13900	715	17946	32561
CORAT SUB-TOTAL	109421	63284	120944	293649
CONTINGENCY (15%)	16413	9403	18142	44048
CORAT TOTAL USAID REQUEST	125834	72777	139086	337697
FX = FOREIGN EXCHANGE				
CORAT CONTRIBUTION BUDGET				
BUDGET ITEM	OT, '86/ SE, '87	OT, '87/ SE, '88	OT, '88/ SE, '89	3 YEAR TOTALS
3. COMMODITIES	(US\$)	(US\$)	(US\$)	(US\$)
VEHICLE DUTY & TAX	12500	-	-	12500
COMPUTER DUTY & TAX	10000	1000	-	11000
TOTAL COMMODITIES	22500	1000	-	23500
TOTAL LOCAL/OTHER SOURCES	22500	-	-	22500
PERCENT OF GRAND TOTAL BUDGE	0.15	-	-	0.06
GRAND TOTAL CORAT BUDGET	148334	73777	139086	361197
3 YEAR TOTAL TARGET POPULATION SERVED				559980
FINAL YEAR COST PER PERSON SERVED		US\$	0.25	
3 YEAR COST PER PERSON SERVED		US\$		0.64

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PROCUREMENT PLAN

Commodity/ Service	Delivered		Procurement		Remarks
	Cost	Consignee	Source	Origin	
1. Vehicles & Motor Bikes					
	No.				
Subaru 4x4 Saloon	1	\$ 13,000	CDRAT AFRICA	Kenya	Japan
Suzuki Sierra's	2	24,000	Diocese of Maseno South	Kenya	Japan
	2	25,200	Diocese of Maseno West	Kenya	Japan
	3	37,200	Diocese of Eldoret	Kenya	Japan
Landrover Hard Top (110 type)	1	20,625	Tenwek Hospital	Kenya	Kenya
Sub-Total	9	120,025			
Honda Motorbike XL 125					
	3	\$ 7,907	Diocese of Maseno South	Japan	Japan
	4	10,825	Diocese of Maseno West	Japan	Japan
	4	9,967	Diocese of Eldoret	Japan	Japan
	9	28,699	Tenwek Hospital	Japan	Japan
Sub-Total	20	56,770			
2. Bicycles	37	\$ 7,613	Diocese of Maseno South	Kenya	India
	23	4,741	Diocese of Maseno West	Kenya	India
	15	2,288	Diocese of Eldoret	Kenya	India
Sub-Total	75	14,642			
3. Computer Equipment and Software					
-microcomputers, printers, equipment & software		\$ 11,100	CDRAT AFRICA	U.S.A.	U.S.A.
-microcomputer, printer, equipment & supplies		9,414	Tenwek Hospital	U.S.A.	U.S.A.
Sub-Total		19,514			
4. Office Equipment					
	2,188		Diocese of Maseno South	Kenya	Kenya
	2,188		Diocese of Maseno West	Kenya	Kenya
	9,375		Diocese of Eldoret	Kenya	Kenya
Sub-Total	14,751		Tenwek Hospital	Kenya	Kenya
5. Medical Immunization Equipment					
Equipment, materials other than drugs and vaccines		8,531	Tenwek Hospital	Kenya	Kenya
					Off the Shelf
6. CHW Materials					
Kit, Syringes, Scales, sterile dressing, etc. but no drugs, vaccines		6,140	Diocese of Maseno South		Off the Shelf.
		7,713	Diocese of Maseno West		-No
		4,391	Diocese of Eldoret		drugs,
		10,394	Tenwek Hospital		medic-
Sub-Total		28,638			ines
					or
Grand Total		259,871			vac-
		*****			cines.

CURRICULUM VITAE

WILLIAM RAPHAEL TEMU

Office Address:

CORAT AFRICA
P.O. Box 42493
NAIROBI

Present Position:

Executive Director

In this capacity

- . Responsible for the management of the resource centre.
- . Initiate, develop and co-ordinate the programmes and activities of the consultant team.
- . Responsible for advisory services, and participate in training courses, and research and development programmes.
- . Ensure the professional standards of CORAT are maintained at the highest possible level.
- . Develop and maintain good relations with CORAT's clients and funding agencies.
- . Market CORAT's services with the help of the consultant team so as to maintain a steady work and cash flow.
- . Enable and co-ordinate the extension of church management services to different African countries through national church organisations and CORAT associates.
- . Manage all personnel matters of the staff.
- . Act as secretary to the company.

Past Work Experience

September 1979 - July 1982 - Finance Officer/Consultant for
CORAT AFRICA.

In this capacity

- . Manage the finances of CORAT AFRICA and co-ordinate and supervise CORAT's capital development programmes.

In this capacity

- Participate in the research and communication, training and advisory service programme areas. This will involve preparation of educational material, curriculum development, lecturing and consultancy assignments.
- Assist in the development of CORAT through contacts, visits and correspondence.
- Participate in the planning of all CORAT's programmes including the capital investment programme and internal management.

January 1976 - June 1979 - Principal Auditor
Tanzania Audit Corporation

In this capacity

- In charge of all the overall financial and management audits of over fifteen parastatal organisations.
- Participated in policy development, programme planning for the Corporation.
- April 1973 - December 1975 - Assistant Lecturer in Accountancy, Institute of Development Management, Morogoro.
- May 1972 - March 1973 - Assistant to Regional Financial Controllar, Kigoma.

In this capacity

In charge of regional development budget preparation and reporting on recurrent budget expenditure against budget for the region.

Related Experience

Management Consulting.

- Feasibility Study on the Establishment of a Christian Secondary School near Nairobi (October, 1979).
- Survey and Evaluation of the Maasai Rural Training Centre - Kenya (November, 1979)
- Study on Establishing Programme Priorities for the All Africa Conference of Churches - Kenya (May, 1980).
- Management Review of Plateau Hospital - Kenya (July, 1980).
- Management Audit - Office of Development Coordinator, Diocese of Kitui - Kenya (October, 1980).
- Management Review of the Kenya YMCA, (August, 1982).
- Financial Evaluation of the Development Education and Development Coordinators Programme - Diocese of Meru, Kenya (December, 1983).

- Management Restructuring of the Christian Service Committee of the Churches in Malawi (June, 1983).
- Evaluation of the Methodist Church in Kenya (June, 1984).
- Study of the Presbyterian Church of East Africa - Kenya (December, 1984).
- Evaluation of the Christian Council of Tanzania (June, 1985).
- Evaluation of the Christian Community Services of the Diocese of Maseno South - Kenya (June, 1985).

Research

- Development of a curriculum on Management for Seminarians (February, 1980).
- Development of a Correspondence Course "Management for Development Workers"
- Development of Management and Accounting Systems in Kiswahili for the Evangelical Lutheran Church in Tanzania, Northern Diocese (1984 and still in progress).

Training

Participated in numerous management training programmes in the following countries - Tanzania, Kenya, Ethiopia, Sudan, Malawi, Zambia, Zimbabwe, Lesotho, Ghana, Nigeria.

Educational and Professional Training

June 1972 - B. Com. (Hons) University of Nairobi

June 1977 - A.C.C.A. (U.K.)

Professional Membership

- Fellow, Chartered Association of Certified Accountants (U.K.)
- Member, Kenya Institute of Management

Gordon W. Brown
Senior Consultant, CORAT AFRICA

Dr. Brown has been Senior Consultant with CORAT since late 1979. He has been involved in all areas of CORAT's work: training, materials development, research and consulting as a member of the consultant team. Over the past few years Dr. Brown has become increasingly involved with consultancies for mission hospitals and hospital organizations in Kenya with emphasis on cost-effective management and data gathering methodology and utilization.

Past Work Experience:

- 1976-1979 - Lecturer and consultant with Industry and Commerce Programme, Mindolo Ecumenical Centre, Kitwe, Zambia, engaged in materials development and training for industrial middle management personnel as well as industrial management consultancies. He also performed a cost analysis of the functions of the whole of Mindolo's operations.
- 1976 - Consultant with the U.S. Energy Research and Development Administration, Washington, D.C., engaged in research and development of methods of statistical insulation design.
- 1972-1975 - Associate Professor, Electrical Engineering Department, University of Pittsburgh, Pittsburgh, PA, U.S.A.
- 1967-1972 - Assistant Professor, Electrical Engineering Department, University of Pittsburgh, Pittsburgh, PA, U.S.A.
- 1967 to present - Consultant to industrial concerns including Westinghouse Electric Corporation, ITE Imperial, Balfour Beatty, Zambia Electric Supply Company, Kenya Power and Lighting in the area of transmission line protection against lightning and the cost-effective upgrading of high voltage transmission lines.

Education and Professional Qualifications:

- Ph.D.E.E., Illinois Institute of Technology, 1967
- M.S.E.E., Illinois Institute of Technology, 1963
- B.S.E.E. and B.A. in Applied Sciences, Lehigh University, 1960
- Registered Professional Engineer in Pennsylvania (USA) and Kenya
- Senior Member, I.E.E.E.
- Member, C.I.G.R.E. and I.E.K.
- Associate Member, Kenya Institute of Management

Pertinent Publications and Papers:

- "Determining Cost-Effectiveness of CBHC/FP Programs," co-authored with Dr. Mark Jacobson, April 1986.
- "Management in Church Hospitals," co-authored with W. R. Temu, Proceedings of the International Hospital Federation Regional Conference, Nairobi, October 1984.
- "Contribution by and Future Potential of the Protestant Churches Medical Association (Kenya) in the Delivery of Health Services in Kenya," report for USAID, 1982.

Dr. Brown has published over twenty technical papers in refereed journals on engineering topics. Some of these, dealing with cost-effectiveness and/or statistical design and analysis, are indicated below as relevant:

"Cost-Effective Upgrading of HV Lines - Experience in Africa," invited paper presented at Imperial College of Technology, London, April 1983.

"The Weibull Distribution: Some Dangers With its Use in Insulation Studies," IEEE Transactions on Power Apparatus and Systems [PAS], Sept 1982, pp. 3513-3522.

"Joint Frequency Distributions of Stroke Current Rates of Rise and Crest Magnitude to Transmission Lines," IEEE PAS, Jan/Feb 1978, pp. 53-58.

"A Critique of Extreme Value Analysis in Cable Insulation Research," invited paper presented at Imperial College, London, February 1977.

"Frequency of Distribution Arrester Discharge Currents Due to Direct Strokes," co-authored with S. Thunander, IEEE PAS, Sept/Oct 1976, pp. 1571-79.

"Optimization of Electrical Design of EHV Transmission Lines," as Ph.D. thesis advisor, University of Pittsburgh, 1974.

"Testing for the Cumulative Flashover Distribution," IEEE PAS, May 1970, pp. 1186-91.

"Maximum Likelihood Methods Applied to Flashover Probability Data," IEEE PAS, Dec 1969, pp. 1323-30.

"Markov Processes Applied to Power System Reliability," as M.S. thesis advisor, University of Pittsburgh, 1968.

Kershaw Burbank Jr.

EXPERIENCE: CHRISTIAN COMMUNITY SERVICES OF MT. KENYA EAST
1979-1983 Kerugoya, Kenya (Church of the Province of Kenya- C.P.K)
Executive Director
(Appointed Missionary, Episcopal Church, U.S.A.)

Started this development corporation serving the Diocese of Mt. Kenya East, geographically 34% of Kenya. Assessed needs, wrote policy and organizational plans, found funding, and initiated local and regional rural development projects. Hired, trained, and supervised immediate staff of 15 Kenyan nationals. Worked directly for Rt. Rev. Dr. David Gitari and with diocesan staff, clergy, and committees.

Served as Diocesan Development Secretary. Evaluated local theological and development projects, wrote proposals, and negotiated agreements with funding agencies. Oversaw grant administration and wrote reports to funding agencies. Member of National Board of Christian Community Services, National Christian Council of Churches Rural Development Advisory Group, and diocesan representative to Kenyan government development committees.

1975-1978 BURBANK ASSOCIATES, Paoli, Pennsylvania
Owner
1974-1975 Account Executive

Managed all aspects (from finance to creative output) of consulting firm specializing in public relations and advertising. Planned and executed national public relations programs and budgets for Tylenol, Ferrari, and a museum. Wrote advertising and public relations strategies and copy for TV, radio, print, and direct mail. Consulted on management organizational development, and fund raising matters. Trained and supervised account staff. Created and presented new business proposals. Negotiated contracts. Spokesman with national press. Worked with clients' top management, marketing and technical staffs.

Accounts: McNeil Consumer Products Co., (Johnson & Johnson subsidiary); Ferrari automobile distributors; Sleepy Hollow Restorations; Devon Horse Show; University of Pennsylvania's University Museum; and Algar Enterprises (car dealer).

1973-1974 PROCTER & GAMBLE COMPANY, Cincinnati, Ohio, U.S.A.
Staff Assistant, CONSUMER AFFAIRS DEPARTMENT

First in new position responsible for national public education program about advertising. Worked with Vice-President- Advertising, Director Public Affairs Division, and Managers of various departments and brands.

- 1970-1973 PROCTER & GAMBLE
Staff Assistant, PUBLIC RELATIONS DEPARTMENT
PR Counsel to the Packaged Soap & Detergent Products Division. Organized community relations programs for manufacturing plants. Wrote PR materials and organized media events. Worked with Division, Plant, and Brand Managers.
- 1968-1970 PROCTER & GAMBLE
Field Supervisor, FIELD ADVERTISING DEPARTMENT
Managed door-to-door sampling operations throughout U.S.A. Worked with District Sales Managers.
- EDUCATION:
1983-1984 CORNELL UNIVERSITY, Ithaca, New York- Master Professional Studies (M.P.S.) in International Agriculture and Rural Development specializing in project design and management. Degree expected January, 1985.
- 1979 C.P.K. LANGUAGE SCHOOL, Nairobi, Kenya- 3 month intensive course in Swahili.
- 1964-1968 YALE UNIVERSITY, New Haven, Connecticut- B.A. degree in American Studies. Member: St. Elmo's Senior Society; Fence Club. Student aide to the President; assistant manager of the varsity hockey team.
- 1965-1961 TAFT SCHOOL, Watertown, Connecticut- Certificate of Recommendation from the National Merit Scholarship.
- MILITARY: U.S. MARINE CORPS- Honorably discharged in 1967. Active duty: 1961-1964. Corporal (E-4), squad leader and spot team chief.
- ACTIVITIES: Cornell Camel Breeders' Association member.
Presentations on overseas church work to U.S. churches.
Lay Reader, St. Thomas's Church, Kerugoya.
Scuba, photography, ice hockey, squash, and tennis.
- TRAVEL: Kenya, United Kingdom, Netherlands, Belgium, France, Germany, Israel, Okinawa, Japan, Korea, Hong Kong, Philippines, Taiwan, Panama Canal Zone, Bermuda, and the Caribbean. Throughout the United States.
- LANGUAGES: Swahili, French, Computer BASIC.
- PERSONAL
REFERENCES: Upon request.

VITAE

DAN C.O. KASEJE

MBChB, MPH,
Dip, C.S.

OFFICE ADDRESS:

DEPARTMENT OF COMMUNITY HEALTH,
FACULTY OF MEDICINE,
P.O. BOX 30588,
NAIROBI

Phone. 334800 Ext. 2718 or
2376

FIELD ADDRESS:

SARADIDI RURAL HEALTH,
PROGRAMME,
P.O. BOX 33,
NYILIMA.

PERSONAL

Marital Status: Married

GENERAL EDUCATION:

Maranda and Tambach Secondary Schools 1964 - 1967
obtained E.A.C.E. (Division 1).

Thika High School 1968 - 1969
obtained E.A.A.C.E. (3p 2s.).

Regent College, University of British Columbia 1978 - 1979
Awarded a Diploma in Christian Studies (Dip. C.S.).

Area of concentration: Communication Principles and Christian
Counselling

MEDICAL EDUCATION:

University of Nairobi 1970 - 1975.

Awarded Bachelor of Medicine and Bachelor of Surgery (MB ChB).

Harvard University, School of Public Health 1977 - 1978

Awarded Master of Public Health (MPH).

Area of Concentration: Communicable disease control and Tropical
Public Health.

Educational Commission for Foreign Medical Graduates (U.S.A.):

Passed the qualifying Examination E.C.F.M.G. Certificate in 1978.

University of Nairobi, Department of Pathology, 1979
Awarded Certificate of Post graduate Immunology

UNIVERSITY APPOINTMENTS:

Tutorial Fellow: In the Department of Community Health, Faculty of Medicine, University of Nairobi, appointed in 1976.

Lecturer: Promoted to the position of a Lecturer in the Department of Community Health in January 1979.

PROFESSIONAL EXPERIENCE:

Medical Officer (Intern)
Machakos General Hospital,
Machakos District, Eastern Province 1975 - 1976

Rotated through the Department of Paediatrics, Medicine, and Obs/Gyn.

Medical Officer (Obstetrics and Gynaecology) and Assistant Medical Officer of Health (In charge of Rural Health Services, Machakos District, Eastern Province (1976 - 1977)).

I was also responsible for Tuberculosis and Kala-azar management, control/and research during the same period (1976-1977).

Acting Medical Officer of Health

Machakos District,
Eastern Province, 1977 (January to March).

TEACHING EXPERIENCE:

Undergraduates:- Lectures and Seminars on:-

- Communicable disease control
- Organization of Rural Health Services in Kenya
- Health Centre Practice
- Community Diagnosis
- Primary Health Care (Community Based).

Field Work: Practical approaches to Field Work: Community Based Surveys on malaria

disease and disease related problems in given communities, action programmes based on survey findings and evaluation of action.
Utilization of data from Community based surveys.

Advanced Nursing Students: Epidemiology of selected communicable diseases.

Public Health Nurses:

Community Diagnosis

Rural Health Training Centre Teacher Trainees:

- Communicable Diseases Control
- Community Diagnosis
- Rural Health Services and Primary Health Care.

Visiting Scholar

Regent College
University of British Columbia
Vancouver, Canada.

I Organized and conducted a Seminar for Medical and Paramedical professionals and "Wholistic Community Based Health system".

RESEARCH ACTIVITIES:

PAST: Evaluation of the National Tuberculosis Programme in Machakos District (1976 - 1977)

- A report is available.

Investigation of an outbreak of visceral Leishmaniasis in Machakos District, its management and control. (1977).

A report is available.

Community Based distribution of non-clinical Family Planning Services: Its feasibility in Kenya (1980).

- A report available.

CURRENT: Saradidi Community based malaria Chemoprophylaxis and Chemotherapy Control Programme. This research is funded by WHO, S/G on Applied Field Research on malaria and I am the Principal Investigator.
Saradidi Community Based distribution of non-clinical Family Planning Services - Funded by Family Planning International Assistance.
Epidemiology of the major Communicable diseases in an area in Siaya District and appropriate control strategies.

CONFERENCES, SEMINARS AND WORK SHOPS

October 1980

Attended a workshop on
"Is the concept of the Rural Community Health Worker Programme Applicable to the Urban Environment?"
-READ A PAPER ON "URBAN HEALTH PROBLEMS IN SQUATTER AREAS OF NAIROBI".

December 1980

Attended a work-shop on Community Based distribution of Family Planning Services and Management of Community Based income generating programmes at the Asian Centre for Population and Community Development, in BANKOK - Thailand.

READ A PAPER ON

"A Community Based Health Programme in Kenya: Saradidi Health Project".

February 1981 Attended the 2nd Annual Medical Scientific Conference, Nairobi, Kenya.

April 1981

To attend IUAES 1981 Symposium "ANTHROPOLOGY AND PRIMARY HEALTH CARE" at the Royal Tropical Institute, Amsterdam, Holland.

Paper for presentation:

"A Community Based Health Programme in Kenya: Saradidi Health Project".

6

OTHER ACTIVITIES:

- From 1st December 1980: A member of the Community Health Workers Support Unit (CHWSU) Advisory Committee.
- June 1980 to January 1981: A Consultant to the International Eye Foundation, Rural Blindness Prevention Programme on Community based Services.
- February 1981 Member of the Review Committee on Public Health Act.
- June 1979 to November Consultant to the diocese of Maseno South on Rural Health Services.

PAPERS

- Kaseje, D.C.O., 'Sickle Cell Disease in East Africa'.
Unpublished Dissertation, 3rd year Nairobi
University Medical School 1973.
- Kaseje, D.C.O., 'Evaluation of the national TB. Programme
in Machakos District Unpublished term-paper
for Master of Medicine in Community Health 1977.
- Kaseje, D.C.O., 'Epidemiology, Management and Control of Visceral
Leishmaniasis outbreak in Machakos District'-
Unpublished Term Paper for Master of Public
Health, Harvard School of Public Health (1978).
- Kaseje, D.C.O., 'Noise: Its effects on Hearing, 'Schistosomiasis:
The Relationships among Pathology, Prevalence,
and intensity of infection'. 'Ethical analysis
of Family Planning Programmes in Machakos
District.' All these were unpublished term
papers for Master of Public Health degree of
Harvard, 1978.
- Kaseje, D.C.O., 'The Role of Medical Missions' and 'The Healing
Ministry' Both are unpublished Course Papers
for the Diploma in Christian Studies at Regent
College, Vancourver, Canada.

Kaseje, D.C.O., "Malaria Chemoprophylaxis: A feasible control Alternative" Unpublished paper prepared for the work-Shop on Malaria in Dar es Salaam, 1979.

Mburu, F.M., and Kaseje, D.C.O. "Community Based Distribution of Non-clinical Family Planning Services: A feasibility study in Kenya" Unpublished report, Family Planning Association of Kenya, Nairobi, April, 1980.

CURRICULUM VITAE

NAME: MR. PASCOAL AMOS SEBASTIAN ALMEIDA DENIS.

NATIONALITY: KENYAN.

RELIGION: CATHOLIC.

STATUS: MARRIED.

EDUCATIONAL RECORD: (From age of 12 years)

- 1946-50: St. Joseph's High School, Bangalore, India - Cambridge School Certificate and High School Certificate.
- 1956-57: University College, Nairobi - Diploma of the Association of Accountants in East Africa.
- 1957: Kenya Government Senior Accounts Examination.
- 1961: British Broadcasting Corporation - Administration and Accounts Course.
- 1974: British Council, London - Course on Developments in Government Accountancy and Audit.
- 1978: Kenya Institute of Management - Attended the Advanced Management Programme.

