7.2.7 Administrative Structure

A Project Management Committee will be established. The committee will be responsible for the overall management and evaluation of the project. The proposed committee will be headed by the Principal Secretary, MOHP. The Principal Secretary will be assisted by a controller who will be appointed by him/her. Proposed members of the committee include the controller of clinical medicine, controller of preventive medicine, the National Safe Motherhood Co-ordinator, project technical advisors, representatives from technical organisations including the College of Medicine, international agencies, and non-governmental organisations. The committee will meet every six months to review the progress made by the project and revise the project plan.

The project will be implemented by a Project Support Group that will be established within the framework of the National Safe Motherhood Programme Office. MOHP will appoint a project manager who will operate under the National Safe Motherhood Programme Co-ordinator. The project manager will also act as the secretary of the project management committee.

The Project Support Group will consist of the project manager, technical advisors, a representative of the health education unit at the central level, appointed officials of MOHP, and a representative of each district project team (see below for the explanation of the district project team). The Project Support Group will be responsible for daily implementation and management of the project and will issue project reports every six months prior to Project Management Committee meetings.

At the district level, a district project team will be formed. The District Health Officer, assisted by other staff, will be in charge of the team. The MCH Co-ordinator, Reproductive Health Co-ordinator, a technical advisor, and the person in charge of health education at the district level will be members of the team.

7.2.8 Monitoring and Evaluation

The proposed Project Management Committee will be responsibility for monitoring and evaluation of the project. The committee will develop a comprehensive evaluation strategy during the first phase of the project. The strategy will include the identification of indicators, methods of verification, responsible organisations, and a time frame.

1) EOC and referral

Data to monitor project outputs will be generated through the Reproductive Health Information System, which is provided support under the project. Additional information such as number of participants for training and results of field observation will be generated by proposed district project teams and the Project Support Group at the national level. The Project Support Group will be responsible for compiling and publishing all data in six-monthly project reports.

Though overall the project targets all women of reproductive age, some activities will be carried out on a pilot basis. Proper evaluations will be carried out to determine the suitability for wider implementation. Baseline surveys will be conducted for each pilot study area and, if possible, in other areas to better understand the impact of the pilot activity.

2) IEC activities

Three to six months after IEC activities are implemented, monitoring will be done to determine how well the messages are reaching the target groups. The results of the monitoring will be used to design future IEC activities and materials.

During the design stage of IEC activities, the behaviour change objectives should be clearly stated. Indicators to evaluate the IEC activities should be designed simultaneously, to ensure that they correlate with the information being disseminated. Possible indicators of behavioural change are the increase in the number of women who utilise ANC and the increase in the proportion of institutional deliveries.

Ideally, surveys should be conducted before and after project implementation to measure the evidence of behaviour change. These surveys, however, are often expensive and time consuming. In this case, national or regional health statistics will be used as indicators of change.

When there are no available statistics that can be used to measure the impact of the IEC activities, qualitative research tools (focus group discussions, in-depth interviews and observations) will be used to measure the changes in community knowledge and attitudes as well as any self-reported changes in behaviour concerning maternal health.

3) Advocacy

The monitoring and evaluation of advocacy activities will be done by interviewing the target groups (planners, decision makers, etc.). The number of press conferences and public speeches in which they mention the issues of safe motherhood, gender, and women's rights will be counted as an indicator of their supportive attitude. Newspaper articles will be collected.

7.2.9 Budget

Project Management	
Equipment	US$165,900
Transport	US$265,000
Support staff	US$208,800
Office running costs	US$390,000
Sub-total	US$1,029,700
Drugs and consumables	US$79,000

Medical equipment	US$390,000
Staff development (in-country)	US$987,600
Staff development (in Japan or in third country)	US$94,800
IEC/Advocacy	US$250,000
Baseline studies (US$10,000 x 5)	US$50,000
Planning Workshops (US$4,800 x10)	US$48,000
Monitoring and evaluation	US$50,000
(including $15,000 for regular field visits by the district project teams)	
Operational research (pilot studies)	US$147,470
Reproductive Health Handbook	US$67,390
Community co-operative transportation system	US$19,340
Radio systems and motorcycle ambulances	US$52,740
Waiting home	US$8,000
Total	US$3,126,570

7.2.10 Required Human Resources

1) Long-term experts

Project advisor (leader)	1 X 60 MM
Long-term experts:	
Obstetrician/gynaecologist	1 X 60 MM
Midwife	2 X 60 MM, 3 X 36 MM
Health education/IEC specialist	
(reproductive health handbook, IEC activities)	1 X 60 MM
Community mobilisation specialist	1 X 24 MM
Equipment/maintenance specialist	1 X 60 MM
Co-ordinator	1 X 60 MM

2) Short-term experts

Expert on health system/planning to deal with matter of ambulance distribution and prioritisation guidelines	1 X 2 MM X 3 times
Expert on logistics of drugs and supplies	1 X 2 MM X 3 times
Expert on health information system	1 X 2 MM X 5 times
Obstetrician/gynaecologist	1 X 1 MM X 5 times
Epidemiologist	1 X 4 MM X 3 times

7.2.11 Important Assumptions

- Standardised radio communication systems are installed at all health facilities and ambulances by another proposed project (Improvement of Health Facilities for Provision of Essential Obstetric Care).