PROFESSIONAL QUALIFICATIONS:

- Company Auditor - Authority was granted in 1976 by the Registrar of Companies under section 161 of the Companies Act (Cap. 486) to hold the position of Auditor of any Company in Kenya.
- Accountant - Registration as an Accountant under the provisions of the Accountants Act (Cap. 531) was obtained on 6th September, 1978 under Registration No. R 271.
- Membership of the Institute of Certified Public Accountants of Kenya, CPA (Kenya), was granted in April, 1979.

Holder of Practising Certificate
No. P 206 authorising practise in
Kenya as a Certified Public Account-
ant (Kenya) effective from 13th
June, 1979.

EMPLOYMENT RECORD:

- 1951-1956: Clerical Officer (Accounts) - various Mini-
stries, Government of Kenya.
- 1956-1958: Accounts Assistant/Examiner of Accounts,
Accounts Officer - various Ministries,
Government of Kenya.
- 1959-1965: Accountant - various Ministries, Government
of Kenya.
- 1966-1968: Senior Accountant - Ministry of Finance and
Planning, Government of Kenya.
- 1968-1969: Chief Accountant, Treasury, Ministry of
Finance and Planning, Government of Kenya.
- 1970-1979: Head of Accountancy Services - Government
of Kenya.
- 1977-1980: Registrar, Registration of Accountants Board,
Kenya.
- 1980
to present-Training Consultant with CORAT

EXPERIENCE:

In the course of my 28 years in the Civil Service I have acquired wide practical experience in accountancy and finance management at all levels. (See Annex III). I have held positions of trust and have carried responsibility for a wide range of accounting systems, analysis and design of computerised stores applications, organisation and methods assignments, computer based accountancy operations, and staff selection, their training and development to professional standards. A resume of practical accounting and management experience gained is attached. (See Annex I). For the 2½ years period July, 1977 to January, 1980 I held the position of Secretary/Chief Executive of a Statutory Board, i.e. Registrar, Registration of Accountants Board, Kenya. (See Annex IV).

MEMBERSHIP OF BOARDS/COMMITTEES/ORGANISATIONS:

PROFESSIONAL

Member of the Institute of Certified Public Accountants of Kenya - CPA (Kenya).

3.

Fellow of the British Institute of Management (FBIM).

Corporate member of the Kenya Institute of Management (MKIM) and member of Council.

Vice-Chairman of the Kenya Accountants and Secretaries National Examinations Board.

Member of Council of the Association of Professional Societies in East Africa.

OFFICIAL

Chairman of the Working Party on Accountants Legislation. (1970-1973).

Treasury representative on the Executive Board of the Management Training and Advisory Centre, Nairobi. (Up to 30th April, 1979).

Treasury representative on the Directing Committee for Management Training at the Kenya Institute of Administration. (Up to 30th April, 1979).

Treasury representative on the Kenya Accountants and Secretaries National Examinations Board.

Registrar, Registration of Accountants Board, Kenya. (Up to 31st January, 1980).

CHURCH

LEGION OF MARY

Senior Praesidium: Took up membership in 1951 and did 6 years of active work of a religious nature.

CHRISTIAN LIFE COMMUNITIES

St. Joseph's School, Bangalore Group: Took up membership in 1948 and was active in the group for 3 years doing social welfare work for the aged.

St. Francis Xavier's Church Group, Nairobi: Took up membership in 1952 and over the past 28 years have been Councillor for 4 years, Treasurer for 5 years, Auditor for 2 years, First Assistant for 2 years and Prefect for 12 years. The work involved is connected with the welfare of the community in the Parish.

ST. FRANCIS XAVIER'S CHURCH, PARKLANDS

In 1954 I was Treasurer of the Parish Hall Building Committee and subsequently served for 6 years as Chairman of Parish General Purposes Committees. Since 1971 have been Chairman of the Parish Council, and a member of the Diocesan Council of Nairobi and the Lay Council of Kenya.

CHARITABLE AND SOCIAL INSTITUTIONS

SOCIETY OF ST. VINCENT DE PAUL

St. Francis Xavier's Conference, Parklands:- Took up membership of the Conference on its inception in 1962. Became its first Treasurer, and continued in post until 1972. Have been Chairman since 1973.

Nairobi Area Council - Have been a member for the past 16 years and presently carry out the role of Convenor.

National Council of Kenya - Have served as Hon. National Treasurer since 1972.

The main task in these organisations is to look after the needs of the poor and the crippled in Kenya.

FRIENDS OF THE ORDER OF ST. JOHN OF JERUSALEM, OF RHODES AND OF MALTA

Elected a Knight of the Order in Rome on 10th April, 1975, and serve as Assistant Treasurer of the Kenya Association of the Order.

LANGUAGES SPOKEN

English, French, Konkani and Kiswahili.

COUNTRIES VISITED

All Countries in Europe, India, Pakistan, Israel, Lebanon, U.S.A., Canada, Czechoslovakia, Hungary, Uganda, Tanzania, Egypt, Malawi, Zambia, Botswana, Lesotho, Swaziland, Nigeria and Algeria.

CURRICULUM VITAE

MARGARET WAMBUI MWAURA

:
Nationality : Kenyan
:
Status : Single

Educational Record

- . 1972 - 1975 : Kahuhia Girls High School
Obtained E.A.C.E. (Division 1)
- . 1976 - 1977 : Kangaru High School
Obtained E.A.A.C.E. (3P 1S)
- . 1978 - 1981 : University of Nairobi
BA(HONS) in Sociology & Geography

Employment Record

- . 1978 : Teacher - Muthithi Secondary
School, Muranga, for a period
of six months.
- . 1982 - 1985 : Administrative Accountant,
CORAT (Africa)
- . 1986 : Training & Administrative Officer,
CORAT (Africa)

In the course of the four and half years I have worked in CORAT (Africa) I have acquired practical experience in Training, Finance and Administration as follows:-

Training:

Participated in Management Training Programmes in Kenya and Tanzania.

Finance:

Participated in keeping Books of Account and preparation of Financial Reports.

Administration:

Participated in Administration in the office and of Residential Training Courses.

Appendix D:

Recent CORAT Activities Relevant to Proposal

- Present - JHU - CORAT CBHC Operations Research. With Johns Hopkins University and funded by USAID, emplacing and extending thre CBHC and one NFP project in Kenya, with emphasis in introducing family planning into the CBHC projects and assessing parameters .. influencing the cost-effectiveness of the projects.
- 1985 - Shirati Hospital. Assist in planning CBHC project of this Tanzanian hospital.
- 1985 - Christian Community Services, Diocese of Maseno South. Evaluation of entire development work of CCS, with particular reference to the World Education, Inc. Rural Development Project there.
- 1985 - Christian Council of Tanzania. Evaluation of the work and structure of CCT, with particular reference to its development activities.
- 1985 - Diocese of Machakos, CPK. Consulting services to the Diocese in planning its developmetn work, with special reference to starting a community based health programme.
- 1985 - Management for Development Coordinators. CORAT-taught residential course for senior staff of departments and projects. Participants from throughtout Africa.
- 1985 - PCMA Structure. Recommendations for the future structure of the Protestant Churches Medical Asociation, given their increased project work.
- 1985 - PCMA/KCS Grant Allocation. Consultancy to make recomme-ndations on an equitable distribution of the government grant to the mission medical services of the Protestant

- Churches Medical Association and the Kenya Catholic Secretariat Medical Services.
- 1985 - Thika Maternity Hospital. Evaluation in which a cost-effectiveness analysis of the hospital was a key feature.
- 1984 - Chogoria Hospital CBHC Programme. Facilitation and mini-consultancy on this CBHC project in Kenya which included an approximate cost-analysis.
- 1984 - Management for Development Coordinators. See similar, 1985.
- 1984 - Christian Service Committee of Malawi. Evaluation of this agency which funds nearly all the development work of the churches in Malawi and a significant part of that of the government of Malawi.
- 1983 - Workshop for Development Coordinators. Follow-up to CORAT course in Management for Development Coordinators.
- 1983 - Interchurch Response for the Horn of Africa. Evaluation of the ICR refugee work in Somalia.
- 1983 - Management for Development Coordinators. See similar, 1985.
- 1982 - PCMA Survey. This USAID-funded study focussed on the present and future potential of PCMA in health care in Kenya, including potential for CBHC and FP efforts. Approximate comparative costs were determined for PCMA, KCS and government in the delivery of health services.
- 1982 - Partnership for Productivity. Evaluation of the Kenya operations of this important development activity.

APPENDIX E

TASKS OF THE VILLAGE HEALTH COMMITTEES

1. To provide leadership and organization for health activities.
2. To select people for local community health worker training.
3. To generate and control community health and development funds.
4. To participate in the identification of local health problems and in prioritising these health problems for local solutions.
5. To coordinate activities with Government health services and NGO health services and serve as communicators to help spread health information among the community.
6. To help provide for supplies, logistics and referrals in support of the community health worker.
7. To help identify indigenous practitioners (e.g., TBAs and others) and encourage their participation in the primary health care programme.
8. To assist in health promotion, disease prevention and health education programmes.
9. To support, encourage and motivate the community health workers.

APPENDIX F

CHWS JOB DESCRIPTION

1. To recognise common health problems such as diarrhoea/vomiting, malaria, throat infections, respiratory infections, skin infections, eye, ear, nose/teeth and tuberculosis, leprosy and minor injuries including burns, insect bites and snake bites.
2. To provide simple and safe remedies for health problems and refer serious cases to the rural health centre or dispensary.
3. To provide health education on the prevention of common health problems, their management, and their prevention.
4. To advise mothers on maternal and child health, nutrition, breast-feeding and weaning and on ante-natal and post-natal care.
5. To conduct weighing of babies and children under age 5, plot their weight and age on standard growth charts and instruct mothers on significance of frequent weighing and appropriate care for the child that is identified to be under-weight for age.
6. To provide nutrition education to mothers and others involved with child care.
7. To promote acceptance of immunizations and assist in organizing local activities for the expanded programme of immunization.
8. To advise on clean water supply and sanitation matters.
9. To organize and conduct a local community health survey, participate in the identification of local health problems and in setting priorities for their solution.
10. To maintain an accurate and complete record for households in the community health worker's area on vital events (births, deaths, migration), morbidity, family planning practices, and similar types of information important in a community-oriented management information system.
11. To promote home gardens, community gardens, poultry raising, animal husbandry, and similar activities aimed at improving the production of nutrition foods.
12. To promote environmental improvement activities, primarily directed to sanitary measures and vector control.
13. To participate in village development committee meetings and the organization of community health and development activities.



FUNDING PROPOSAL

ANNEX A

CHRISTIAN COMMUNITY BASED HEALTH CARE

(CCBHC)

in

DIOCESE OF MASENO SOUTH

SUBMITTED TO U.S.A.I.D.

by

CORAT AFRICA
P.O. Box 424393
NAIROBI, KENYA

and

DIOCESE OF MASENO SOUTH
P.O. Box 380
KISUMU, KENYA

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1.0 PROPOSAL SUMMARY

1.1 Diocesan Community - Based Child Survival and Development. The Diocese of Maseno South proposes to expand its present Primary Health Care Programme both geographically and in terms of numbers of VHCs and CHWs. The number of CHWs will increase from about 236 to about 357 with consequent increase in the number of home visits, immunization coverage, health education sessions, knowledge and practice of ORT, growth monitoring and Family Planning use.

The main focus of the programme will be on the health of women 15 to 49 years (the child bearing years) and children under 5 years of age. The project strategy is to involve the community in the health care process. The community will select CHWs who will be trained to motivate their community to use the immunization and growth monitoring services available. CHWs will train the mothers to make and use ORT and to practice child spacing.

1.1.1 Budget. The budget for the programme is \$358,750 including local contribution of \$120,787. This requests \$237,963 from U.S.A.I.D.

2.0 BACKGROUND

2.1 The Diocese of Maseno South. The Diocese of Maseno South is one of the eleven Dioceses of the Church of the Province of Kenya (a part of the worldwide Anglican Communion.) The Diocese is located in Western Kenya, bordering on Lake Victoria. The Diocese includes Kisii, Kisumu and South Nyanza Districts of Nyanza Province in Kenya and borders Tanzania to the South.

2.1.1 Area. The Diocese covers 12,634 sq. km. --- 79.2% of which is land and 20.5% is water.

2.1.2 Population. The latest population estimates put the total figure for the area covered by the Diocese at 3.2 million which is about 16% of the national total. Mean density is 300 persons per square kilometre with over 400 persons per square kilometre in Kisii District and about 150 persons per square kilometre in South Nyanza District. About 60% of the population are under 20 years of age. This is a high dependency ratio and birth rate. The population is characterised by high early childhood mortality rates. The cumulative total fertility is over 8 and median age at first delivery is 17 years. The area has also the highest fertility rates with very low birth intervals.

2.1.3 Economic Activities. The main activity here is mixed agriculture: growing both cash and food crops and domestic animals (cows, sheep and goats). The cash crops include sugar cane, cotton, coffee, tobacco and maize. Food crops include maize, millet, beans, bananas and sweet potatoes.

2.1.4 Health Situation. The area has 94 health institutions such as hospitals and dispensaries. But these are centrally located such that the majority of people have no access to them due to inadequate transport infrastructure.

In most areas these health facilities are only able to reach 25% of the population (or about 14,000 people per health establishment).

The health needs in the Diocese are enormous. The early childhood mortality rates for the districts involved are Kisumu: 199, South Nyanza: 216, and Kisii: 86 (per 1,000).

The Diocese has had the highest rate of illnesses reported from households compared to other similar projects in the country.

TABLE 1: -----

Project	Illnesses per household
Tenwek	.7
Mount Kenya East	.8
Nyahururu	.9
Maseno South	1.2

The diseases which are responsible for most of the morbidity and mortality are preventable. They include malaria, diarrhoea and vomiting, measles, upper respiratory infections, malnutrition, tuberculosis and leprosy. These diseases are responsible for the high early childhood mortality rates. These diseases have their greatest impact on children 0 - 5. Many of these communicable diseases are preventable by immunization (e.g., measles, whooping cough, tuberculosis and tetanus). Less than 30% of children within the Diocese are fully immunised. Improvement of this immunization coverage could have a dramatic impact on the health status of the children and mothers in the child-bearing age.

The impact of communicable diseases is aggravated by poor nutritional status which is also a serious problem in the area. More than 60% of children are malnourished; 30% being severely malnourished with 25% showing stunted growth. This state of under-nourishment and malnutrition may also compromise the effectiveness of vaccination and particularly so in a community where most of the children and pregnant women are infected with malaria parasite.

Some of the nutritional problems above may arise from inadequate food production, but many of them may arise from poor weaning practices, and inappropriate feeding habits during illnesses. Many people do not feed their children during measles, diarrhoea, and/or vomiting.

Thus, the synergistic relationship between malnutrition and infection increases the mortality and morbidity rates in the area.

The health interventions that enhance child survival in the area include:

- a) control of communicable diseases through increasing community immune status (through high immunization status) with respect to the diseases in question;
- b) appropriate management of diarrhoea to avoid or minimise dehydration and its impact on nutritional status;
- c) relevant specific nutrition education based on changeable feeding habits geared towards increased concentrated caloric intake;
- d) regular growth monitoring to follow up the trend of weight for age; and
- e) child spacing.

A Primary Health Care project can best educate the public and change attitudes and practices in the home. Lack of immunization is also partly responsible for the area's poor health. Mobile clinics can bring immunization services to remote areas where distance from a health institution is a major constraint to immunization. A crucial community health need also is to motivate the communities to use the available services.

2.1.5. Christian Community Services (CCS). Christian Community Service is the development arm of the Diocese. CCS started in 1975 mainly as an educational activity aimed at raising the awareness of the community concerning their situation, and what they could do to help themselves.

From the initial emphasis on agriculture and health, the programme now reaches the rural populations through:

- A. Community Based Health Care Department; and
- B. Community Based Rural Development Dept. including:
 - i) Development Education
 - ii) Agriculture
 - iii) Village Technology
 - iv) Water Supply
 - v) Vocational Education

These activities are part of a closely integrated whole programme with synergistic effects in every area. They are inter-dependent.

The CCS is organized to relate to the diocesan structure so that CCS can receive feed back at every level. The Diocese is organized into Archdeaconries (similar to Districts), which are in turn split into Deaneries (similar to Divisions). Three to 6 parishes form a deanery, and 2-10 congregations form a parish. Thus, the Diocese has an infrastructure giving it in place organizational structures along District, Divisional, and Locational lines. The church geographic boundaries do not, however correspond directly to governmental boundaries.

2.1.6 Summary of Achievements

Training and Re-training of CHWs. Over 200 CHWs have been recruited and trained. Of those, 165 have been re-trained. In many cases the retraining has extended over a year at different regular sessions and localities.

Family Planning. The adoption rate of family planning is encouraging. Within ten months, the CHWs together with the supervisors (Diocesan Community Nurses) have recruited over 1200 clients. There is a positive correlation between the number of CHWs trained and the number of family planning acceptors.

Immunizations. Altogether 13 centres have been identified where mobile immunization clinics are periodically held. In all the centres it has been possible to carry out over 2000 immunizations in one year.

Village Health Committees (VHC). Fourteen VHCs have been formed and trained throughout the Diocese.

2.2 Sustainability and Project Capability. The project has proven its capability to carry out a CBHC programme effectively with the present project, and is currently funded through a grant with USAID through the Johns Hopkins University and CORAT AFRICA. (Grant No. AID/DSFE-C-0055 which expires in May, 1987).

3.0 OVERALL GOAL, PURPOSES, AND OUTPUTS

The main overall goal of the project is to improve the community health of the Kenyan people. Special emphasis is on the poor and remote people whose health status is worse than others. The Diocese of Maseno South shares this goal with the other projects, but recognizes that its programme can but contribute in a small way to this larger national goal.

3.1 The purposes of the Maseno South project are to:

- 1) Expand the current project to reach more of the remote and poor people of the diocese. Objectives and end of project status (EOPS) are discussed further under "Target Groups". The project will also increase the number of

active trained CHWS from an estimated 236 to an EOPS estimate of 357 CHWS. The approximately 48 currently active VHCS will be increased to about 90.

2) Increase the immune status of children under 2 years old. Most recent diocesan survey information indicates that only about 7% of under 2's have had any immunization. Additional research is needed to ascertain how that status has changed during the last two years in the project areas and how many children have completed a full course of immunization. Prior to such research planned as part of this project, the project has set a goal of 30% of under 2's in CHWS' service areas being fully immunized by project end.

3) Increase the number of women of child-bearing ages who know how to prepare oral rehydration therapy. Baseline surveys will indicate current knowledge and practice. Reasonable EOPS indicators can then be developed.

4) Increase significantly the number of children in target groups who have healthy age/weight or arm circumference ratios. Again baseline data will need to be collected before EOPS indicators can be set to show achievement.

5) Increase the number of couples knowing about and practicing family planning through provision of contraceptives by the CHWS. The project currently has an estimated 1072 active family planning clients. The project plans on extending FP services to approximately 3,752 FP users by EOP.

6) Increasing knowledge of and practice of good health and sanitation practices in the target groups. Attainment will be indicated by the construction of an estimated 2,000 new latrines and approximately 5,000 new dish racks.

3.2 OUTPUTS. Outputs leading to this changed status are:

1. An estimated 112,000 immunizations (doses) to children under 5 years and ante-natal mothers.

2. An estimated 580 mobile clinics to remote areas needing immunization services.

3. An estimated 175,000 home visits by CHWS to households in their target groups.

4. Approximately 105,000 training and retraining/counselling sessions with women on ORT usage.

5. An estimated 216,300 child weighings or arm circumference measurements.

(Outputs and indicators are detailed in Appendix A.)

3.4 TARGET GROUPS. The project will expand into new areas---most notably, South Nyanza and Kisii districts where some work has been done but many parishes need help. The Coordinator and staff will choose areas to work where cost-effective establishment of CHWS and VHCS in areas over 2 km. from a health institution is most indicated. Within each area, the VHCS and CHWS will focus on the families

with under five years children and on women of child bearing age (15 to 49 years). Efforts will be made at all levels to focus on high risk families.

Each CHW is expected visit 100 households in his village and neighboring area on a regular basis. These 100 households have an average 5.3 household members (according to previous surveys); 22% of the population are women aged 15 to 49; and averagely each household has an under 5 child. Key figures are:

TARGET GROUPS

<u>EOPS</u> <u>CHWS</u>	<u>TOTAL HH</u> <u>SERVED</u> <u>(100/CHW)</u>	<u>POP./</u> <u>AVG.</u> <u>HH</u>	<u>TOTAL</u> <u>POP.</u> <u>SERVED</u>	<u>WOMEN</u> <u>(15 -</u> <u>49 YRS)</u>	<u>CHILDREN</u> <u>UNDER</u> <u>5 YEARS</u>
330	33000	5.3	174900	38478	33137

4.0 GENERAL PLAN

In general terms, the plan is to simply expand into new areas as rapidly as possible consistent with ability to motivate health committee formation, train CHWs, field and supervise them.

4.1 Supervisors. Each supervisor schedules one week per month doing immunizations; growth monitoring; family planning information; motivation and supply; curative and referral services; etc. at mobile clinics. CHWs assist.

4.2 CHWs. In home visits and group sessions (e.g., women's group meetings, chiefs and sub-chiefs' barasas), all CHWs provide family planning information, education and motivation. About 70% are distributing family planning supplies. CHWs teach mothers how to make and use home-made ORT as well as appropriate practices in breast-feeding/weaning, nutrition, sanitation, hygiene, kitchen gardens, etc. They are trained to appropriately distribute simple drugs, such as chloroquine, simple analgesics, eye ointment and whitfield ointment. Although simple first aid can be provided, more serious diseases and problems are referred either to a nurse-supervisor or clinic.

4.3 CHW TRAINING. The CHWs are selected from the local community by the village health committees to undergo training in centres designated by the Diocese under the guidance of a Diocesan Coordinator. The CHWs are usually housewives with families. They are people who have already earned the villagers' trust and respect. CHWs are trained by the Coordinator, Mrs. Esther Aruwa (a Kenya Registered Nurse with long experience in training, management and FP), and other supervisory staff (all nurses).

CHWs are trained locally, in order to facilitate their availability and to limit expense and to avoid the subsequent temptation for them to seek or admire paid posts at urban hospitals which are in fact not available to them.

8/

At the end of training, each person receives a drug kit in accordance with Ministry of Health specifications, containing common medications and contraceptive supplies.

Their training emphasizes skills rather than knowledge. They are also prepared in methods that they may use to change attitudes. CHWs are taught how to improve child survival by training the parents in the importance of immunization, nutrition, growth monitoring, proper breast feeding, weaning, oral rehydration, personal and home hygiene. They learn to promote the use of latrines; to use simple, home-made plate racks and to dig and use garbage disposal pits. CHWs learn how to check a child's nutrition by measuring the circumference of the upper arm.

4.4 Family Planning. The CHWs promote FP through education and the distribution of information material, by making services and supplies available and by subsequent guiding of acceptors. The health workers are taught to stress the benefits of suitably spaced births to children, mothers, fathers, households, the community and hence, the nation. They learn that the possible side effects of various methods of birth control are insignificant in comparison to the risks of frequent pregnancies and deliveries.

Details of different methods of contraception are discussed, and they learn how to order, store and supply the products and the importance of client follow-up.

4.5 Records. The CHWs are able to record simple case-histories and make census records of their own villages: numbers of males, females and children under five in each household how many children have been immunized, number of latrines built and percentage in use, number of plate-racks, number, type and quality of local water sources. For family planning, they keep records of contacts made, acceptors supplied, potential acceptors, defaulters, complications, women of child-bearing age and high-risk families. They make monthly reports.

4.6 Problems Health Workers Face. In principle, these CHWs serve their communities on a voluntary basis. The CHWs are motivated by a genuine interest in health work and a sincere desire to help their fellow-man which is often reinforced by religious conviction.

The CHWs are faced with a mammoth task, as they are often the only health workers in an area which may cover about 18 square kilometres, containing about ten villages which, with an estimated 74 households per village and five people per household, gives each worker a possible population of nearly 40,000 people. CHWs may be able to spare only seven hours per week from home and family obligations to help these people, although some spend up to five hours per day when visiting homes, churches and conducting demonstrations. Obviously, even the most devoted worker cannot visit all homes. Hence, the need to train more CHWs.

4.7 VHCS. Diocesan development staff encourage formation of parish health committees (not restricted to church members). The project staff then visit, motivate and encourage the committees to select CHWs for training.

4.8 Supplies. Medical supplies, including FP supplies, are obtained from the Ministry of Health (MOH). Immunization supplies (used in mobile clinics, at which CHWs assist) use the MOH cold chain. All the vaccines will be provided by Kenya Expanded Programme of Immunization. They will also provide the cold chain equipment required and training in immunization and management of the cold chain system. Thus, the Diocesan system will complement the efforts of the Ministry of Health towards meeting their priority objectives.

5.0 WORK SCHEDULE

Supervisors now use a monthly work schedule including two weeks of training, one of CHW field supervision and one of mobile clinic duty. Logistics, supervision, mobile clinics, etc., are all ongoing activities in all months:

October - December, 1986:

Continue monthly CHW training/retraining. Select and train 40 new CHWs.

Form 10 VHCs.

Continue supervision of CHWs, follow-up of VHCs (supervisors' responsible).

Continue monthly mobile clinic by each supervisor.

Select and train 5 Contact CHWs (CCHWs).

Continue outreach clinics for immunization. Recruit one new supervisor.

January - June, 1987:

Same activities as above. Follow-up evaluation survey for Johns Hopkins Project. Add baseline questions on nutrition and immunization. Recruit second new supervisor. Expand further into Migori-Kisii and South Nyanza. Select and train 11 CCHWs, train 60 new CHWs; form 10 VHCs.

July 1987 and after:

Add additional CCHWs, new CHWs, and, VHCS per Appendix A. Activities similar to above time periods.

August, 1989 - Evaluation survey.

6. EVALUATION AND MONITORING

6.1 Cost-effectiveness. The heart of the evaluation and monitoring methodology is a running management cost-effectiveness study, updated annually and reviewed semi-annually. The cost-effectiveness study is an allocation of costs into each of the following areas:

- Household visits: Most project results are achieved through these visits. Cost per visit is assessed.
- Immunization: The cost per immunization is determined.
- CHWs: Overall cost per CHW is sought.
- Family Planning: The cost per user-year, and approximate cost per couple-year protection is determined for each project.

Carrying out ongoing cost-effectiveness studies provides ample motivation for the projects to focus on assuring sufficiently accurate service data and adequate design and analysis of surveys. Service data will, as a natural part of a focus on cost-effectiveness, be regularly reviewed.

It is planned to make every effort, consistent with the community-based approach to minimize the amount of service data required from the CHWs; sufficient to keep them focused on the activities that are important, yet not so much that they will not understand or keep good records nor be so much that data and records get in the way of producing results.

6.2 Service Data. Monthly CHW reports are collected and aggregated for the programme. Six monthly reports are summarized and sent to CORAT AFRICA for aggregation with other sub-projects. Six monthly reports detail statistics for the period in the areas of:

1. New VHCs and Attrition,
2. New CHWs and Attrition,
3. New Refresher Training,
4. Immunizations given,
5. Children Weighed,
6. New Family Planning (FP) acceptors and ongoing usage,

7. ORT Training, and

8. Latrines and dish racks.

Other operational news is shared as well as future plans for the following period.

6.3 Surveys. Three-year (approximately) surveys were planned to monitor impact in the communities served. Data on deaths of most recent child will be used to estimate changes in infant mortality. (IMR calculated using the "indirect techniques" will be used. In a rural setting, it is difficult to obtain adequately accurate data for direct calculation of IMR.) Additional questions will be added to elicit more information on nutrition and immunization. Previous surveys have been focused on FP and have not asked for in-depth information in these areas.

Enough information will be gathered during the baseline and follow-up surveys to enable the estimation of fertility and mortality rates using the indirect techniques according to Brass et al. Such surveys are intended to elicit the changes in health status in the community that could be attributed to the community based interventions.

The follow-up survey will have to be done as late as possible in the project period to maximize effect because the period between surveys will be under 2 years.

7.0 FINANCE

7.1 Budget. The total project budget is \$358,750. This proposal requests U.S.A.I.D. Grant the Diocese of Maseno South \$237,963 (66%) from October, 1986, to September, 1987. The Diocese expects to raise \$120,787 in local support through labor, in kind, and financial support. This sum does not mention substantial diocesan overheads for buildings, etc., that are contributed.

(Appendix B details the budget.)

7.2 Vehicles. Vehicles form a substantial part of this budget. They are, however, necessary to provide transport to the remote areas targeted. Public transport is inadequate or non-existent in these areas.

7.3 Cost Effectiveness. In the final year the project plans to reach an EOPS target population of 174,900 people living in the households served by CHWs at a cost of \$0.81 per person.

APPENDIX A
DIOCESE OF MASENO SOUTH CBHD
VERIFIABLE INDICATORS

OUTPUTS	OT, '86/ SE, '87	OT, '87/ SE, '88	OT, '88/ SE, '89	3 YEAR TOTALS
VILLAGE HEALTH COMMITTEES				
ACTIVE VHCS: BEGIN YEAR	48	58	75	
NEW VHCS	12	25	25	62
ATTRITION (10% P.A.)	-2	-8	-10	-20
ACTIVE VHCS: YEAR END	58	75	90	
ACTIVE CHWS: BEGIN YEAR	236	278	330	
NEW CHWS	50	80	60	190
ATTRITION (-10% P.A.)	-8	-28	-33	-69
TOTAL CHWS: YEAR END	278	330	357	
CHWS RETRAINED	119	278	330	727
ACTIVE CCHWS: BEGIN YEAR	4	16	27	
NEW CCHWS	12	12	12	36
ATTRITION (-5% P.A.)	0	-1	-2	-3
ACTIVE CCHWS: YEAR END	16	27	37	
AVG. CHWS/CCHW:YE	17	12	10	
SUPERVISORS: BEGIN YEAR	2	4	4	
NEW SUPVS.	2	0	0	2
ATTRITION	0	0	0	0
SUPERVISORS: YEAR END	4	4	4	
AVG. CHWS/SUPERVISOR	70	83	89	
AVG. HOME VISITS/CHW/MONTH	17	19	21	
TOTAL HOME VISITS	18913	69364	86639	174915
ORT TRAINING AS % OF VISITS	60%	60%	60%	
TOTAL NEW/REPEAT ORT TRAINING	11348	41618	51983	104949
CHWS DIST. FP (70%/72%/75%)	195	238	268	
AVG. FP USERS/CHW	10	12	14	
TOTAL YEAR END FP USERS	1947	2854	3752	
MOBILE CLINICS/MONTH	10	20	20	
TOTAL CLINICS (ABOVE X 11)	140	220	220	580
CHILDREN SEEN PER CLINIC	100	150	100	
TOTAL CHILDREN SEEN	14000	33000	22000	69000
ANTENATAL MOTHERS SEEN/CLINIC	20	25	30	
TOTAL ANTENATAL MOTHERS	2800	5500	6600	14900
IMMUNIZATION DOSES/CHILD SEEN	1.00	2.00	1.25	
TOTAL CHILDREN IMMUN. DOSES	14000	66000	27500	107500
IMMUNIZATIONS/ANTENATAL MOTHER	0.30	0.30	0.30	
TOTAL MOTHER IMMUN. DOSES	840	1650	1980	4470
TOTAL IMMUNIZATION DOSES	14840	67650	29480	111970
WEIGHT/AC PER CHW VISIT&CLINIC	1&6/10	1&6/10	1&6/10	
CHILD WEIGHINGS	27313	89164	99839	216315

DIOCESE OF MASENO SOUTH CBHD
 U.S.A. I.D. BUDGET(US\$)
 OCT., 1986 TO SEPT., 1989
 0919861050

APPENDIX B

BUDGET ITEM	OT, '86/ SE, '87	OT, '87/ SE, '88	OT, '88/ SE, '89	3 YEAR TOTALS
1. TECHNICAL ASSISTANCE	(US\$)	(US\$)	(US\$)	(US\$)
COORDINATOR *	2042	6656	7322	16020
SUPERVISOR 1	2406	2647	2912	7965
SUPERVISOR 2	2406	2647	2912	7965
SUPERVISOR 3 *	802	2647	2912	6361
SUPERVISOR 4 *	802	2647	2912	6361
CONTACT CHWS (12/24/30)	1800	3960	4356	10116
STATISTICS/BOOKKEEPER *	573	1891	2080	4544
LOGISTICS *	417	1375	1513	3305
DRIVERS 1 & 2	1500	1650	1815	4965
DRIVER 3 *	250	825	908	1983
WATCHMAN/CASUAL LABOR *	229	756	832	1817
CONSULTANTS *	250	900	990	2140
TOTAL TECH. ASSISTANCE	13477	26601	31464	73542
2. TRAINING				
CHW TRAINING	1875	3300	2723	7898
CHW RETRAINING	1116	2867	3743	7726
VHC TRAINING	338	773	351	1962
CCHW TRAINING	48	105	72	225
TOTAL TRAINING	3377	7045	7389	17811
3. COMMODITIES				
2 VEHICLES (\$12,000 EACH)	24000	-	-	FX 24000
3 MOTORBIKES ('86:1;'88:2)	2313	-	5595	FX 7909
CHW KITS(NON-DRUG SUPPLIES/EQUIP.)	1375	2269	2496	6140
BICYCLES ('86:12,'87:15,'88:10)	2250	3094	2269	7613
OFFICE EQUIPMENT	1563	625	-	2188
TOTAL COMMODITIES	31501	5988	10361	47850
4. OTHER EXPENSES				
VEHICLE RUNNING COSTS				
YEAR 1: 22000 KM X \$.25/KM	5500	-	-	5500
YEAR 2: 44000 KM X \$.28/KM	-	12100	13310	25410
YEAR 1: 20000 KM X \$.125/KM	2500	-	-	2500
YEAR 2: 30000 KM X \$/138/KM	-	4125	4538	8663
TRAVEL	625	1375	1513	3513
OFFICE EXPENSE	1250	2250	2475	5975
WORKSHOPS	313	563	619	1495
AUDIT	938	1719	1891	4548
TOTAL OTHER EXPENSES	11126	22132	24346	57604
5. EVALUATION				
EVALUATION SURVEYS	313	563	619	1495
SUB-TOTAL	59794	64329	74179	198302
CONTINGENCY/INFLATION (20%)	11959	12866	14836	39661
SUB-PROJECT USAID REQUEST (US\$)	71753	77195	89015	237963

*PARTIAL YEAR. BEGIN JUNE 1, 1987.
 FX = FOREIGN EXCHANGE REQUIRED

DIOCESE OF MASENO SOUTH CBHD
 LOCAL/OTHER CONTRIBUTION
 OCT., 1986 TO SEPT., 1989
 0826862115

APPENDIX B CONT'D

LOCAL/OTHER CONTRIBUTIONS	OT, '86/ SE, '87	OT, '87/ SE, '88	OT, '88/ SE, '89	3 YEAR TOTALS
-----	-----	-----	-----	-----
1. TECHNICAL ASSISTANCE	(US\$)	(US\$)	(US\$)	(US\$)
DIRECTOR (PARTIAL)	1250	1375	1513	4138
CHW SERVICES (\$12.50/CHW/MO)	13100	40800	47250	101150
TOTAL TECH. ASSISTANCE	14350	42175	48763	105288
2. TRAINING (25% OF TOTAL)	1125	2348	2463	5936
3. COMMODITIES				
IMMUNIZATION EQUIPMENT/SUPPLIES	625	1875	2063	4563
2 MOTORBIKES	5000	-	-	5000
TOTAL COMMODITIES	5625	1875	2063	9563
LOCAL/OTHER CONTRIBUTIONS (US\$)	21100	46398	53289	120787
PERCENT OF GRAND TOTAL BUDGET	0.22	0.37	0.37	0.33
GRAND TOTAL (ALL SOURCES): US\$	92853	123593	142304	359750
SUB-PROJECT TARGET POPULATION SERVED			174900	174900
FINAL YEAR COST PER PERSON SERVED		US\$	0.81	-
3 YEAR COST PER PERSON SERVED			US\$	2.31



FUNDING PROPOSAL

ANNEX B

CHRISTIAN COMMUNITY BASED HEALTH CARE
(CCBHC)

in

DIOCESE OF MASENO WEST

SUBMITTED TO U.S.A.I.D.

by

CORAT AFRICA
P.O. Box 42493
NAIROBI, KENYA

and

DIOCESE OF MASENO WEST
P.O. Box 793
SIAYA, KENYA

DIOCESE OF MASENO WEST

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1.0 EXECUTIVE SUMMARY

The Diocese of Maseno West proposes to implement a Child Survival and Development project in Siaya District an area of high mortality and fertility. Given the health problems in the District:-

- immunization
- oral rehydration therapy
- growth monitoring
- child spacing
- nutrition
- hygiene/sanitation

have been selected as the key interventions that might have maximum impact on child survival in three years.

The project proposes to complement the activities of the Government by concentrating on the Community Based activities, training and supervising and supporting of Community Health Workers (CHWs) and outreach MCH services through mobile clinics. Through the CHWs, knowledge and usage of ORT, growth monitoring, immunization and child spacing will be markedly increased.

The main objective is to improve, measurably, the health status of children 0-5 years in Siaya District through the Community Based Health Care (CBHC) approach.

It is estimated that over 29,800 women 15-49 years and 23,200 children under the age of 5 years will benefit directly from the programme every year.

The implementation is based on local infrastructure organization that effectively reaches every village of the target communities.

Service indicators (outputs and intermediate outcomes) and impact indicators (final outcomes) will be used to assess progress and impact of the project.

The project aims at covering the whole District and will be based on genuine community involvement by facilitating leadership development in the community and training community health workers from the community, selected by the community.

Immunization coverage, knowledge and skills in ORT, practice of regular growth monitoring, nutrition status, and use of modern child spacing methods will indicate achievement of objectives. The project is sustainable beyond the funding through community involvement in the spirit of self-reliance.

U.S.A. I.D. Project Request	=	\$232,854
Local Contributions	=	\$168,306
Total Project Budget	=	\$401,160

2.0 BACKGROUND

2.1 Location. This project is located in Siaya District of Nyanza Province to the north west of Nyanza Province. This is one of the most densely populated Districts in Kenya (up to over 230/km²). Most of its population lives within a few kilometres off the shores of Lake Victoria. The general height is 1,200 metres above the sea level, and, hence, it is not humid most of the year.

2.2 Population. The total population of Siaya is 673,338 and is increasing at the rate of 3.1 per cent per year. The District is inhabited by the Luos who are mainly subsistence farmers, although those who live by Lake Victoria participate in fishing. It is characterised by high fertility (the total fertility rate is 8.3) and high mortality. Infant and childhood mortality rates are 147 per 1000 live births and 211 per 1000 mid year population of children under 2 years respectively.

2.3 Health Problems. The mortality rates for Siaya District demonstrate the fact that it has many health problems affecting children and women in child-bearing age. The more serious health problems are:-

a) those affecting children:-

- measles
- malaria
- malnutrition
- diarrhoea and vomiting
- ante-respiratory infections

b) those affecting women:-

- anaemia in pregnancy
- malaria in pregnancy
- complications of frequent deliveries
- unwanted pregnancies

All of these conditions are preventable by simple means that can be provided at the community level through community involvement and participation.

At the moment only 35% of children under the age of 5 are immunized adequately against all the immunizable diseases. More than 60% of the same children are under-nourished and 37% of them are stunted.

This malnutrition may show problems with food production and/or food habits, and child rearing and feeding practices. For example, weaning onset may be late, meaning diet may be too dilute and low in caloric content or too bulky and not easy for the baby to eat. Bottle-feeding may still be a problem and management of diseases when food and fluids are withheld from the children may contribute to malnutrition (febrile illness being very frequent in Siaya District).

2.4 Existing Health Facilities. There are only 11 health facilities in Siaya providing MCH Care. The Diocese has complemented this by 2 more static clinics at Ng'iya and Saradidi and 13 mobile clinic sites. The programme has also recruited and trained 304 CHWs who are actively providing Information Education and Communication (IEC) to the communities.

Given these and the health problems above, there is a desperate need to expand the community Based Health Programme (CBHP) to save the lives of so many children who are dying unnecessarily.

There is a great need to improve the availability and accessibility of the services that would improve the health of mothers and their children.

2.5 How activities fit into the Ministry of Health Programme. The programme works in close collaboration with the Ministry of Health (MOH).

At the District level there is a Co-ordinating Committee which coordinates all the PHC activities within the District. Non-government organizations including the Diocese are members of this committee. The committee is chaired by Medical Officer of Health.

This ensures that the activities are in line with the priorities of the MOH. At the Health Centre and Dispensary levels, there are many joint activities e.g., Mobile Clinics, training of VHCs and CHWs and supervision and referral support for CHWs which is provided mainly by the local MOH staff on a more continuing basis than Diocesan staff could provide. The project provides what the Ministry cannot provide, usually transport and training skills, while commodities like vaccines and contraceptives are provided by the MOH. Linkages are provided for through the coordinating committee at the District level where NGOs and relevant Government Departments participate. This also makes joint activities in the field possible. Those who belong to the PHC Coordinating Committee include:

- District Health Management Team
- Ministries of Education
 - Culture and Social Services
 - Water Development
 - Agriculture
- CARE Kenya
- Meals for Millions
- Internation Food and Agricultural Development
- Diocese of Maseno South (CPK)
- Diocese of Kisumu (Roman Catholic)

The Coordinating Committee meets under the Chairmanship of the District Medical Officer of Health.

2.6 Summary of Achievements. The Diocese of Maseno West was recently split off from the Diocese of Maseno South, which has been operating this community health programme in Siaya. The Diocese of Maseno West is developing its own health programme from the nucleus programme being handed over by the Diocese of Maseno South.

The Maseno South health programme has been underway since 1975. The Diocese of Maseno South has already established 123 VHCs and trained 304 CHWs during the current project period. The number is rapidly increasing. The training of these CHWs and VHC is undertaken as close as possible to the villages of the CHWs to enable them to continue with their responsibilities as mothers and housewives. The training strategy also keeps the cost of training to a minimum while ensuring that the training is relevant both in content and setting.

This project proposes to enlarge its activities in Siaya District which has one of the highest infant and childhood mortality rates. One of the areas which has had 240 CHWs for more than 2 years and 120 CHWs for more than 6 years, Saradidi Rural Health Project (SRHP), has been able to reduce both infant and childhood mortality by 50%.

SRHP is now fully under the Diocese of Maseno West and will serve as a living model for the project expansion. The trainers who have been working in SRHP for the last 6 years are now available to the rest of the Diocese and this influence would continue if funding is obtained. A mortality drop by about 50%. This has been achieved in Saradidi, in the same District and could be achieved in the whole District even to bring the infant and childhood mortality only down to the National Average.

2.7 Rationale for the Community Based System Proposed.

The church infrastructure and system reach out to every village in Siaya District thus setting the stage for the community process. The organizational structure to support the community based operations is also in place. Core staff are available and so the new staff requested in the proposal will have guidance from the older ones. Siaya has several active projects already Saradidi Rural Health Programme have proved beyond doubt that Community Based Health Care (CBHC) is effective in improving child survival in the area.

There is a system in place which will train all new staff in methods of community process and dialogue. The older CHWs and Supervisors are already experienced in these methods and are highly motivated. The MOH is well prepared for this work and is not only very supportive but ready to form partnership with all involved in the implementation of child survival activities with community participation.

The communities are aware of their plight and are anxious to change their attitude and behaviour in order to improve their health through active involvement. Members of these committees are willing to take leadership

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responsibilities in VHCs and to become CHWs and to function as change agents. Traditional Birth Attendants (TBAs) and Traditional Healers (THs) have a lot of experience in community health care and they are willing to collaborate in child survival activities.

This approach is at the heart of the District Focus for Rural Development strategy which the government is busy implementing now. Hence the community based approach is in keeping with the government policy for Rural Development.

3.0 OVERALL GOAL, PURPOSES, AND OUTPUTS

The main overall goal of the project is to improve the community health of the Kenyan people. Special emphasis is on the poor and remote people whose health status is worse than others. The Diocese of Maseno West shares this goal with the other sub-projects, but recognizes that its programme can but contribute in a small way to this larger national goal.

3.1 PURPOSES. The purposes of the Maseno West sub-project are:

- 1) Expand the current project to reach more of the remote and poor people of the area. Objectives and end of project status are discussed further under "Target Groups". The project will also increase the number of active trained CHWs from an estimated 130 to an "end of project status" (EOPS) estimate of 333 CHWs. The approximately 30 currently active VHCs will be increased to about 66.
- 2) Increase the immune status of children under 2 years old. Most recent diocesan survey information indicates that about 7% of under 2's have had any immunization. Additional research is needed to ascertain how that status has changed during the last two years in the project areas and how many children have completed a full course of immunization. Prior to such research planned as part of this project, the project has set a preliminary goal of 75% of under 2's in CHWs' service areas being fully immunized by project end.
- 3) Increase significantly the number of women of child-bearing ages who know how to prepare oral rehydration therapy. Baseline surveys will indicate current knowledge and practice. Reasonable EOPS indicators can then be developed.
- 4) Increase significantly the number of children in target groups who have healthy age/weight or arm circumference ratios. Again baseline data will need to be collected before EOPS indicators can be set to show achievement.

- 5) Increase the number of couples knowing about and practising family planning through provision of contraceptives by the CHWs. The project has an unestimated number of family planning clients who are aggregated with Maseño South reports. The project plans on extending FP services to approximately 3,500 FP users by EOP and will disaggregate start-up data on FP usage.
- 6) Increasing knowledge of and practice of good health and sanitation practices in the target groups. Appropriate indicators will be developed with the baseline surveys.

3.2 Outputs. Outputs leading to this changed status are:

- 1) An estimated 131,900 immunizations (doses) to children under 5 years and ante-natal mothers.
- 2) An estimated 590 mobile clinics to remote areas needing immunization services.
- 3) An estimated 143,000 home visits by CHWs to households in their target groups
- 4) Approximately 86,100 training and retraining/counselling sessions with women on ORT usage.
- 5) An estimated 193,300 child weighings or arm circumference measurements.

(Outputs and indicators are detailed in Appendix A.)

3.3 Target Groups. The project will expand into new areas. The coordinator and staff will choose areas to work where cost-effective establishment of CHWs and VHCs in areas over 2 km. from a health institution is most indicated. Within each area, the VHCs and CHWs will focus on the families with under five years children and on women of child bearing age (15-49 years). Efforts will be made at all levels to focus on high risk families.

Each CHW will be expected to choose (with VHC and staff help) the 100 or so households within her/his area which she will visit on a regular basis. (The CHW will be available to other members of the community, but will not schedule visits to other households unless special circumstances dictate.) In the diocese, research has shown that CHW areas have an average of 5.3 family members to each household, 22% are child bearing aged women, and averagely there is slightly less than one under 5 child to each household. Key figures are:

EOPS TARGET GROUPS

EOPS CHWS	TOTAL HH SERVED (100/CHW)	POP./AVG. HH	TOTAL POP. SERVED	CHILD BEARING AGE WOMEN	CHILDREN UNDER 5 YEARS
256	25,600	5.3	135,680	29,850	23,201

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4.0 THE NATURE OF HEALTH INTERVENTIONS

The programme will focus on four main interventions arrived at improving the health of the target groups: women in child-bearing age and children under five years of age. These interventions are:

4.1 Immunization. This will be carried out by the community through the efforts of CHWs in educating the mothers and motivating them to have their children adequately immunized against the immunisable diseases (measles, whooping cough, tetanus, tuberculosis, diphtheria and poliomyelitis). The project will ensure that the vaccines are made as accessible as possible through mobiles, special intensive immunization days and integrated static clinics.

The cold chain equipment are provided by KEPI and the training for the management of immunization and the cold chain is provided by KEPI.

The trainers will have received the training for both. New staff will be trained.

4.2 Oral Rehydration Therapy. Although at present some CHWs distribute the ready made ORT salts, the programme will emphasize the training of mothers on home-made salt, sugar solution (SSS). SSS is good enough if the mothers start giving it to the child as soon as diarrhoea is noticed.

A standard container which is universally available in the homes has been identified and simple standard measurements have been identified, and will be taught to the mothers, fathers and other children. Continuation of other foods and fluids will also be stressed.

SSS will be demonstrated in the homes, schools, barazas and in churches. Training will be provided in its preparation, and management of a diarrhoea case and when to refer.

4.3 Nutrition Education and Growth Monitoring. The CHWs will discuss with mothers about child feeding with a view to improving the child feeding practices. Emphasis will be laid on increased frequency of feeding, caloric content and feeding during illness. Onset and process of weaning will also be discussed to ensure introduction of supplementary feeding by four months. Based on current practice in the villages the weaning diet will be developed which is appropriate according to the culture, and consistency of food.

Growth Monitoring by regular weighing will be not only stressed but will be made as participatory as possible. The mothers will participate in the weighing of their children and will discuss the trend indicated by the records. Emphasis will be laid on the trend of the curve, making regular weighing important not on the weight for age.

This emphasis is more useful in identifying early malnutrition and may also show improvement even if the simple weight plot falls in the wrong level based on the Harvard Standard of Weight for Age.

4.4 Child Spacing for Child Survival and Development. The importance of birth interval for Child Survival is well known. Women in child-bearing age will be motivated to use FP services which are available to them through the CHWs. Thus, the CHWs will provide the information and the commodities that the mothers can use to space their children.

The CHWs will assist the FP acceptors to select an appropriate method using a check-list and will supply the appropriate commodities to enable the FP acceptor to start using the method pending examination by a nurse at a static or mobile clinic.

5.0 PLAN AND METHOD OF OPERATION

The project has been going on for more than three years and the proposed project is mainly an expansion and intensification of the existing project. The project initiation is done through the local congregations who become entry points into their own communities. The congregation leader introduces the idea to the community and a VHC is formed whose membership is not limited to the members of the congregation. Thus the project becomes a truly community based one, rather than being church based, at the village level. The committee then organises the whole community to select CHWs who are respected people within the village in matters of health.

Literacy is not required and whoever is selected by the community enters the training programme. The community is advised to consider that the selected individual is permanently resident in the community. The community themselves come up with criteria for selection of CHWs.

5.1 Training of CHWs. Training is done as close as possible to where they live and instructional training is not required. The fact that literacy is not a requirement for selection makes it mandatory for the training method to be the non-formal adult learning approach. Each class is kept as small as possible to ensure adequate sharing of experience, discussions, reflection to allow attitude change. The training starts with a two-week block and then followed by on-going weekly or monthly schedules as arranged by the CHW trainees themselves.

As their training continues they begin using the knowledge and skills learnt in their homes and then in their own villages. The first topics to discuss include those that are most relevant to the existing health problems e.g., management of diarrhoea and vomiting, malaria, immunizations, growth monitoring, weaning diet and family planning.

5.2 Activities of CHWs. The CHWs are engaged mainly in health information education and communication . .

regarding:-

- management of diarrhoea and vomiting
- importance of immunization
- importance of growth monitoring
- weaning
- child spacing for child survival and development.

They carry out IEC through home visits, where they are better able to put their message in the context of home and may reach not only mothers but also father, grandparents and older siblings. Thus, IEC in homes is considered most effective. Each CHW can conduct 17-21 home visits a month. Therefore, CHWs in the final year can make over 75,000 home visits. Each assigned household should receive a visit at least every two months. The higher risk households can be visited even more frequently.

The CHWs also give IEC in community meetings, women's groups, clan groups, youth groups and in schools.

They also provide simple remedies for the treatment of malaria, intestinal worms, scabies, cuts, wounds, and ORT. The CHWs keep record of their work and also of health happenings in their village to allow monitoring of activities. The CHWs recruit, interview and counsel F.P. acceptors and provide initial supply of commodities according to a check-list. These F.P. acceptors are then referred to a clinic for physical examination within nine months. The CHWs also participate in MCH clinics to learn certain skills (e.g., weighing of babies and examination of mothers and children for prevalent clinical problems).

In all these activities the CHWs are backed up by the Supervisor/Trainer who continues to motivate, train and guide them. They also provide a referral backing and assist them in solving problems that they may have. The supervisor gives supplies as required and receives their reports.

Once every month the trainer meets them to give them feedback on the reports of the previous month and to collect data collected during the month. The Statistical Clerk keeps a record of commodities issued. The CHWs and the trainer/supervisors fill forms monthly that indicate utilization of commodities. Replenishment of stocks at various levels is done according to the supplies used.

Management keeps an eye on any unusual rise or drop in consumption. The trainer/supervisor also meets with the VHCs monthly to plan with them and to keep the community dialogue going. This way their continued participation is facilitated. Functions involving the community as a group can then be discussed and undertaken. This community dialogue continues and will continue beyond the project funding period when the activities will be taken on mainly by the Government personnel working in local Health Centres.

5.3 Plan of Work/Schedule of Activities. Maseno West is planned to continue under care of Maseno South until May, 1987.

October - December, 1986:

Part of Maseno South sub-project.

Recruit Coordinator.

Recruit 2 additional supervisors/trainers.

January - June, 1987:

Smooth transition to operation as a separate project.

Select and train 7 Contact CHWs.

Select and train 40 new CHWs.

July 1987 and after:

Continue expansion in Siaya.

Same activities as above as indicated on next page.

MASENO WEST TASKS

Activity	Already present			
	1986	1987	1988	1989
Formation of Committees	30	11	20	20
Training of CHWs	130	66	100	85
Mobile & Static Clinics	x			x
Growth Monitoring	x			x
Meet CHWs	x			x
Training of Coordinator and Trainers	x	x		
Meet with committees	x			x
Prepare for and participate in surveys		x		x
Determine appropriate using diet		x		xx
Write reports		x	x	x
Workshops		x		x
Refresher courses	x	x	x	x
Dissemination Workshop				x
Purchase Vehicles	xx			
Obtain cold chain equipment	xxx			
Develop Training Materials	xx	xx		
Develop Training Curriculum	xx			
Establish Evaluation and Monitoring System	xx	x		

6.0 EVALUATION AND MONITORING

6.1 Cost-effectiveness. The heart of the evaluation and monitoring methodology is a running management cost-effectiveness study, updated annually and reviewed semi-annually. The cost-effectiveness study is an allocation of costs into each of the following areas:

- Household visits: Most project results are achieved through these visits. Cost per visit is assessed.
- Immunization: The cost per immunization is determined.
- CHWs: Overall cost per CHW is sought.
- Family Planning: The cost per user-year, and approximate cost per couple-year protection is determined for each project.

Carrying out ongoing cost effectiveness studies provides ample motivation for the projects to focus on assuring sufficiently accurate service data and adequate design and analysis of surveys. Service data will, as a natural part of a focus on cost-effectiveness, be regularly reviewed.

It is planned to make every effort, consistent with the community-based approach to minimize the amount of service data required from the CHWs; sufficient to keep them focused on the activities that are important, yet not so much that they will not understand or keep good records nor be so much that data records get in the way of producing results.

6.2 Service Data. Monthly CHW reports are collected and aggregated for the programme. Six monthly reports are summarized and sent to CORAF AFRICA for aggregation with other sub-projects. Six monthly report detail statistics for the period in the areas of:

1. New VHCs and Attrition,
2. New CHWs and Attrition,
3. New Refresher Training,
4. Immunizations given,
5. Children Weighed,
6. New Family Planning (FP) acceptors and ongoing usage,
7. ORT Training, and
8. Latrines and dish racks.

Other operational news is shared as well as future

plans for the following period.

6.3 Surveys. Three-year (approximately) surveys were planned to monitor impact in the communities served. A baseline survey was done in 1983. A follow-up survey is planned for March, 1987. Data on deaths of most recent child can be used to estimate changes in infant mortality. (IMR calculated using the "indirect techniques" will be used. In a rural setting, it is difficult to obtain adequately accurate data for direct calculation of IMR). Additional questions will be added to elicit more information on nutrition and immunization. Previous surveys have been focused on FP and have not asked for in-depth information in these areas. An additional full baseline survey may be necessary to gather the appropriate information.

Enough information will be gathered during the baseline and follow-up surveys to enable the estimation of fertility and mortality rates using the indirect techniques according to Brass et al. Such surveys are intended to elicit the changes in health status in the community that could be attributed to the community based interventions.

7.0 FINANCE

7.1 Budget. The total project budget is \$401,160. This proposal requests U.S.A.I.D. grant the Diocese of Maseno West through CORAT a total of \$232,854 (58%) from October, 1986, to September, 1987. Maseno West expects to raise \$168,306 support through labour, in kind, and financial support. This sum does not mention substantial diocesan overheads for buildings, etc., that are contributed. (Appendix B details the budget).

7.2 Vehicles. Vehicles form a substantial part of this budget. They are, however, necessary to provide transport to the remote areas targeted. Public transport is inadequate or non-existent in these areas.

7.3 Cost-Effectiveness. In the final year the project plans to reach an EOPS target population of 135,680 people living in the households served by CHWs at a cost of \$1.14 per person.

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APPENDIX A
DIOCESE OF MASENO WEST CBHD
VERIFIABLE INDICATORS

OUTPUTS	JE, '86/ SE, '87	OT, '87/ SE, '88	OT, '88/ SE, '89	3 YEAR TOTALS

VILLAGE HEALTH COMMITTEES				
ACTIVE VHCS: BEGIN YEAR	30	39	53	
NEW VHCS	11	20	20	51
ATTRITION (10% P.A.)	-2	-6	-7	-15
ACTIVE VHCS: YEAR END	39	53	66	
ACTIVE CHWS: BEGIN YEAR	130	195	275	
NEW CHWS	66	100	85	251
ATTRITION(-10% P.A.)	-1	-19	-27	-47
TOTAL CHWS: YEAR END	195	275	333	
CHWS RETAINED	43	105	275	514
ACTIVE CCHWS: BEGIN YEAR	4	10	17	
NEW CCHWS	6	8	9	23
ATTRITION (-5% P.A.)	0	-1	-1	-2
ACTIVE CCHWS: YEAR END	10	17	25	
AVG. CHWS/CCHW:YE	19	16	13	
SUPERVISORS: BEGIN YEAR	2	4	4	
NEW SUPVS.	2	1	0	3
ATTRITION	0	-1	0	-1
SUPERVISORS: YEAR END	4	4	4	
AVG. CHWS/SUPERVISOR	49	69	83	
AVG. HOME VISITS/CHW/MONTH	17	19	21	
TOTAL HOME VISITS	13254	53619	76662	143535
ORT TRAINING AS % OF VISITS	60%	60%	60%	
TOTAL NEW/REPEAT ORT TRAINING	7953	32171	45997	86121
CHWS DIST. FP (70%/72%/75%)	136	198	250	
AVG. FP USERS/CHW	10	12	14	
TOTAL YEAR END FP USERS	1364	2380	3497	
MOBILE CLINICS/MONTH	20	20	20	
TOTAL CLINICS (ABOVE X 11)	150	220	220	590
CHILDREN SEEN PER CLINIC	150	150	125	
TOTAL CHILDREN SEEN	22500	33000	27500	83000
ANTENATAL MOTHERS SEEN/CLINIC	20	25	30	
TOTAL ANTENATAL MOTHER VISITS	3000	5500	6600	15100
IMMUNIZATION DOSES/CHILD SEEN	1.00	2.00	1.25	
TOTAL CHILDREN IMMUN. DOSES	22500	66000	34375	122875
IMMUNIZATIONS OF MOTHER VISITS	30%	30%	30%	
TOTAL MOTHER IMMUN. DOSES	1800	3300	3960	9060
TOTAL IMMUNIZATION DOSES	24300	69300	38335	131935
WEIGHT/A.C.PER CHW VISIT&CLIN.	1&6/10	1&6/10	1&6/10	
CHILD WEIGHINGS/ARM MEASURES	26754	73419	93162	193335

DIOCESE OF MASENO WEST CBHD
 U.S.A.I.D. BUDGET (US\$)
 OCT., 1986 TO SEPT., 1989
 0919861100

APPENDIX B

BUDGET ITEM	OT, '86/ SE, '87	OT, '87/ SE, '88	OT, '88/ SE, '89	3 YEAR TOTALS
1. TECHNICAL ASSISTANCE	(US\$)	(US\$)	(US\$)	(US\$)
COORDINATOR *	6050	6656	7322	20028
SUPERVISOR 1	2406	2647	2912	7965
SUPERVISOR 2	2406	2647	2912	7965
SUPERVISOR 3 *	802	2647	2912	6361
SUPERVISOR 4 *	802	2647	2912	6361
CONTACT CHWS (10/17/25) *	1500	2805	4538	8843
STATISTICS/BOOKEEPER *	573	1894	2080	4547
LOGISTICS *	573	1894	2083	4550
DRIVERS 1 *	481	906	1000	2387
WATCHMAN/CASUAL LABOR *	250	825	908	1983
CONSULTANTS *	563	756	832	2151
TOTAL TECH. ASSISTANCE	16406	26324	30411	73141
2. TRAINING				
CHW TRAINING	2475	4125	3857	10457
CHW RETRAINING	403	2011	3120	5534
VHC TRAINING	309	619	681	1609
CCHW TRAINING	71	105	118	294
TOTAL TRAINING	3258	6860	7776	17894
3. COMMODITIES				
2 VEHICLES ('86-1; '87-1)	12000	13200	-	25200 FX
4 MOTORBIKES ('86-2; '88-2)	4625	-	6200	10825 FX
CHW KITS (NON-DRUG SUPPLIES/EQUIPT)	1250	3433	3025	7713
BICYCLES ('86-9; '87-6; '88-8)	1688	1238	1315	4241
OFFICE EQUIPMENT	1563	625	-	2188
TOTAL COMMODITIES	21126	18501	11040	50667
4. OTHER EXPENSES				
VEHICLE RUNNING COSTS				
YEAR 1: 19275 KM X \$.25/KM *	4819	-	-	4819
YEAR 2: 33000 KM X \$.28/KM	-	9075	9988	19063
YEAR 1: 23400 KM X \$.125/KM *	2925	-	-	2925
YEAR 2: 10000 KM X \$.138/KM	-	5500	6050	11550
TRAVEL *	731	1375	1513	3619
OFFICE EXPENSE *	731	1500	1650	3881
WORKSHOPS	-	563	406	969
AUDIT *	938	1719	1891	4548
TOTAL OTHER EXPENSES	10144	18732	21498	51374
5. EVALUATION				
EVALUATION SURVEYS	-	563	406	969
SUB-TOTAL	50934	71980	71131	194045
CONTINGENCY/INFLATION (20%)	10187	14396	14226	38809
SUB-PROJECT REQUEST OF U.S.A.I.D.	61121	86376	85357	232854

* PARTIAL YEAR, JUNE TO SEPT., 1987, ONLY.
 FX = FOREIGN EXCHANGE

DIocese of Maseno West CBHD
 U.S.A.I.D. BUDGET (US\$)
 OCT., 1986 TO SEPT., 1989
 0826862130

APPENDIX B CONT'D

LOCAL/OTHER CONTRIBUTIONS	OT, '86/ SE, '87	OT, '87/ SE, '88	OT, '88/ SE, '89	3 YEAR. TOTALS
1. TECHNICAL ASSISTANCE	(US\$)	(US\$)	(US\$)	(US\$)
DIRECTOR (PARTIAL)	413	1375	1513	3301
CHW SERVICES (\$12.50/CHW/MO)	38550	50160	62436	151146
TOTAL TECHNICAL ASSISTANCE	38963	51535	63949	154447
2. TRAINING (25% OF TOTAL)	1086	2286	2592	5964
3. COMMODITIES				
IMMUNIZATION EQUIPMENT/SUPPLIES	625	2063	2269	4957
2 MOTORBIKES (DIDCOUNTED 33%)	2938	-	-	2938
TOTAL COMMODITIES	3563	2063	2269	7895
TOTAL LOCAL/OTHER CONTRIBUTIONS	43612	55894	68810	168306
PERCENT OF GRAND TOTAL BUDGET	0.42	0.39	0.45	0.42
GRAND TOTAL BUDGET (ALL SOURCES)	104735	142260	154167	401160
SUB-PROJECT TARGET POPULATION SERVED			135680	135680
FINAL YEAR COST PER PERSON SERVED			1.14	-
3 YEAR COST PER PERSON SERVED				2.96



FUNDING PROPOSAL
ANNEX C
CHRISTIAN COMMUNITY BASED HEALTH CARE
(CCBHC)

in
DIOCESE OF ELDORET
SUBMITTED TO U. S. A. I. D.

by

CORAT AFRICA
P.O. Box 42493
NAIROBI, KENYA

and

DIOCESE OF ELDORET
P.O. Box 3404
ELDORET, KENYA

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1.0 EXECUTIVE SUMMARY

Eldoret Diocese (CPK) is a new CBHC/FP project and is intending to carry out child survival activities (immunizations, ORT, FP motivation and supply, and nutrition education). Eldoret project began actively in 1986. Funding under this project is proposed for the period from October, 1986, through September, 1989. The experience with nearby Maseno South and West and with Tenwek will enable rapid and effective project growth. It is expected that by end of project, the project will have over 125 CHWs taking care of over 1,100 FP clients and an estimated 70,000 people in the households regularly visited by CHWs.

Of the 70,000 people, approximately 13,000 are children under 5 years and 14,000 are women 15 to 48 years.

The project will complement Government efforts in this vast area by concentrating in remote communities not reached by the Government system. The approach will be community based but specially modified where needed to suit the nomadic communities in West Pokot District. Key interventions will be:

- immunizations
- oral rehydration
- growth monitoring
- family health and environmental health oriented IEC.

The achievement of the project objectives will be measured using service indicators and survey data.

The main objective is to improve the health status of the vulnerable members of the target communities through community involvement and provision to primary health care and supplies.

Project Budget:

U. S. A. I. D. REQUEST	\$225,863
LOCAL/OTHER CONTRIBUTIONS	\$129,422
TOTAL PROJECT BUDGET	\$355,285

2.0 BACKGROUND

2.1 Location and People. The Diocese of Eldoret is geographically a very large diocese, covering approximately 50,000 square kilometres with a population of 1,400,000. The Diocese includes the government districts of: Trans Nzoia, Turkana, Nandi, Uasin Gishu, Elgeyo-Marakwet, and West Pokot.

The Diocese of Eldoret wishes to fulfil its calling to minister to the needs of the poor and to assist the government and other bodies in realization of 'health for all'. Eldoret has chosen to work towards the establishment of a community health care programme as the most effective means by which it can contribute to this end.

Childhood mortality rates range from 92 per 1000 mid-year population of children under two years, in Uasin Gishu District to 188/1000 in West Pokot.

2.2 Health problems and resources in the project area. From Health facility data in the Eldoret project area, the main health problems are communicable and are preventable by available health interventions. The problems include:

- diarrhoea and vomiting
- measles
- malaria
- tetanus
- acute respiratory infections
- tuberculosis
- pockets of malnutrition.

Most of these diseases are preventable by immunization yet the immunization coverage in the area is very low estimated at less than 25% completed immunization coverage.

Breast-feeding and supplementation in the area is generally adequate and hence malnutrition of infants is not a major problem in this area.

The project area is very large and is supplied by more than 125 Health Centres and Dispensaries which offer mainly curative services. These clinics are underutilized in some areas. This may be due to limited accessibility and also due to cultural beliefs in areas like Pokot inhabited by semi-nomadic communities.

These services deliver primarily curative services to a small percentage of the population. Preventive and health education services are virtually non-existent in many parts of the diocese.

2.3 Achievements to date. Eldoret is just starting. It has a coordinator (missionary) medical doctor in place. It has established contact with three areas which are enthusiastic about improving the health of their families, in which to begin. It has offices available and has hired 3 supervisor/trainer who are already available to start work.

The Director of Christian Community Services and the Health Coordinator have both received training in community mobilisation techniques. One of the supervisors has already received training as a trainer (TOT) and one of the other three identified has been in community based health care (CBHC) for more than six years.

Thus, the team is well primed for the task ahead and are actively collecting information from neighbouring projects to learn from them.

Population Densities: Nandi 100/Sq. km
Sirikwa... 65- 85
Kitale.... 2-125

2.4 Cooperation with other Agencies. The Government is encouraging the formation of coordination committees at various levels. Eldoret project will facilitate the formation of such committees in the Districts in which they are involved. The project will make sure that there is no unnecessary over-lap with programmes of other agencies.

3.0 OVERALL GOAL, PURPOSES, AND OUTPUTS

The main overall goal of the project is to improve the community health of the Kenyan people. Special emphasis is on the poor and remote people whose health status is worse than others. The Diocese of Eldoret shares this goal with the other projects, but recognizes that its programme can but contribute in a small way to this larger national goal.

3.1 The purposes of the Eldoret project are to:

- 1) Develop the project to reach the remote and poor people of the diocese. Objectives and end of project status are discussed further under "Target Groups". The project will also train an estimated 125 CHWs and expects about 117 to be active EOP. About 21 EOPS active VHCs will be trained.
- 2) Increase the immune status of children under 2 years old. There is no recent diocesan survey information to indicate under 2's immunization status. Research is needed to ascertain that status. Prior to such research planned as part of this project, the project has set a goal of 30% of under 2's in CHWs' service areas being fully immunized by project end.
- 3) Increase the number of women of child-bearing ages who know how to prepare oral rehydration therapy. Baseline surveys will indicate current knowledge and practice. reasonable EOPS indicators can then be developed.
- 4) Increase significantly the number of children in target groups who have healthy age/weight or arm circumference ratios. Again baseline data will need to be collected before EOPS indicators can be set to show achievement. This may not be a problem in this project.
- 5) Increase the number of couples knowing about and practising family planning through provision of contraceptives by the CHWs. The project plans on extending FP services to approximately 1,100 FP users by EOP.

- 6) Increasing knowledge of and practice of good health and sanitation practices in the target groups. Attainment will be indicated by measures to be developed after the baseline survey.

3.2 Outputs. Outputs leading to this changed status are:

- 1) An estimated 81,000 immunizations (doses) to children under 5 years and ante-natal mothers.
- 2) An estimated 330 mobile clinics to remote areas needing immunization services.
- 3) An estimated 54,600 home visits by CHWs to households in their target groups.
- 4) Approximately 32,700 training and retraining/counselling sessions with women on ORT usage.
- 5) An estimated 62,455 child weighings or arm circumference measurements.

(Outputs and indicators are detailed in Appendix A.)

3.3 Target Groups. The project will expand into new areas. The Coordinator and staff will choose areas to work where cost-effective establishment of CHWs and VHCs in areas over 2 km. from a health institution is most needed. Within each area, the VHCs will focus on the families with under five years children and on women of child bearing age (15 to 49). Efforts will be made at all levels to focus on high risk families.

Each CHW will be expected to choose (with VHC and staff help) the 100 or so households within her/his area which she will visit on a regular basis. (The CHW will be available to other members of the community, but will not schedule visits to other households unless special circumstances dictate.) In the diocese, we have estimated that: there are 6.0 family members to each household; 20% are child bearing aged women; and averagely there is slightly more than one under 5 years child to each household. Key figures are:

TARGET GROUPS

EOPS CHWS	TOTAL HH SERVED (100/CHW)	POP. / AVG. HH	TOTAL POP. SERVED	CHILD BEARING AGE WOMEN	CHILDREN UNDER 5 YEARS
117	11,700	6.0	70,200	14,040	13,071

3.4 Operational Objectives. The expected results are based upon the work of CORAT in assessing the factors which

affect results (e.g., population density). The projections for immunizations are not as clear, but are based on the results at Tenwek, which has, in some parts, a comparable population (population densities will frequently be somewhat lower in Eldoret). As a new project, the supervisors may be focusing on training. On the other hand, demand for immunization will be at its highest. The supervisors will need vehicles (rather than motorbikes) due to the rugged terrain and the demands put on their services.

3.5 Interventions. Regarding interventions by the community health workers, we believe the key interventions to be the following (again subject to the results of surveys):

- MCH education (including QRT, nutrition, immunization, etc).
- growth monitoring
- Family Planning education
- Sanitation and hygiene education
- Possibly food production in connection with nutrition.

CHW supervisors will provide immunization intervention. With the understanding that experience will indicate the best method in the region, we propose to consider the model used at Tenwek (another sub-project discussed in this proposal), in which the supervisors regularly visit specific locations which will be a focal point for supervision as well as immunization.

Thus, the main targets of the programme are the children under five years of age and mothers in the child-bearing age.

3.6 Immunization. The IEC regarding MCH and immunization will be given by CHWs. They will also encourage mothers to bring their children to the clinics. The supervisor/trainers will give vaccinations in both static and mobile clinics. Special intensive immunization "tours" will be carried out to maximize immunization coverage.

3.7 Oral Rehydration Therapy. Packeted oral rehydration salts will be supplied to mothers when available. The preparation of home-made SSS will be encouraged. A standard container and measurements will be established in the first project year. SSS will be demonstrated in the homes, schools, community meetings and in activity group meetings.

3.8 Nutrition Education and Growth Monitoring. This education will be based on availability of foods and cultural food habits. The messages will be developed in the first year to aim at specific necessary behaviour changes. Each child will be expected to have a card and to be weighed regularly. The weight gain will be discussed with the mother.

3.9 Information, Education and Communications (IEC). The non--formal adult education methods will be used to maximize the relevance of IEC, community involvement, experience sharing and self-discovery.

3.10 Relevance to Government Programme. The community-based approach and the interventions listed above fit into the Government policy of District focus and Primary Health Care.

3.11 To ease the work of the supervisors, Contact CHWs will be chosen from the better CHWs to assist in service data collection and other basic supervisory needs, on a volunteer bases, with a nominal allowance for the added effort.

4.0 PLAN OF WORK

4.1 Project Plan. The Diocese has established a Community Health Section under the Christian Community Services Department of the Diocese. The steps seen as necessary are:

- Establish the Community Health Section.
- Recruit a Community Health Coordinator.
- Recruit one Community Health Nurse to serve as supervisor (and add one more each year).
- Begin the project in Nandi and Kitale at two locations with known enthusiasm of local parishes for self-development. Expand from there.
- Through appropriate interventions, assist the people to improve their own health in the three archdeaconaries of the diocese. The basic approach will be to encourage the formation of health committees, which would recruit volunteer or committee-paid health workers. The health section staff would then train and partially supervise them in appropriate interventions.

While many activities can be identified as 'appropriate interventions' (immunization, ORT education, nutrition education, malarial education, family planning education and supply, etc.), baseline and follow-up surveys will be used to guide the development of the programme. These surveys will be carried out by CORAT.

CORAT will also help the project to set up its management and finance systems.

4.2 Method of Operation. The project initiation at the community level will be done through the local congregations who become entry points into their communities. The congregation leader introduces the idea to the community and a VHC is formed whose membership is not limited to members of the church.

The committee organizes the community to select CHWs who should be respected and permanent residents in the community.

4.3 Training

4.3.1 Trainers. The trainers are trained in three basic skill areas each area covered in one week with two to three months practice in between.

Week 1. . The concepts of:

- Health
 - Primary Health Care
 - CBHC
 - Community Participation
 - Community Involvement
- . The methods of changing attitudes
 - . Problem identification in the community
Information gathering, analysis and utilization of results
 - . Community diagnosis.

At the end of this week, the participants should be able to start the process of community mobilization and dialogue and maintain it.

Week II - Review of Community Based activities - concepts

- Adult learning methods
- The process of attitude change
- Setting up a learning climate
- Developing and using codes
- Discussions (asking questions)
- Teaching Aids
- Lesson planning
- Evaluation of learning.

Week III - Reviewing of week II

- Management of CBHC
- Evaluation and monitoring CBHC.

4.3.2 CHWs, TBAs and THs. The above methods are used in the training of these health workers. Their course is based strictly on problems that are currently being experienced. They are taught to:

- identify a problem
- identify with a problem
- consider its occurrence
- discuss its causes
- discuss what could be done about it
- plan action to take
- follow-up the action.

Topic areas could include:

- Immunizations
- MCH
- ORT
- Growth monitoring
- Weaning and breast-feeding
- Data gathering .
- Community process
- Leadership

The functions of the CHWs, etc. are assigned to them by the Community members but normally include IEC as the main activity.

4.4 Plan of Work/Schedule of Activity

Oct. - Dec. 1986:

Design, plan, and execute baseline survey with CORAT. Identify and form first 3 to 5 VHCs. Select first group of CHWs (estimate 10 to 15).

Choose/develop training materials.

Train first CHWs.

Purchase vehicles and equipment.

Establish CHW supervision.

Establish initial mobile clinic schedules.

Jan. - June 1987:

Evaluate first round of efforts and plan needed modifications. Set schedules for training, supervision, mobile clinics, VHC mobilization.

Mobilize second group of VHCs (3 - 5)

Write first 6 months report and send to CORAT. (April).

Train second group of CHWs (10 - 15).

Mobilize third group of VHCs.

Recruit additional supervisor.

July 1987 and after:

Expand and increase rate of above activities.

November 1987:

Write first annual report to CORAT.

Carrying out ongoing cost effectiveness studies provides ample motivation for the projects to focus on assuring sufficiently accurate service data and adequate design and analysis of surveys. Service data will, as a natural part of a focus on cost-effectiveness, be regularly reviewed.

It is planned to make every effort, consistent with the community-based approach to minimize the amount of service data required from the CHWs; sufficient to keep them focused on the activities that are important, yet not so much that they will not understand or keep good records nor be so much that data records get in the way of producing results..

5.2 Service Data. Monthly CHW reports are collected and aggregated for the programme. Six monthly reports are summarized and sent to CORAT AFRICA for aggregation with other sub-projects. Six monthly report detail statistics for the period in the areas of:

1. New VHCs and Attrition,
2. New CHWs and Attrition,
3. New Refresher Training,
4. Immunizations given,
5. Children Weighed,
6. New Family Planning (FP) acceptors and ongoing usage,
7. ORT Training, and
8. Latrines and dish racks.

These are recorded daily, weekly and monthly. They will be reported to CORAT semi-annually. (See Appendix A for additional outputs to be recorded. Other operational news is shared as well as future plans for the following period.

5.3 Surveys. Three-year (approximately) surveys were planned to monitor impact in the communities served. An initial baseline survey is planned for the first quarter of the project. A follow-up survey about 2 1/2 (two and half) years later is planned.

Data on deaths of most recent child can be used to estimate changes in infant mortality. (IMR calculated using the "indirect techniques" will be used. In a rural setting, it is difficult to obtain adequately accurate data for direct calculation of IMR). Additional questions will be added to elicit more information on nutrition and immunization. Previous surveys have been focused on FP and have not asked for in-depth information in these areas.

Enough information will be gathered during the baseline and follow-up surveys to enable the estimation of fertility and mortality rates using the indirect techniques according to Brass et al. Such surveys are intended to elicit the changes in health status in the community that could be attributed to the community based interventions.

Intermediate Indicators.

- A) % increase of children immunized
- B) % increase of children with MCH cards
- C) % increase of children weighed regularly
- D) % increase of children with satisfactory weight/age or arm circumference ratios
- E) % increase of mothers who know ORT
- F) % increase of couples using FP.

Impact Indicators.

- Family Planning acceptance and usage rates.
- Significant changes in A-F (above) between baseline and follow-up.

The follow-up survey will have to be done as late as possible in the project period to maximize effect because the period between surveys will be under 3 years.

6.0 FINANCE

6.1 Budget. The total project budget is \$355,285. This proposal requests U.S.A.I.D. grant \$225,863 (63% of total) to the Diocese of Eldoret from October, 1986 to September, 1989. The Diocese expects to raise \$129,422 in local support through labor, in kind, and financial support. This sum does not mention substantial diocesan overheads for buildings, etc., that are contributed. (Appendix B details the Financial Plan.)

6.2 Mission Moving Mountains, a mission agency, supports the Coordinator, his vehicle, and his living expenses for an estimated \$61,650 over the next three years.

6.3 Vehicles. Vehicles form a substantial part of this budget. They are, however, necessary to provide transport to the remote areas targeted. Public transport is inadequate or non-existent in these areas.

6.4 Cost-Effectiveness. In the final year the project plans to reach an EOPS target population of 70,200 people living in the households served by CHWs at a cost of \$0.39 per person.

7.0 SUSTAINABILITY.

A) Community Support. This is given from the beginning. A CBHC cannot function without community participation. The communities make a commitment at the beginning as they realise that they will have to commit their time and resources into the programme. The sub-

project staff will earn more commitment and support as relationships are built, objectives met, and greater trust is developed.

The investment of training and IEC brought to the community is relatively permanent and will remain in the community beyond the funded project period.

B) Ministry of Health. The project has strong and permanent linkages with the Ministry of Health. This will ensure continuation after the funded period.

C) The Diocese. This is a permanent caring institution which will always be able to support a worthy cause like this one.

The stewardship programme of the Diocese is young but is growing. The Diocese will be able to support the Child Survival activities in the future, not 3 years, but in 6 to 10 years to come.

D) The other aspect that may promote self-reliance is fee for service. When the demand and awareness for these services have been adequately created, fees can be introduced. In this way, users of definite services (like clinics, immunization, and simple curative activities) can contribute towards the maintenance of the system.

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ELDORET SUB-PROJECT
 VERIFIABLE INDICATORS
 0826861100

APPENDIX A

OUTPUTS	OT, '86/ SE, '87	OT, '87/ SE, '88	OT, '88/ SE, '89	3 YEAR TOTALS

VILLAGE HEALTH COMMITTEES				
ACTIVE VHCS: BEGIN YEAR	0	5	14	
NEW VHCS	5	10	10	25
ATTRITION (10% P.A.)	0	-2	-2	-4
ACTIVE VHCS: YEAR END	5	14	21	
ACTIVE CHWS: BEGIN YEAR	0	25	72	
NEW CHWS	25	50	50	125
ATTRITION (-8% P.A.)	0	-3	-5	-8
TOTAL CHWS: YEAR END	25	72	117	
CHWS RETRAINED	0	25	72	97
ACTIVE CCHWS: BEGIN YEAR	0	1	5	
NEW CCHWS	1	4	6	11
ATTRITION (-5% P.A.)	0	-0	-1	-1
ACTIVE CCHWS: YEAR END	1	5	10	
AVG. CHWS/CCHW:YE	25	15	11	
SUPERVISORS: BEGIN YEAR	0	1	2	
NEW SUPVS.	1	1	1	3
ATTRITION	0	0	0	0
SUPERVISORS: YEAR END	1	2	3	
AVG. CHWS/SUPERVISOR	25	36	39	
AVG. HOME VISITS/CHW/MONTH	20	25	30	
TOTAL HOME VISITS	6000	14550	34042	54592
ORT TRAINING/HOME VISITS	60%	60%	60%	
TOTAL NEW/REPEAT ORT TRAINING	3600	8730	20425	32755
CHWS DIST. FP (100%)	25	72	117	
AVG. FP USERS/CHW	6	9	10	
TOTAL YEAR END FP USERS	150	648	1171	
MOBILE CLINICS/MONTH	5	10	15	
TOTAL CLINICS (ABOVE X 11)	55	110	165	330
CHILDREN SEEN PER CLINIC	150	150	150	
TOTAL CHILDREN SEEN	8250	16500	24750	49500
ANTENATAL MOTHERS SEEN/CLINIC	20	25	30	
TOTAL ANTENATAL MOTHERS	1100	2750	4950	8800
IMMUNIZATION DOSES/CHILD SEEN	1.00	2.00	1.50	
TOTAL CHILDREN IMMUN. DOSES	8250	33000	37125	78375
IMMUNIZATIONS/ANTENATAL MOTHER	30%	30%	30%	
TOTAL MOTHER IMMUN. DOSES	330	825	1485	2640
TOTAL IMMUNIZATION DOSES	8580	33825	38610	81015
CHILD WEIGHINGS(%CLINIC/CHW VISITS)	60%	60%	60%	
CHILD WEIGHINGS/ARM MEASURE	8550	18630	35275	62455

DIOCESE OF ELDORET CBHD
 U.S.A. I.D. BUDGET (US\$)
 OCT., 1986 TO SEPT., 1989
 0919861100

APPENDIX B

BUDGET ITEM	OT, '86/ SE, '87	OT, '87/ SE, '88	OT, '88/ SE, '89	3 YEAR TOTALS
1. TECHNICAL ASSISTANCE	(US\$)	(US\$)	(US\$)	(US\$)
DEPUTY COORDINATOR	6000	6600	7260	19860
SUPERVISOR 1	2406	2647	2912	7965
SUPERVISOR 2	-	2647	2912	5559
SUPERVISOR 3	-	-	2912	2912
CONTACT CHWS (1/5/10)	150	825	1815	2790
STATISTICS/BOOKEEPER	1719	1891	2080	5690
LOGISTICS	1563	1719	1891	5173
SECRETARY	1563	1719	1891	5173
DRIVER	825	908	998	2731
WATCHMAN/CASUAL LABOR	750	925	908	2483
CONSULTANTS	688	756	832	2276
TOTAL TECH. ASSISTANCE	15664	20537	26411	62612
2. TRAINING				
CHW TRAINING	938	2063	2269	5270
CHW RETRAINING	-	258	567	825
VHC TRAINING	141	309	340	790
CCHW TRAINING	-	86	189	275
TOTAL TRAINING	1079	2716	3365	7160
3. COMMODITIES				
VEHICLES ('86-2; '87-1)	24000	13200	-	FX 37200
4 MOTORBIKES ('86-2; '87-1; '88-1)	4625	2544	2798	FX 9967
CHW KITS (NON-DRUG EQUIPT./SUPPLIES)	781	1719	1891	4391
BICYCLES ('86-0; '87-5; '88-10)	-	963	1325	2288
OFFICE EQUIPMENT	9375	-	-	9375
TOTAL COMMODITIES	38781	18426	6014	63221
4. OTHER EXPENSES				
VEHICLE RUNNING COSTS				
YEAR 1: 20000 KM X \$.25/KM	5000	-	-	5000
YEAR 2: 20000 KM X \$.28/KM	-	5500	6050	11550
MOTORBIKES				
YEAR 1: 40000 KM X \$.125/KM	5000	0	0	5000
YEAR 2: 50000 KM X \$.138/KM	0	6875	9831	16706
TRAVEL	938	1125	1350	3413
OFFICE EXPENSE	1250	1500	1650	4400
WORKSHOPS	313	563	406	1282
AUDIT	1563	1719	2031	5313
TOTAL OTHER EXPENSES	14064	17282	21318	52664
5. EVALUATION				
INTERNAL EVALUATION	625	1125	813	2563
SUB-TOTAL	70213	60086	57921	188220
CONTINGENCY/INFLATION (20%)	14042	12017	11584	37643
SUB-PROJECT USAID REQUEST (US\$)	84255	72103	69505	225863

FX=FOREIGN EXCHANGE REQUIRED

DIOCESE OF ELDORET CBHD
 LOCAL/OTHER SOURCES BUDGET (US\$)
 OCT., 1986 TO SEPT., 1989
 0826862130

APPENDIX B CONT'D

BUDGET ITEM	OT, '86/ SE, '87	OT, '87/ SE, '88	OT, '88/ SE, '89	3 YEAR TOTALS
1. TECHNICAL ASSISTANCE	(US\$)	(US\$)	(US\$)	(US\$)
DIRECTOR (PARTIAL)	1875	2063	2269	6207
COORDINATOR/DOCTOR (MISSIONARY)	10000	11000	12100	33100
CHW SERVICES (\$12.50/CHW/MO)	1875	11880	21236	34991
TOTAL TECH. ASSISTANCE	13750	24943	35605	74298
2. TRAINING (25% TOTAL)	358	905	1122	2386
3. COMMODITIES				
IMMUNIZATION EQUIPMENT/SUPPLIES	6563	750	1250	8563
*VEHICLE	12000	-	-	12000
COORDINATOR VEHICLE	15625	-	-	15625
TOTAL COMMODITIES	34188	750	1250	36188
4. OTHER EXPENSES				
VEHICLE EXPENSE (20000KM X \$.25)	5000	5500	6050	16550
TOTAL LOCAL/OTHER SOURCES	53297	32098	44027	129422
PERCENT OF GRAND TOTAL BUDGET	0.39	0.31	0.38	0.36
GRAND TOTAL (ALL SOURCES): US\$	137552	104201	113532	355285
SUB-PROJECT TARGET POPULATION SERVED (EOPS)			70200	70200
FINAL YEAR COST PER PERSON SERVED		US\$	0.39	
3 YEAR COST PER PERSON SERVED			US\$	5.06



FUNDING PROPOSAL

ANNEX D

CHRISTIAN COMMUNITY BASED HEALTH CARE
(CCBHC)

in

TENWEK HOSPITAL

SUBMITTED TO U. S. A. I. D.

by

CORAT AFRICA
P.O. Box. 42493
NAIROBI, KENYA

and

TENWEK HOSPITAL
P.O. Box 3039
BOMET, KENYA

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1.0 EXECUTIVE SUMMARY

Tenwek Hospital proposes to implement a Child Survival and development project in Kericho District to reach the Hospital's catchment area. Given the health problems in the District:-

- immunization
- oral rehydration therapy
- growth monitoring
- child spacing
- nutrition
- hygiene/sanitation

have been selected as the key interventions that might have maximum impact on child survival in three years.

The project proposes to concentrate on the Community Based activities, training and supervising and supporting Community Health Workers (CHWs) and outreach MCH services through mobile clinics. Through the CHWs, knowledge and usage of ORT, growth monitoring, immunization and child spacing will be markedly increased.

The main objective is to improve, measurably, the health status of children 0-5 years in target areas through the Community Based Health Care (CBHC) approach.

It is estimated that over 29,800 women 15-49 years and 23,200 children under the age of 5 years will benefit most from the programme every year. But the principal beneficiaries will be the 179,200 people living in households regularly visited by a Tenwek CHW at the end of project.

The implementation is based on a local infrastructure organization that effectively reaches every village of the target communities.

Service indicators (outputs and intermediate outcomes) and impact indicators (final outcomes) will be used to assess progress and impact of the project.

The project aims at covering the whole District and will be based on genuine community involvement by facilitating leadership development in the community and training community health workers from the community, selected by the community.

Immunization coverage, knowledge and skills in ORT, practice of regular growth monitoring, nutrition status, infant mortality rate and use of modern child spacing methods will indicate achievement of objectives. The project is sustainable beyond the funding through community involvement in the spirit of self-reliance.

U.S.A. I.D. Project Request	=	\$247,664
Local Contributions	=	\$154,547
Total Project Budget	=	\$402,211

2.0 BACKGROUND

2.1 Location of project and description of field conditions. The community health programme is located in the western highlands of Kericho District. This rural agricultural area has a population of 100 - 150 per square kilometre. The Kipsigis tribe is predominant. These people raise cattle, sheep and goats. Maize and various vegetables are grown for food. Tea and pyrethrum are the major cash crops. The average annual income is less than 6,000 Kshs. Annual rainfall has averaged 54 inches a year for over the last 44 years.

Tenwek Community Based Health Delivery project is an extension of Tenwek Hospital. The project was established to meet the needs of the surrounding people who do not have ready access to medical or family planning services. They often have to travel many kilometres to reach a medical facility. Transportation and hospitalization are quite costly, which is difficult for low income people. The community health programme is working within an area of 2,500 square kilometres. There are only seven government dispensaries within this service area. The nearest hospitals are 50 kilometres to the west, 40 kilometres to the northwest, 80 kilometres to the north, 115 kilometres to the southeast and 90 kilometres to the southwest.

2.2 The Project Organization. Tenwek Community Health is set-up as a separate entity under the Hospital Board of Directors. It is directly responsible to the Executive Officer in the organizational structure. (See Appendix C). Dr. David Stevens, the Director of the community health programme, is a family practice physician. He, along with the Coordinator, Susan Carter, BSN, KRN, designed and now manage the programme. A community health management committee helps coordinate the efforts of community health, the hospital, the community and the church. Thus, Tenwek Community Health enjoys wide support in the medical and outlying communities.

All community health monies are kept in separate bank accounts and an annual external audit of these accounts is carried out.

2.3 Health problems affecting mothers and children. Kericho District's early childhood (under 2) mortality rate is in the range of 91-120 deaths per 1000 births. While high by Western standards, this rate is mid-range in Kenya. One of Kericho's District wide problems is the estimated 29,000 (16% of total under 5 year old) children whose growth is stunted due to malnutrition.

At the local level, Tenwek Hospital statistics for 1985 show that the 5 most common health problems seen in outpatients were (1) intestinal parasites, (2) malaria, (3) diarrhoea, (4) pneumonia and (5) skin diseases.

The incidence of Notifiable Infectious Diseases were as follows in 1985 (only diseases pertaining to children are listed):

Diarrhoeal diseases	2,462	Poliomyelitis	1
Measles	220	Pulmonary T.B.	584
Meningitis	57	T.B. Other	52
Pneumonia	1,876	whooping cough	21.

Nine of the ten major causes of death at Tenwek Hospital involve children. They are listed below along with their incidence.

Stillborn	71	Measles	30	Neo-natal Sepsis	22
Pneumonia	47	Malaria	29	Gastroenteritis	20
Prematures	38	T.B.	23	Meningitis	19

2.4 Existing health resources available. Within the proposed service area there are 7 government dispensaries. These provide curative treatment for some of the most common diseases. There are only two of the seven that provide immunization and family planning services. There is no routine health education being carried out by these facilities.

However, there is one government family field educator who does health and family planning education in the local communities.

Tenwek Hospital provides a broad range of services to its clients. In addition it receives many referrals from smaller and less equipped facilities.

There are no other community health projects within our principal Tenwek Hospital service area.

2.5 Contributions of project to health resources. Tenwek Community Health has 18 health committees organized and working to develop strategies for improving health in their areas. These 18 committees are supervising 125 active community health workers who are each responsible to teach their neighbours. The health workers also have drugs for the most common diseases available for their community.

Each of these 18 committees hosts a well baby clinic monthly, which is carried out by the community health supervisor. At these clinics, supervisors immunize children, ante-natal mothers, and anyone else requesting it. The Community Health Workers (hereafter referred to as CHWs) are present at these clinics to weigh the babies and teach the waiting mothers.

This programme is also carrying out a pilot project for the Kenya Ministry of Health in the area of community based distribution of family planning commodities. Each CHW is responsible for 100 homes in which they teach about family planning and have the commodities available for distribution. A CHW, trained specifically to teach in the hospital, is reaching many additional people. Significant results from this programme are already being seen. (See the five year summary on Page 22 of Tenwek Hospital's Annual Report available on request from CORAT.)

2.6 Current availability of the proposed health interventions to the specified target group. Currently these health interventions are available to the population living in 14,000 households assigned to CHWs within the present service area. Before the end of the present funding a further 3 VHCs will be started and 28 new CHWs trained bringing the active CHWs to an estimated total of 140 in March, 1987, when full funding would begin for this project. Hereafter, all figures represent where the programme will be when the current funding ends (February, 1986).

No changes are planned in the health interventions, but rather an increase in the coverage within the proposed service area. As stated previously there are no other such services being offered by other groups within the service area. As hospital statistics show there is still much to be done in order to reach all of the target population.

2.7 Fit of proposed interventions with national health strategy of the host country and the local AID Mission.

This programme's proposed health interventions are closely aligned with the national government's plans for community based health care. UNICEF and the Kenya Government have worked together to come up with ten components to be included in the programmes. They are: Safe Water, Health Education, MCH/FP, Immunisations, Nutrition, Sanitation, Control of Common Diseases, Essential Drugs, Dental and Mental. All of these except dental are included in this project's health interventions.

2.8 Government and community support. Community support and participation is basic to this project. Before the project was begun, approval was obtained from the District Officer, District Commissioner, District Medical Officer and Provincial Medical Officer. Also the District Public Health Officer was consulted. It is realized that these people must be involved from the beginning in order for success to be possible.

When entering a new community, the person or persons requesting the project are the first contacted. After seeking explanation of the reason for the invitation, and then giving an explanation of what the programme's goals are, the initiative for actually beginning must follow from the community. The second or third village contact is a village meeting which has been called by the Chief or Assistant Chief. There the community is given an opportunity to discuss what they see as their needs. If the felt needs are in agreement with the project goals and if those attending the village meeting are committed to carrying out their responsibilities, the VHC is formally established. The community selects a health committee from among themselves and, then, organizes a committee training to be held in the community.

The committee, as representatives of the people, are responsible for governing the programme. They set the strategies for improving their health according to felt

needs. They select the people who will be trained as CHWs, and are responsible to help supervise them once training is completed. The community members all contribute to the CHWs training fees. The committee is then responsible for seeing that the CHWs are given opportunities to share their learning in the community, and to be supportive of their teaching.

In this project's experience the people in the communities are eager to learn and practise what the CHWs are teaching. Immunization clinics are well utilized. More than 24,000 immunizations (doses) have already been given in the first six months of this year but an outbreak of measles may mean this rate is unsustainable. In informal questioning, many of the mothers bringing children with diarrhoea to the hospital have already made and given the child ORT. Over 1,650 families are now taking advantage of the community based distribution of family planning commodities. In the follow-up survey to be conducted in September, 1986, under present funding, we will measure some of the impact of teaching on safe water, nutrition, safe fireplaces, latrines, personal hygiene, etc. We are expecting the results to be high.

2.9 Overall national health and development goals of the host country. The Ministry of Health for the Kenya Government has begun actively supporting the community based health care approach to making health care available to all by the year 2000. It has researched various NGO programmes and has prepared a guideline for establishing such programmes. The Ministry of Health has recognized the essential contributions of NGOs to improving the health of it's citizens. Without the assistance of NGOs, the goal of health for all by the year 2000 would be impossible. This programme is committed to assisting the Ministry of Health in reaching this goal and will make all reports available to them. Representatives from the National Council for Population and Development have visited this project on two occasions and we have been assured that we are carrying out their desires concerning community based distribution of contraceptives.

3.0 OVERALL GOAL, PURPOSES, AND OUTPUTS

The main overall goal of the project is to improve the community health of the Kenyan people. Special emphasis is on the poor and remote people whose health status is worse than others. Tenwek Community Health Project shares this goal with the other sub-projects, but recognizes that its programme can but contribute in a small way to this larger national goal.

3.1 The purposes of Tenwek sub-project are to:

- 1) Expand the current project to reach more of the remote and poor people of the area. Objectives and end of project status are discussed further under "Target Groups". The project will also increase the number of active trained CHWs from an estimated 145 to an "end of project status"

(EOPS) estimate of 280 CHWs. The 18 currently active VHCs (estimated at 21 in 1987) will be increased to about 31 EOPS VHCS.

- 2) Increase the immune status of children under .2 years old. Most recent survey information indicates that only about 4% of under 2's have had any immunization. Additional research is needed to ascertain how that status has changed during the last two years in the project areas and how many children have completed a full course of immunization. Prior to such research planned as part of this project, the project has set a preliminary goal of 50% of under 2's in CHWs' service areas being fully immunized by project end.
- 3) Increase significantly the number of women of child-bearing ages who know how to prepare oral rehydration therapy. Baseline surveys will indicate current knowledge and practice. Reasonable EOPS indicators can then be developed.
- 4) Increase significantly the number of children in target groups who have healthy age/weight or arm circumference ratios. Again baseline data will need to be collected before EOPS indicators can be set to show achievement.
- 5) Increase the number of couples knowing about and practising family planning through provision of contraceptives by the CHWs. The project will have an estimated 1,885 active family planning clients at full start-up. The project plans on extending FP services to approximately 4,200 FP users by EOP.
- 6) Increasing knowledge of and practice of good health and sanitation practices in the target groups to be developed as a result of baseline research.

3.2 Outputs. Outputs leading to this changed status are:

- 1) An estimated 82,000 immunizations (doses) to children under 5 years and ante-natal mothers.
 - 2) An estimated 800 mobile clinics to remote areas needing immunization services.
 - 3) An estimated 212,300 home visits by CHWs to households in their target groups
 - 4) Approximately 148,600 training and retraining/counselling sessions with women on ORT usage.
 - 5) An estimated 159,900 child weighings or arm circumference measurements.
- (Outputs and indicators are detailed in Appendix A.)

3.3 Target Groups. The project will principally expand where some work has been done. The coordinator and staff will choose areas to work where cost-effective establishment of CHWs and VHCs in areas over 2 km. from a health institution is most indicated. Within each area, the VHCs and CHWs will focus on the families with under five years children and on women of child bearing age (15-49 years). Efforts will be made at all levels to focus on high risk families.

Each CHW will be expected to choose (with VHC and staff help) the 100 or so households within her/his area which she will visit on a regular basis. (The CHW will be available to other members of the community, but will not schedule visits to other households unless special circumstances dictate.) Research has shown that Tenwek CHW areas have an average of 6.4 family members to each household, 22% are child bearing aged women, and averagely there is slightly more than one under 5 child to each household. Key figures are:

EOPS TARGET GROUPS

<u>EOPS CHWS</u>	<u>TOTAL HH SERVED (100/CHW)</u>	<u>POP./AVG. HH</u>	<u>TOTAL POP. SERVED</u>	<u>CHILD BEARING AGE WOMEN</u>	<u>CHILDREN UNDER 5 YEARS</u>
280	28,000	6.4	179,200	34,043	36,019

4.0 PROJECT DESIGN AND IMPLEMENTATION

4.1 Method for delivery of specified health interventions
 The health interventions proposed here will be accomplished by increasing the number of health committees spread throughout the proposed service area to about 31. At the end of three years, these 31 health committees will have sent an estimated 150 CHWs to training, bringing the total number to 290 CHWs trained. It is expected that at least 270 will remain active, but we have projected 280 EOPS active CHWs. (The CHWs trained first will have been working for over six years.) Each of the 31 committee areas will host a well baby/ante-natal clinic monthly. The CHWs will serve as arms of Tenwek Hospital by sending and receiving referrals. Below are the details of this plan.

Personnel:

Director - Dr. David Stevens, family practice physician
Coordinator - Susan Carter, BSN, KRN
Trainer/Senior Supervisor - Mr. Thomas Rotich
Supervisors - Mr. Wilson Towett
 Mr. Joseah Sang
 Mr. Richard Letich
 Mr. Joseph Morogo
 Fifth Supervisor - to be added in 1st year
 Sixth Supervisor - to be added in 1st year
Secretary/Bookkeeper - to be added in first year
ECN - to be added in first year
Logistics Clerk - Lucy Chepkosge

Community: The community will be responsible for inviting the programme to begin in its area. After the community expresses itself at a village meeting and agrees to accept its responsibilities, a health committee is selected. The community will then be expected to contribute to the CHWs training fees, practice the teaching of the CHWs and provide the CHWs with emotional and physical support. A community building within the area needs to be loaned for monthly clinic. Healthy Home Certificates are presented to home owners who are following good health practices.

Committee: The locally selected health committee will be responsible for setting the strategies for improving health in its own area. They will receive two days of training in which they draw up a committee constitution and begin thinking about their role in problem solving. Several problems are acted out during these two days of training and the committee discusses possible solutions. The committee also decides on the qualities they are looking for in the CHWs, whom they will select. Initially, each new committee selects 7 CHWs. This is a manageable number of CHWs for a new committee. Once the committee is established and working well, they may select and send more CHWs to training, until there are enough CHWs for good coverage of their area. The committee has full responsibility for discipline of itself as well as of its CHWs. A committee of the month is selected monthly, and a certificate awarded.

Community Health Workers: The community health workers of this programme are volunteers who receive four weeks of training in a central location. Each class is made up of 30 students, representing two new committees, and others from already established committees. Adult learning methods are utilized in the training. Each student learns to teach in this manner and practises using it in actual teaching situations during the four weeks. All lessons are taught after first establishing that there is a problem and that the problem is their own. This is one of the reasons for our success in teaching the community. At the completion of training each CHW receives a certificate of achievement and a bag of medicines.

When the CHWs return to their village they begin to follow their plan for visiting their neighbours, teaching them good health practices, selling them medicines as needed

12/2

and distributing family planning supplies as they are requested. The CHWs are trained to have the learner do a return demonstration of the new practice before accepting that it has been learned. The CHW also reports on clinic day to assist by weighing babies, marking growth charts, collecting fees and doing group teaching. His/her reports of activities, family planning commodity distribution and medicines sold are collected monthly at the committee meeting. When the CHW is faced with an unfamiliar sickness or one that does not respond, he/she fills out a referral form which is sent with the person to the medical facility of his choice.

CHW Compensation: CHWs sign their names agreeing to be volunteers. It is a basic assumption of this programme that it is impossible to pay the CHWs and approach self-reliance. But at the same time there are legitimate expenses involved in being a CHW. Because of this, each CHW of this programme can receive up to 50 Ksh. monthly reimbursement for such expenses. This money is generated by the sale of drugs. If a group of CHWs fails to generate this profit in a month, they do not receive it. The amount of 50 Ksh. is not open to debate. At no time will money from the central office be used to reimburse the CHWs. All committees that frequently do not have enough profit to reimburse the CHWs but it has not appeared to have any detrimental effect as the CHWs have continued to work.

Central Office: The staff in the central office is responsible for making sure that the programme is moving forward. They do the initial contact work in each community, and explain what the community health programme offers. After the community decides to begin the programme, the central office staff spends two days training the committee. Once the CHWs have been selected, the staff train them. Progress is somewhat dependent then on the supervision each CHW receives. The six supervisors will each be responsible for five committees and their health workers. (The extra committee will be supervised by the staff of an outlying dispensary.) This will mean that each supervisor will have approximately 41 CHWs. For the first six months following training, each new CHW is individually visited monthly. After the first six months the CHWs are supervised in groups or individually as problems develop. The supervisors make home visits with the CHWs, thereby gaining a good understanding of the CHW's learning and application. They also check the CHW's records, family planning report and supplies and the medicine bag. Teaching and problem solving is attempted on each visit. A major goal of these visits is motivation of the CHW. We have found that as volunteers, the CHWs require a lot of feedback and positive reinforcement. Under previous funding we have looked at the effect of non-financial incentives on the work effort and outcome of each CHW. While at present we cannot give the exact results, we are sure that these things make a significant difference. One especially good incentive, which we will continue is the monthly newsletter. This has proven highly motivational. These things are all invaluable in keeping CHW, Committee and Community motivation high, and therefore should play a significant

role in the delivery of our proposed health interventions.

The supervisors are responsible for carrying out the well baby clinic monthly. We are proposing to add antenatal care in these same clinics, but that is dependent upon funding to hire an ECN. One Supervisor is Senior Supervisor. He extensively trains and oversees the other supervisors.

4.2 Method of commodities management. All commodity management is the responsibility of the Coordinator. From the beginning, many checks and balances have been utilized to make error, both intentional and unintentional, as difficult as possible. All drugs (except family planning) are purchased from the hospital.

Once received in bulk from the hospital central pharmacy, the logistics clerk packages each kind of drug into individual medicine envelopes, which have been printed with drug name, what illness it is for, the ages of those who may take it and the correct instructions for taking it. The price of the medicine is stamped on the outside of each envelope to insure that they are not sold at a higher price. These envelopes are then packed in groups of ten and closed in clear plastic bags, color coded with tape. They are placed in bins. All entries into and all withdrawals from the bins are recorded on the bin card.

When a new committee of CHWs has completed training, a lockable wooden storage box is taken to the committee treasurer. He is responsible for all the drugs inside the box. This original supply of drugs is loaned to the committee, but is later paid back from the profit. The treasurer is required to count and record the number of all drugs placed inside the box. He then records the number in a sign out book. Each health worker, as he needs the drugs in his/her medicine bag replaced, must sign his/her name in the same book stating the number of each type of medicine they have taken. All drugs are signed out in units of ten, except cough syrup which is in 100 ml. bottles. Each CHW turns in all money from the sale of drugs to the committee treasurer and receives a receipt for it. The treasurer, when he purchases more drugs from the central office receives an invoice, pays the invoice and then receives a receipt. All transactions, whether medicines or money are covered by a signature and a receipt.

Family planning supplies are handled in an identical way except the Coordinator must pick up the supply from Central Medical Annex Stores in Nairobi. All family planning commodities are free. We are not able to get enough supplies from the District Hospital. This trip to Nairobi is only necessary 3 or 4 times a year and is always coordinated with other purchasing or community health errands.

Monthly inventory checks are carried out for all committees and CHWs. A record of the number of each type of medicine which individuals and committees had is compared with the number they now have and the number they have sold

or distributed. A new total is then recorded taking into account the drugs they have signed out. This allows us to find a problem immediately and begin steps to correct it.

Immunization commodities are more difficult to manage. In the past we have had difficulty securing the vaccines and child health cards due to the large quantities used and limited government stores. The hospital secures, stores and supplies all the vaccines. It is the responsibility of the hospital staff to monitor refrigerator temperatures. The cold chain is preserved according to KEPI procedures throughout transport and utilization by the community health supervisors. All vaccines returned to the refrigerator have the date and time of dilution written on them.

4.3 Plan for working with community during the project.
Plans are for ten new health committees to be added to the already present 21 during the next three years. These ten committees will select and send for training 70 additional CHWs. Another 80 CHWs will be added to already existing committees. The only addition to the role of these groups of people will be the support of a combined well-baby - ante-natal clinic instead of well-baby clinic alone.

4.4 Overall work plan and schedule of the proposed programme activities.

1986

October	Begin limited use of proposed funding
November	Hire supervisors. Purchase motorbikes. Plan baseline survey for child survival.
December	Review, summarize and publish results of September Survey.

1987

January	Six month report CORAT Workshop
February	Current funding ends
March	Begin full use of proposed funding
April	Train CHWs
May	Train CHWs
June	Select two new committees
July	Train new committees (6 month report)
August	Select 29 CHWs
September	Train CHWs
October	Train CHWs
November	Follow-up supervision of new CHWs
December	Follow-up training

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1988

January	Select two new CHC (6 month report) CORAT Workshop
February	Train new committees
March	Select 28 CHWs
April	Train CHWs
May	Train CHWs
June	Follow-up supervision of new CHWs
July	Follow-up training (6 month report)
August	Select two new committees
September	Train new committees
October	Select 28 CHWs
November	Train CHWs
December	Train CHWs

1989

January	Follow-up supervision of new CHWs (6 month report) CORAT Workshop
February	Follow-up training
March	Select two new committees
April	Train committees
May	Select 28 CHWs
June	Train CHWs
July	Train CHWs (6 month report)
August	Follow-up supervision of new CHWs Follow-up survey
September	Follow-up training
October	Select two new committees
November	Final report drafted
December	Final accounts and CORAT audit

1990

January	Train CHWs (6 month report)
February	Train CHWs
March	Follow-up supervision of new CHWs
April	Dissemination Workshop
May	Follow-up training

4.5 Plans for technical support of field operations. CORAT has served us well during the past three years as technical consultants. They will continue to do so. Their assistance in financial matters, supervisory and management techniques, and surveys are invaluable.

4.6 Consultant schedule during the three years. We can expect a representative from CORAT to visit the site approximately every three months. Their services are especially important for the follow-up survey. At other times correspondence with them is helpful in solving problems. In the past we have found them willing to help whenever they were needed.

5.0 HEALTH PROJECT MONITORING

5.1 Plans for monitoring the use of resources to achieve main programme objectives.

This programme's resources will be monitored monthly by a computer printed financial report. This report will contain the months income, expenses and remaining money on hand. Also printed monthly is a mileage report for all vehicles, where their trip was taken to, and the purpose of the trip. All accounts are kept both by hand and by the computer. This helps us to find errors immediately. An annual audit is conducted. All community health monies are kept in a separate bank account.

5.2 Plans for tracking the progress of the programme in terms of service output.

All CHWs of this programme keep three types of records which are turned in to their supervisor monthly. Activities carried out, family planning supplies given and medicines sold are all recorded and then summarized on a committee summary sheets monthly. These are brought to the central office by the supervisors and entered into the computer. The medicine information is used to print invoices for resupply to the committee. The family planning information is used to generate a monthly FP report which is necessary for the pilot project we are carrying out. The activity report is compiled and returned to the committee and CHWs in the monthly newsletter. This is used as a motivational tool. It also helps the central office to see where most efforts are being applied. The information on the activity report can expect to be changed as the programme develops and emphasis is placed on other things. Immunizations given are recorded by the supervisors and brought to the central office at the close of each clinic. Ante-natal statistics will be kept the same way once they are begun.

A comprehensive evaluation report will be written every six months. It is to be completed by April, 31 and October 31 annually as has been done with the current programme. This report will cover progress, problems and changes of plan.

5.3 Indicators of changes in coverage, access, utilization, quality of care, or health status criteria which will be used to gauge the effectiveness of the programme.

Percentage of children from 1 - 4 years fully immunized

Percentage of children dying in hospital from communicable disease

Percentage of women attending ante-natal clinic

Percentage of premature births in the hospital

Percentage of families using family planning commodities

Percentage of cases and deaths from diarrhoeal diseases

Percentage of mothers able to make Oral Rehydration Solution.

5.4 Plan to assess changes in coverage, access, utilization, quality of care, or health status criteria which will be used to gauge effectiveness of programme.

Prior to the commencement of this project, a survey will be conducted which will serve as a baseline for comparison with another survey to be carried out towards the end of this project. The indicators listed above will be assessed and compared to determine what changes have occurred. These results will also be compared with the statistics found in Tenwek Hospital's annual report. The hospital statistics will not be completely accurate as it serves a larger population than this proposed project, but it will give an indication of progress being made, and should in fact indicate some spill over effects of this programme into areas where there are no CHWs.

5.5 Plan for monitoring the number of persons who die in the target population, and causes of death.

CHWs will be responsible for reporting deaths in children under five in the homes they are covering. Also any deaths of pregnant women will be reported by the CHWs along with the cause of death. A report will be sent to the office monthly.

5.6 Plan for tracking the progress of the programme in its impact on morbidity of the target population.

There are no plans for collecting monthly reports of morbidity in the target population. Some indication of morbidity can be gleaned from the types of medicines reported sold. Otherwise this will be gathered from the survey and hospital statistics.

SUSTAINABILITY OF PROJECT

Anticipated average recurrent cost per person of service.

estimated by: total continuing operating costs
estimated number of persons in target group

Currently without capital replacement costs

397,668

70,067 = 5.7 Ksh. average recurrent cost per person of target group (women and children)

This figure for total continuing operating costs represents the annual cost of the programme at present level; omitting training costs, research and capital replacement costs. (Average monthly cost 33,139 x 12 months). No adjustments have been made for expansion. The target population figure is at the current point in time. Looking at this in an identical way except adding a 10% annual increase in costs for each category, (salaries, transportation, data processing and office) the average recurrent cost at the end of three years would be 7.8 KSh.

At end of three years without capital replacement costs

589,869
----- = 7.8 KSh. average recurrent cost per person
75,784 of target group

The 75,784 target population was reached by adding 4% increase annually to the present proposed population for the three years. This figure again does not include costs of training, research or capital replacement costs.

Other ways to look at this are to add capital replacement costs to the estimated figures for both the current time and the end of three years. These annual replacement costs are as follows:

Vehicle - 100,000 KSh. per year (replace every four years)
Motorcycle - 100,000 KSh. per year (replace three of nine yearly)
Data - 24,000 KSh. per year (replace 1 of 2 computers and printers every three years)
Office - 6,400 KSh. per year (replace duplicator every four years).

Currently with capital replacement cost

628,068
----- = 8.9 KSh. average recurrent cost per person
70,067 of target group

At end of three years with capital replacement

820,269
----- = 10.8 KSh. average recurrent cost per person
75,784 of target group

In the opinion of the leaders of this programme, complete financial independence for a service this broad is nearly impossible in any country but especially a third world country. BUT, we are attempting to establish a groundwork which will enable this project to come as close as possible to that goal.

Income is being generated in two ways. First there is a charge for all immunizations given. Secondly there is a profit made on the sale of all drugs. This profit is

twofold. Approximately one half of the profit stays in the community and the other one half comes to the central office.

Looking at the monthly income over the last nine months, while the number of committees and CHWs has been constant, we find that the average receipt from 1 committee is 1,266 KSh. per month.

To approximate the potential percentage of anticipated costs which the project can generate we will use this figure of 1,266 KSh. per committee per month and will use it to study the same four methods used above.

Percentage of recurrent costs covered by income

Currently without capital replacement costs

1,266/= x 15 CHC x 12 months = 227,880
_____ = 57% self-generated

current expenses 397,668

Currently with capital replacement costs

1266/= x 15 CHC x 12 months = 227,880
_____ = 36% self-generated

current expenses 626,068

Although we are presently covering 36% of our recurrent and capital replacement costs, this percentage drops much lower than when the costs of training and expansion are added in.

At end of 3 years without capital replacement costs

1,266/= x 31 CHC x 12 months = 470,952
_____ = 80% self-generated

anticipated expenses 589,869

At end of 3 years with capital replacement costs

1,266/= x 31 CHC x 12 months = 470,952
_____ = 57% self-generated

anticipated expenses 820,269

It is obvious from the above that funding for continued expansion will do much for the long term survival of the programme by increasing the percentage of self-generated income and by decreasing the recurrent costs per target person.

We have three further potential methods of adding to our income. Because of public interest we are considering adding the sale of feminine pads. It will be possible to add a small charge for family planning services when more income is needed. And finally our income will be increased

with the additional receipts from ante-natal clinics.

With these additional methods of income-generation we are hoping to move towards being able to cover 66% of our recurrent costs, including capital replacement.

The additional recurrent costs will need to be found from other sources. It is hoped that someday in the future, the hospital will be financially able to assist with some salary costs. As the office building has just been completely remodeled and new furnishings purchased it should serve us well, without further costs for many years. Replacement of vehicles is a major concern, as the roads here give vehicles a short life span. One way we have of making replacement costs less is the use of motorcycles for all supervision and well baby clinics. We can purchase seven or eight motorcycles for the cost of one small four wheel drive vehicle. Also the cost of running the motorcycles is significantly less than four wheel drive vehicles.

This community based health care programme is an important outreach of the Africa Gospel Church and World Gospel Mission. Both institutions are committed to it and would do all in their power to see that it does not fail. In an unusual situation, both could be called on to help.

5.7 Plan for encouraging self-reliance in personnel, money and equipment needed for the programme.

a) Self-reliance in personnel. In the community the health committee and health workers are volunteers. There is no financial support given to them from the central office. The health committee is responsible to the entire community which causes some external pressure on them to perform. This programme is set up to give full responsibility for the running of the health programme in an area to its committee. This programme's central office is committed to carrying out the committee's requests. This encourages the committee to take responsibility for and receive credit for its actions. Whenever possible, the central office will assist the committee in whatever is asked.

The most important work of the health committee is to see that its CHWs are working and are not having serious problems. This is done by a representative of the health committee visiting each CHW monthly. They visit the CHWs in their homes and see their work first hand. The purpose of this visit is to provide support, solve problems and motivate. These visits have proven to be a very important motivation to the CHWs.

It is much more difficult to plan for self-reliance of the central office personnel. This programme is fortunate to have the support of World Gospel Mission in supplying the salaries for its Director and Coordinator. The other staff all receive a salary that is proportional to their contribution to the programme.

b) Self-reliance in money. The country of Kenya is familiar with the "Harambee Spirit". As a situation requiring financial support arises the community contributes together to meet that need. This is also true in the community health work. The community makes contribution to each health workers training fees and can be called on to assist with other needs. There is a limit to this type of money though as there are so many other things taking place to which the community is required to give.

Once the programme has begun in an area and the CHWs have been trained, they can begin to sell medicines to the community as they are needed. This generates a small profit which remains in the committee for use in the community projects. At the beginning of the project in a new area, a supply of drugs is loaned to the health committee so that the CHWs can get re-supplies as needed. Over the next year this loan is repaid from the committees profits. Once the initial loan is paid off, all profits remain with the committee. These monies can be used as the committee chooses. Some are used to reward the CHWs, others to begin community projects and others to help needy families.

Because there are legitimate expenses involved in being a CHW, the committee can choose to reimburse the health worker for these expenses. Examples of such expenses are, sugar and salt for rehydration solution, soap for cleaning wounds, bus fare for travel to the immunization clinics, etc. This money must come from the community. It has never and will never come from the central office. If there is not enough profit generated, then there is no reimbursement.

c) Self-reliance in equipment. There is a limited amount of equipment needed in this work. In the community a meeting place, and a building for clinic is all that is required. There has been already existing buildings, so there is no expense involved. The committee needs a locked storage box for its drug supply, but once it is purchased it should last for many years. The CHWs have nylon flight bags to carry their drugs, but they are holding up very well and none of the ones that have been in use for over two years have needed to be replaced. When they do, the money can come from the profit generated from the sale of the drugs.

The most costly equipment is needed in the central office. A second computer has been purchased to assist in keeping all financial records, community statistics, work results; print the monthly newsletter and all training materials, generate graphs depicting movement towards set goals and process all correspondence and report writing. The one computer we have used for eight hours everyday for three years has had only one minor repair required. The printer has been maintenance free. This older computer and printer will both need to be replaced by machines of greater capacity within a short while, but other than replacement, we can expect no major costs for a few years.

The newly remodeled and furnished office building should also not require any additional funds for ten years.

There are two unused offices which are available when they are needed.

Motorcycles can be expected to hold up to the stressful condition of the rough, rural roads for no more than three years. This is a major equipment cost which the project cannot expect to cover without assistance. Proper maintenance and repair helps to prolong their life span but they will still need to be replaced every few years. The project's four-wheel drive vehicle has a longer life span but is another costly expense. The leaders of the project believe that assistance will be needed with these expenses.

Drugs and immunization supplies will continue to be purchased from the hospital, at cost plus ten percent for transportation. Because the hospital buys the drugs in bulk, we are able to purchase and sell them at lower costs. The drug costs are covered by the sale of them to the committee. All immunization supplies are covered by the charges for this service. Equipment for clinic, i.e: B/P cuff, stethoscope, scale, etc, should last for many years with proper care. Their replacement costs can be generated from the community.

Housing for additional staff will be provided by Tenwek Hospital.

Self-reliance for operating these required machines is possible and in this project it is probable. Replacement of equipment is much more costly though, and it is felt that some assistance will be necessary.

6.0 EVALUATION AND MONITORING

6.1 Cost-effectiveness. The heart of the evaluation and monitoring methodology is a running management cost-effectiveness study, updated annually and reviewed semi-annually. The cost-effectiveness study is an allocation of costs into each of the following areas:

- Household visits: Most project results are achieved through these visits. Cost per visit is assessed.
- Immunization: The cost per immunization is determined.
- CHNs: Overall cost per CHW is sought.
- Family Planning: The cost per user-year, and approximate cost per couple-year protection is determined for each project.

Carrying out ongoing cost effectiveness studies provides ample motivation for the projects to focus on assuring sufficiently accurate service data and adequate design and analysis of surveys. Service data will, as a natural part of a focus on cost-effectiveness, be regularly reviewed.

It is planned to make every effort, consistent with the community-based approach to minimize the amount of service data required from the CHWs; sufficient to keep them focused on the activities that are important, yet not so much that they will not understand or keep good records nor be so much that data records get in the way of producing results.

6.2 Service Data. Monthly CHW reports are collected and aggregated for the programme. Six monthly reports are summarized and sent to CORAT AFRICA for aggregation with other sub-projects. Six monthly report detail statistics for the period in the areas of:

1. New VHCs and Attrition,
2. New CHWs and Attrition,
3. New Refresher Training,
4. Immunizations given,
5. Children Weighed,
6. New Family Planning (FP) acceptors and ongoing usage,
7. ORT Training, and
8. Latrines and dish racks.

Other operational news is shared as well as future plans for the following period.

6.3 Surveys. Three-year (approximately) surveys were planned to monitor impact in the communities served. A baseline survey was done in 1984. A follow-up survey is planned for September, 1986. Data on deaths of most recent child can be used to estimate changes in infant mortality. (IMR calculated using the "indirect techniques" will be used. In a rural setting, it is difficult to obtain adequately accurate data for direct calculation of IMR). Additional questions will be added to elicit more information on nutrition and immunization. Previous surveys have been focused on FP and have not asked for in-depth information in these areas. An additional full baseline survey may be necessary to gather the appropriate information.

Enough information will be gathered during the baseline and follow-up surveys to enable the estimation of fertility and mortality rates using the indirect techniques according to Brass et al. Such surveys are intended to elicit the changes in health status in the community that could be attributed to the community based interventions.

7.0 FINANCE

7.1 Budget. The total project budget is \$402,211. This proposal requests U.S.A.I.D. grant Tenwek Hospital \$247,664. (62%) from October, 1986, to September, 1989. Tenwek expects to raise \$154,547 support through labor, in kind, and financial support. This sum does not mention substantial overheads for buildings, etc., that are contributed. World Gospel Mission provides missionary salaries and travel expenses. (Appendix B details the budget.)

7.2 Vehicles. Vehicles form a substantial part of this budget. They are, however, necessary to provide transport to the remote areas targeted. Public transport is inadequate or non-existent in these areas.

7.3 Cost-Effectiveness. In the final year the project plans to reach an EOPS target population of 179,200 people living in the households served by CHWs at a cost of \$0.89 per person.

8.0 SUMMARY

Tenwek Community Health has developed a sound maternal child health programme in it's first three years of existence. It is having a significant impact not only in these areas but in family planning as well. The programme's format, teaching material and motivational techniques have been widely emulated.

The Tenwek Programme serves a needy area with few other health resources. Continued expansion will not only increase the target population covered but also better serve those already targeted. Growth will also make the programme much more self-sufficient in meeting it's recurrent expenditures and lower the cost per target person.

The programme and USAID have both benefitted from their partnership during these past three years. However, those standing to benefit the most from continued funding are the mothers and children of Kenya.

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APPENDIX A
TENWEK HOSPITAL CBHD
VERIFIABLE INDICATORS

OUTPUTS	OT, '86/ SE, '87	OT, '87/ SE, '88	OT, '88/ SE, '89	3 YEAR TOTALS
VILLAGE HEALTH COMMITTEES				
ACTIVE VHCS: BEGIN YEAR	21	23	27	
NEW VHCS	2	4	4	10
ATTRITION (NONE EXPECTED)	0	0	0	0
ACTIVE VHCS: YEAR END	23	27	31	
ACTIVE CHWS: BEGIN YEAR	145	171	226	
NEW CHWS	30	60	60	150
ATTRITION (-10% P. A.)	-4	-5	-6	-15
TOTAL CHWS: YEAR END	171	226	280	
CHWS RETAINED	85	171	226	482
ACTIVE CCHWS	0	0	0	
SUPERVISORS: BEGIN YEAR	5	7	7	
NEW SUPVS.	2	0	0	2
ATTRITION	0	0	0	0
SUPERVISORS: YEAR END	7	7	7	
AVG. CHWS/SUPERVISOR	24	32	40	
AVG. HOME VISITS/CHW/MONTH	30	32	33	
TOTAL HOME VISITS	35910	76224	100108	212322
ORT TRAINING AS % OF VISITS	70%	70%	70%	
TOTAL NEW/REPEAT ORT TRAINING	25137	53357	70132	148625
CHWS DISTRIBUTING FP (100%)	171	226	230	
AVG. FP USERS/CHW	13	14	15	
TOTAL YEAR END FP USERS	2223	3164	4200	
MOBILE CLINICS/MONTH	22	25	29	
TOTAL CLINICS	158	300	348	806
CHILDREN SEEN PER CLINIC	125	115	100	
TOTAL CHILDREN SEEN	19750	34500	34800	89050
NEW MOTHERS CLINICS (ECN)/MO.	24	24	24	
TOTAL MOTHER VISITS	4200	7920	9240	21360
IMMUNIZATION DOSES/CHILD SEEN	1.00	0.95	0.85	
TOTAL CHILDREN IMMUN. DOSES	19750	29325	29500	78655
TETANUS IMMUN./MOTHERS' CLINIC	17%	17%	17%	
TOTAL MOTHER IMMUN. DOSES	714	1346	1571	3631
TOTAL IMMUNIZATION DOSES	20464	30671	31151	82286
CHILD WEIGHINGS/CLINIC ATTEND.	60%	60%	60%	
CHILD WEIGHINGS	11850	20700	20880	53430
ARM CIRCUM. MEASURES/CHW VISIT	50%	50%	50%	
TOTAL ARM CIRCUM. MEASUREMENTS	17955	38112	50094	106161

TENWEK CBHD
 U.S.A. I.D. BUDGET (US\$)
 OCT., 1986 TO SEPT., 1989
 0826862000

APPENDIX B

BUDGET ITEM	OT, '86/ SE, '87	OT, '87/ SE, '88	OT, '88 SE, '89	3 YEAR TOTALS
1. TECHNICAL ASSISTANCE	(US\$)	(US\$)	(US\$)	(US\$)
SENIOR SUPERVISOR *	820	1563	1719	4104
SUPERVISORS 1-4 *	2771	5150	5663	13584
SUPERVISOR 5	1125	1283	1416	3829
SUPERVISOR 6	1125	1288	1416	3829
SECRETARY/BOOKKEEPER	-	906	997	1903
LOGISTICS *	219	413	456	1088
CONSULTANTS	-	2500	2750	5250
TOTAL TECH. ASSISTANCE	6060	13108	14417	33585
2. TRAINING				
CHW TRAINING	2644	4875	4938	12657
CCHW TRAINING	182	344	378	904
TOTAL TRAINING	3026	5219	5316	13561
3. COMMODITIES				
1 VEHICLE	-	20625	-	FX20625
9 MOTORBIKES ('86-3; '87-3; '88-3)	7313	8456	9300	FX25069
CHW KITS (NON-DRUG SUPPLIES/EQUIPT) 2781		3625	3998	10394
MEDICAL & IMMUNIZ. EQUIPT *	1706	3250	3575	8531
OFFICE EQUIPMENT	-	1000	-	1000
COMPUTER EQUIPMENT	625	4063	756	FX 5444
COMPUTER SUPPLIES	900	1000	1100	FX 3000
TOTAL COMMODITIES	13325	42019	15719	74663
4. OTHER EXPENSES				
VEHICLE RUNNING COSTS (1)				
YEAR 1: 11667 KM X \$.313/KM	3646	-	-	3646
YEAR 2: 20000 KM X \$.344/KM	-	6875	7563	14453
MOTORBIKES (8)				
YEAR 1: 36000 KM X \$.125/KM	7266	-	-	7266
YEAR 2: 180000 KM X \$.138/KM	-	22500	24750	47250
TRAVEL *	729	1375	1513	3617
OFFICE EXPENSE *	729	1375	1513	3617
WORKSHOPS	-	563	406	969
AUDIT *	625	1719	2031	4375
TOTAL OTHER EXPENSES	12995	34407	37776	85178
SUB-TOTAL	35406	94753	76228	206337
CONTINGENCY/INFLATION (20%)	7081	18950	15246	41277
SUB-PROJECT REQUEST TO USAID:\$	42487	113703	91474	247664

*MARCH TO SEPT., 1987, ONLY.
 FX= FOREIGN EXCHANGE REQUIRED.

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TENWEK CBHD
 LOCAL/OTHER CONTRIBUTION (US\$)
 OCT., 1986 TO SEPT., 1989
 0826862145

APPENDIX B (CONT.)

BUDGET ITEM	OT, '86/ SE, '87	OT, '87/ SE, '88	OT, '88 SE, '89	3 YEAR TOTALS
1. TECHNICAL ASSISTANCE	(US\$)	(US\$)	(US\$)	(US\$)
DIRECTOR (PARTIAL)	911	2250	2475	5636
COORDINATOR	3646	9000	9900	22546
ASSISTANT COORDINATOR	3646	9000	9900	22546
SECRETARY/BOOKKEEPER	3646	-	-	3646
*CHW SERVICES (\$12.50/CHW/MO)	13825	33165	46464	93454
TOTAL TECH. ASSISTANCE	25674	53415	68739	147828
3. COMMODITIES				
VEHICLE (DEPRECIATED 75%)	3906	-	-	3906
3 MOTORBIKES (DEPRECIATED 50%)	2813	-	-	2813
TOTAL COMMODITIES	6719	-	-	6719
TOTAL LOCAL/OTHER SOURCES	32393	53415	68739	154547
PERCENT OF GRAND TOTAL BUDGET	0.43	0.32	0.43	0.38
GRAND TOTAL BUDGET: US\$	74830	167118	160213	402211
SUB-PROJECT TARGET POPULATION SERVED			179200	179200
FINAL YEAR COST PER PERSON SERVED		US\$	0.89	
3 YEAR COST PER PERSON SERVED			US\$	2.24

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INITIAL ENVIRONMENTAL EXAMINATION
OR CATEGORICAL EXCLUSION

Project Country : Kenya

Project Title and Number : CORAT Child
Survival and Family
Planning (615-0241)

Funding : \$1.285 million

Life of Project : FY 1986 - FY 1989

IEE Prepared by : Barry MacDonald

Environmental Actions Recommended :

Positive Determination _____

Negative Determination _____

or

Categorical Exclusion _____ X _____

In accordance with Section 216.2 (c) (2) (viii), it is recommended that this project be excluded from further environmental review.

Action Requested by: Steven W. Sindin
Director, USAID/Kenya

Date: 9/11/86

Concurrence:

Bureau Environmental Advisor,
AFR/TD/SDP Decision

Clearance: GC/AFR RLA K. Hansen
USAID/Kenya: Gordon Bertolin GB
Acting Chief, Office of Projects

REDSO/ESA: John Gaudet JG
Regional Environmental Officer

I. Examination of the Nature, Scope and Magnitude of Environmental Impacts

A. Description of the Project:

The overall goal of the CORAT Child Survival and Family Planning Project is to increase awareness of the benefits of modern methods of preventative health, encourage use of modern family planning methods and to make supplies and services conveniently accessible through community development organizations. The purpose of the proposed program is to assist Kenyan churches to expand community based child survival and primary health care programs in the diocese of Maseno South, Maseno West and Eldoret and the Tenwek Hospital region.

The project will be implemented through the Christian Organizations Research Advisory Trust (CORAT). A.I.D. financing will be provided to the project by means of an Operational Program Grant (OPG). The project consists of the following elements: (1) support for two on-going community based health care/family planning subprojects and two new subprojects which focus on (a) identifying and training village health committees, (b) selecting and training community health workers, (c) supervising and retraining the health workers, (d) providing information and education to families on vital aspects of family health, (e) providing simple medicines and referrals to families, and (f) providing immunization services through staff supervisors; (2) oversight and technical/management assistance to the subprojects in management and health planning areas; (3) management workshops for subproject managers; and (4) impact evaluations through community surveys.

B. Identification and Evaluation of Environmental Impacts

1. Identification of Possible Impacts

The purpose of this project is to provide training, management assistance and a limited amount of commodities to support the work of village health workers at the community level. On a social level, improvements in village level health delivery services will assist in improving the physical well-being of those affected by the project. There will be no direct environmental impact except for a possible improvement in general sanitation at the village level. No water supply systems, waste water treatment centers or other facilities of a like nature will be constructed under the project.

2. Impact Evaluation

The nature of the project precludes any significant impact on the physical or natural environment.

II. Recommendation for Environmental Action

In accordance with AID Regulation 16 paragraph 2.16.2 (c) (2) (viii), it is recommended that this project be excluded from further environmental examination.

UNCLASSIFIED
Department of State

INCOMING TELEGRAM

Berry
A. Standen
PR. J.

PAGE 01 NAIROB 35090 00 OF 02 150929Z 6073 03061A AID2164
ACTION AID-80

NAIROB 35090 00 OF 02 150929Z 6073 03061A

FAMILY PLANNING PROJECT IS TO INCREASE AWARENESS OF THE BENEFITS OF MODERN METHODS OF PREVENTATIVE HEALTH, ENCOURAGE USE OF MODERN FAMILY PLANNING METHODS AND TO MAKE SUPPLIES AND SERVICES CONVENIENTLY ACCESSIBLE THROUGH COMMUNITY DEVELOPMENT ORGANIZATIONS. THE PURPOSE OF THE PROPOSED PROGRAM IS TO ASSIST PENAN CHURCHES TO EXPAND COMMUNITY BASED CHILD SURVIVAL AND PRIMARY HEALTH CARE PROGRAMS IN THE DIOCESE OF MUMBO SOUTH, HAZENI WEST AND ELDORET AND THE TENGER HOSPITAL REGION.

ACTION OFFICE AFER-01
INFO AFCA-01 AFPO-01 AMAD-01 GC-01 GCAM-01 SINC-02 SACT-01
AFDA-01 RELO-01 TELE-01 /022 AD

INFO LOG-00 COPY-01 AF-00 CIAE-00 EB-00 DODE-00 /009 V
-----155175 150930Z /23

C 150926Z SEP 66
FM AMEMBACC/ NAIROBI
TO SECSTATE WASHDC IMMEDIATE 9113

UNCLAS NAIROBI 35090

AIDAC

FOR: AFR/TF/DP - ATTN: BUREAU ENVIRONMENTAL OFFICER,
- BESSIE BRYAN
- AFR/PO - TOM LOGGREN

E.O. 12356: N/A
SUBJECT: IEE APPROVAL FOR CHILD SURVIVAL AND HEALTH DEVELOPMENT PROJECT LIS-0241

REF: NAIROBI 25401

1. MISSION REQUESTS FOR BUREAU ENVIRONMENTAL OFFICER REVIEW AND COMPLIANCE WITH FOLLOWING IEE REQUEST FOR CATEGORICAL EXCLUSION FOR SUBJECT PROJECT. PLEASE NOTIFY MISSION OF ACTION BY CABLE.

INITIAL ENVIRONMENTAL EXAMINATION OR CATEGORICAL EXCLUSIONS

PROJECT COUNTRY - KENYA

PROJECT TITLE AND NUMBER - COAST CHILD SURVIVAL AND FAMILY PLANNING 615-0041

FUNDING - \$ DOLLARS 1.285 MILLION

LIFE OF PROJECT - FY 1966 - FY 1969

IEE PREPARED BY - BRYAN BACCO/ALD

ENVIRONMENTAL ACTION RECOMMENDED:

POSITIVE DETERMINATIONS:

NEGATIVE DETERMINATIONS:

CATEGORICAL EXCLUSIONS: - X - - - - -

IN ACCORDANCE WITH SECTION 216.2 (C) (2) (VI)(I), IT IS RECOMMENDED THAT THIS PROJECT BE EXCLUDED FROM FURTHER ENVIRONMENTAL REVIEW.

ACTION REQUESTED BY: STEVEN W. BONDING

DIRECTOR, USAID/KENYA

DATE: SEPTEMBER 13, 1966

CONCURRENCE: Yes: X No:

BUREAU ENVIRONMENTAL ADVISOR,
AFR/TF/DP DECISION

Date 9/25/66

Bestie Bryan, AFR/TF/DP
1. DESCRIPTION OF THE PROJECT, SCOPE AND MAGNITUDE OF ENVIRONMENTAL IMPACTS

A. DESCRIPTION OF THE PROJECT:

THE OVER-ALL GOAL OF THE COAST CHILD SURVIVAL AND

- THE PROJECT WILL BE IMPLEMENTED THROUGH THE CHRISTIAN ORGANIZATIONS RESEARCH ADVISORY TRUST (CORAT). A I.O. FINANCING WILL BE PROVIDED TO THE PROJECT BY MEANS OF AN OPERATIONAL PROGRAM GRANT (OPG). THE PROJECT CONSISTS OF THE FOLLOWING ELEMENTS: (1) SUPPORT FOR TWO ON-GOING COMMUNITY BASED HEALTH CARE/FAMILY PLANNING SUBPROJECTS AND TWO NEW SUBPROJECTS, WHICH FOCUS ON (1) IDENTIFYING AND TRAINING VILLAGE HEALTH COMMITTEES, (2) SELECTING AND TRAINING COMMUNITY HEALTH WORKERS, (3) SUPERVISING AND RETRAINING THE HEALTH WORKERS, (4) PROVIDING INFORMATION AND EDUCATION TO FAMILIES ON VITAL ASPECTS OF FAMILY HEALTH, (5) PROVIDING SIMPLE MEDICINES AND REFERRALS TO FAMILIES, AND (6) PROVIDING IMMUNIZATION SERVICES THROUGH STAFF SUPERVISORS; (2) OVERSIGHT AND TECHNICAL/MANAGEMENT ASSISTANCE TO THE SUBPROJECTS IN MANAGEMENT AND HEALTH PLANNING AREAS; (3) MANAGEMENT WORKSHOPS FOR SUBPROJECT MANAGERS; AND (4) IMPACT EVALUATIONS THROUGH COMMUNITY SURVEYS.

B. IDENTIFICATION AND EVALUATION OF ENVIRONMENTAL IMPACTS

1. IDENTIFICATION OF POSSIBLE IMPACTS

THE PURPOSE OF THIS PROJECT IS TO PROVIDE TRAINING, MANAGEMENT ASSISTANCE AND A LIMITED AMOUNT OF COUNSELING TO SUPPORT THE WORK OF VILLAGE HEALTH WORKERS AT THE COMMUNITY LEVEL. ON A SOCIAL LEVEL, IMPROVEMENTS IN VILLAGE LEVEL HEALTH DELIVERY SERVICES WILL ASSIST IN IMPROVING THE PHYSICAL WELL-BEING OF THOSE AFFECTED BY THE PROJECT. THERE WILL BE NO DIRECT ENVIRONMENTAL IMPACT EXCEPT FOR A POSSIBLE IMPROVEMENT IN GENERAL SANITATION AT THE VILLAGE LEVEL. NO WATER SUPPLY SYSTEMS, WATER TREATMENT CENTERS OR OTHER FACILITIES OF A LIKE NATURE WILL BE CONSTRUCTED UNDER THE PROJECT.

2. IMPACT EVALUATION

THE NATURE OF THE PROJECT PRECLUDES ANY SIGNIFICANT IMPACT ON THE PHYSICAL OR NATURAL ENVIRONMENT.

III. RECOMMENDATION FOR ENVIRONMENTAL ACTION

IN ACCORDANCE WITH AID REGULATION 16 PARAGRAPH 2.16.2 (C) (2) (VI)(I), IT IS RECOMMENDED THAT THIS PROJECT BE EXCLUDED FROM FURTHER ENVIRONMENTAL EXAMINATION.

J. FYI. REG/TF/DA ALA HAS CLEARED IEE TEXT.
THMAS

Bunyan Bryan 9/26/66 9/26/86
Clearance GC/AFR Date

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FY 1987 PROJECT STATUTORY CHECKLISTS

5C(1) - COUNTRY CHECKLIST

Listed below are statutory criteria applicable generally to FAA funds, and criteria applicable to individual fund sources: Development Assistance and Economic Support Fund.

A. GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

1. FAA Sec. 481(h)(1); FY 1987 Continuing Resolution Sec. 526. Has it been determined or certified to the Congress by the President that the government of the recipient country has failed to take adequate measures or steps to prevent narcotic and psychotropic drugs or other controlled substances (as listed in the schedules in section 202 of the Comprehensive Drug Abuse and Prevention Control Act of 1971) which are cultivated, produced or processed illicitly, in whole or in part, in such country or transported through such country, from being sold illegally within the jurisdiction of such country to United States Government personnel or their dependents or from entering the United States unlawfully? No.

2. FAA Sec. 481(h)(4). Has the President determined that the recipient country has not taken adequate steps to prevent (a) the processing, in whole or in part, in such country of narcotic and psychotropic drugs or other controlled substances, (b) the transportation through such country of narcotic and psychotropic drugs or other No.

controlled substances, and
(c) the use of such country
as a refuge for illegal drug
traffickers?

3. FAA Sec. 620(c). If assistance is to a government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) the debt is not denied or contested by such government? No.
4. FAA Sec. 620(e)(1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities? No.
5. FAA Sec. 620(a), 620(f), 620(D); FY 1987 Continuing Resolution Sec. 512. Is recipient country a Communist country? If so, has the President determined that assistance to the country is important to the national interests of the United States? Will assistance or reparations be provided to Angola, Cambodia, Cuba, Iraq, Syria, Vietnam, Libya, or South Yemen? Will assistance be provided to Afghanistan without a certification? No.

6. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction by mob action of U.S. property? No.
7. FAA Sec. 620(l). Has the country failed to enter into an agreement with OPIC? No.
8. FAA Sec. 620(o); Fishermen's Protective Act of 1967, as amended, Sec. 5. (a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters? (b) If so, has any deduction required by the Fishermen's Protective Act been made? (a) No.
(b) No.
9. FAA Sec. 620(g); FY 1987 Continuing Resolution Sec. 518. (a) Has the government of the recipient country been in default for more than six months on interest or principal of any AID loan to the country? (b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the appropriation bill (or continuing resolution) appropriates funds? (a) No.
(b) No.
10. FAA Sec. 620(s). If contemplated assistance is development loan or from Economic Support Fund, has the Administrator taken into account the amount of foreign exchange or other resources which the country has spent on military equipment? (Reference may be made to the annual "Taking into Consideration" memo: "Yes, taken into N/A.

account by the Administrator at time of approval of Agency OYB". This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.)

11. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption? No.

12. FAA Sec. 620(u). What is the payment status of the country's U.M. obligations? If the country is in arrears, were such arrearages taken into account by the AID Administrator in determining the current AID Operational Year Budget? (Reference may be made to the Taking into Consideration memo.) Kenya is not in arrears.

13. FAA Sec. 620A. Has the government of the recipient country aided or abetted, by granting sanctuary from prosecution to, any individual or group which has committed an act of international terrorism? No.

14. ISDCA of 1985 Sec. 552(b). Has the Secretary of State determined that the country is a high terrorist threat country after the Secretary of Transportation has determined, pursuant to section 1115(e)(2) of the Federal Aviation Act of No.

1/6/85

1958, that an airport in the country does not maintain and administer effective security measures?

15. FAA Sec 666. Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA? No.
16. FAA Sec. 669, 670. Has the country, after August 3, 1977, delivered or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan). No.
17. FAA Sec. 670. If the country is a non-nuclear weapon state, has it, on or after August 8, 1985, exported illegally (or attempted to export illegally) from the United States any material, equipment, or technology which would contribute significantly to the ability of such country to manufacture a nuclear explosive device? No.
18. ISDCA of 1981 Sec. 720. Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the The position of the GOK on this matter was taken into account by the Administrator in a memo dated November 14, 1986, in which the OYB for Kenya was approved.

Non-Aligned Countries to the 36th General Assembly of the U.N. of Sept. 25 and 28, 1981, and failed to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the Taking into Consider- ation memo.)

19. FY 1987 Continuing Resolution Sec. 540.

Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions? Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilization?

No.

Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?

No.

20. FY 1987 Continuing Resolution. Is the assistance being made available to any organization or program which has been determined as supporting or participating in the management of a program of coercive abortion or involuntary sterilization?

No.

If assistance is from the population functional account, are any of the funds to be made available

No.

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to family planning projects which do not offer, either directly or through referral to or information about access to, a broad range of family planning, methods and services?

21. FY 1987 Continuing Resolution, Sec. 528. Has the recipient country been determined by the President to have engaged in a consistent pattern of opposition to the foreign policy of the United States?

No.

22. FY 1987 Continuing Resolution, Sec. 513. Has the duly elected Head of Government of the country been deposed by military coup or decree?

No.

B. FUNDING SOURCE CRITERIA FOR COUNTRY ELIGIBILITY

1. Development Assistance Country Criteria

FAA Sec. 116. Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy?

No.

2. Economic Support Fund Country Criteria

FAA Sec. 502B. Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the country made such significant improvements in its human rights record that furnishing such assistance is in the national interest?

N/A.

5C(2) PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A includes criteria applicable to all projects. Part B applies to projects funded from specific sources only: B.1. applies to all projects funded with Development Assistance loans, and B.3. applies to projects funded from ESF.

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

A. GENERAL CRITERIA FOR PROJECTS

1. FY 1987 Continuing Resolution, Sec. 523; FAA Sec. 634A; Sec. 553(b).

Describe how authorizing and appropriations committees of Senate and House have been or will be notified concerning the project.

A Congressional Notification regarding an FY 87 obligation was submitted to Congress on December 9 1986, and expired without objection on December 24, 1986.

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$500,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

(a) Yes.

(b) Yes.

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

No further legislation is required.

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4. FAA Sec. 611(b); FY 1987 Continuing Resolution Sec. 501. If for water or water-related land resource construction, has project met the standards and criteria as set forth in the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See AID Handbook 3 for new guidelines.) N/A:
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project? N/A.
6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs. No. It is a country-specific child survival and family planning activity.
- 7.* FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, and credit unions, and savings and loan associations; (d) discourage The project is designed to promote initiative among Kenyan villagers to assist in meeting primary health care needs. As such, it will assist in improving the efficiency of the health delivery system in Kenya.

monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

8. FAA Sec. 601(b).

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

The project will be implemented by a Kenyan based Private Voluntary Organization. No other linkages to private U.S. participation are anticipated.

9. FAA Sec. 612(b), 636(h); FY 1987 Continuing Resolution Sec. 507. Describe steps

taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.

All communities and local organizations participating in the project will provide local resources to support the project. CORAF will also contribute significantly to the project's local currency requirements.

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

No, the U.S. does not own excess Kenyan currency.

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

Yes, where applicable.

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12. FY 1987 Continuing Resolution Secs. 521, 522.
If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?
- This assistance is not for the production of any commodity for export.
13. FAA 118(c) and (d). Does the project comply with the environmental procedures set forth in AID Regulation 16? Does the project or program take into consideration the problem of the destruction of tropical forests?
- Yes. A categorical exclusion was approved by the Africa Bureau environmental officer.
14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollars or local currency generated therefrom)?
- N/A.
15. FY 1987 Continuing Resolution, Sec. 532. Is disbursement of the assistance conditioned solely on the basis of the policies of any multilateral institution?
- No.
16. ISDCA of 1985 Sec. 310; FY 1987 Continuing Resolution. For development assistance projects, how much of the funds will be available only for activities of economically and socially
- CORAT, the implementing agent, is an indigenous Kenyan PVO.

disadvantaged enterprises, historically black colleges and universities, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)?

17. FY 87 Continuing Resolution, Sec. 559. Will the proposed project involve the obligation or expenditure of funds to procure directly feasibility studies or prefeasibility studies for, or project profiles of potential investment in the manufacture for export to the U.S. or third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, luggage, flat goods, work gloves or leather wearing apparel? Or to assist directly the establishment of facilities for the manufacture and export of such items to the U.S. or third countries in direct competition with U.S. exports?

The project is not an export oriented project and poses no problem for U.S. manufacturers or exporters.

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B. FUNDING CRITERIA FOR PROJECT

**1. Development Assistance
Project Criteria**

a. FAA Sec. 102(a), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

This project can only function successfully through the active participation and collaboration of village communities. In turn, the benefits of improved health resulting from the project will accrue directly to the villagers themselves. Women and young children are a particular target of project interventions.

b. FAA Sec. 103, 103A, 104, 105, 106. Does the project fit the criteria for the type of funds (functional account) being used?

Section 104. Yes.

c. FAA Sec. 107. Is emphasis on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

The project emphasizes an appropriate level of technology for meeting village level primary health care and family planning needs.

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

N/A since this is a grant to a PVO. However, in accordance with AID policy, at least 25% of the cost of the project will come from non-AID resources.

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

By improving the physical well-being of project beneficiaries, the project will assist in increasing their productive capacity.

f. FAA Sec. 128(b). If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority?

The project will work directly with the poor majority at the village level.

g. FAA Sec. 281(b).

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

The selection and support of a village health worker is a process which will strengthen self-government at the village level. The effort is designed to meet the desire for improved health care and family planning services on the part of those communities which will participate in the project. Local Kenyans will be used as technical consultants to specific project activities.

h. FY 1937 Continuing Resolution, Sec. 558. Will the proposed assistance be for any testing or breeding, feasibility study, variety improvement or introduction, consultancy, publication, conference or training in connection with the growth or production in the recipient country of an agricultural commodity for export which would compete with a similar commodity grown or produced in the U.S., excluding: (1) activities designed to increase food security which will not have significant impact on the export of U.S. agricultural commodities; or (2) research activities intended primarily to benefit American producers?

The project is not an agricultural activity and will therefore have no impact in any way on U.S. agriculture.

5C(3) - STANDARD ITEM CHECKLIST

Listed below are the statutory items which normally will be covered routinely in those provisions of an assistance agreement dealing with its implementation, or covered in the agreement by imposing limits on certain uses of funds. ,

These items are arranged under the general headings of (A) Procurement, (B) Construction, and (C) Other Restrictions.

A. Procurement

1. FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?
The project is being implemented through an indigenous Kenyan PVO. Should any commodities or services be purchased in the U.S., applicable contract provisions regarding participation of U.S. small business will be adhered to.
2. FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or under delegation from him?
Yes.
3. FAA Sec. 604(d). If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company?
Kenya does not discriminate against U.S. marine companies.
4. FAA Sec. 604(e); ISDCA of 1980 Sec. 705(a). If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)
No agricultural commodities or products will be financed by the project.

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5. FAA Sec. 604(g). Will construction or engineering services be procured from firms of countries which receive direct economic assistance under the FAA and which are otherwise eligible under Code 941, but which have attained a competitive capability in international markets in one of these areas? Do these countries permit United States firms to compete for construction or engineering services financed from assistance programs of these countries?

No construction or engineering services will be financed.

6. FAA Sec. 603. Is the shipping excluded from compliance with requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent that such vessels are available at fair and reasonable rates?

7. FAA Sec. 621. If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? If the facilities of other Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

Services will be provided by the indigenous Kenya PVO CORAT. Services by other Federal agencies are not anticipated.

8. International Air Transport Fair Competitive Practices Act, 1974. If air transportation of persons or property is financed on grant basis, will U. S. carriers be used to the extent such service is available? Yes

9. FY 1987 Continuing Resolution Sec. 504. If the U.S. Government is a party to a contract for procurement, will the contract contain a provision authorizing termination of such contract for the convenience of the United States? N/A

B. Construction

1. FAA Sec. 601(d). If capital (e.g., construction) project, will U.S. engineering and professional services to be used? N/A

2. FAA Sec. 611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable? N/A

3. FAA Sec. 320(k). If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed \$100 million (except for productive enterprises in Egypt that were described in the CP)? N/A

C. Other Restrictions

1. FAA Sec. 122(b). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter? N/A
2. FAA Sec. 301(d). If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights? N/A
3. FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the communist-bloc countries? Yes.
4. Will arrangements preclude use of financing:
- a. FAA Sec. 104(f); FY 1987 Continuing Resolution Secs. 525,540. (1) To pay for performance of abortions as a method of family planning or to motivate or coerce persons to practice abortions; (2) to pay for performance of involuntary sterilization as method of family planning; or to coerce or provide financial incentive to any person to undergo sterilization; (3) to pay for any biomedical research which relates, in whole or part, to methods or the performance of abortions or involuntary sterilizations as a means of family planning; (4) to lobby for abortion? (1) Yes.
(2) Yes.
(3) Yes.
(4) Yes.

b. FAA Sec. 483. To reimburse persons, in the form of cash payments, whose illicit drug crops are eradicated? Yes.

c. FAA Sec. 620(g). To compensate owners for expropriated nationalized property? Yes.

d. FAA Sec. 650. To provide training or advice or provide any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes.

e. FAA Sec. 652. For CIA activities? Yes.

f. FAA Sec. 636(i). For purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? Yes.

g. FY 1987 Continuing Resolution, Sec. 503. To pay pensions, annuities, retirement pay, or adjusted service compensation for military personnel? Yes.

h. FY 1987 Continuing Resolution, Sec. 505. To pay U.N. assessments, arrearages for dues? Yes.

i. FY 1987 Continuing Resolution, Sec. 506. To carry out provisions of FAA section 209(d) (Transfer of FAA funds to multilateral organizations for lending)? Yes.

j. FY 1987 Continuing Resolution, Sec. 510. To finance the export of nuclear equipment, fuel, or technology or to train foreign nationals in nuclear fields? Yes

k. FY 1987 Continuing Resolution, Sec. 511. Will assistance be provided for the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights?

No.

l. FY 1987 Continuing Resolution, Sec. 516. To be used for publicity or propaganda purposes within U.S. not authorized by Congress?

Yes.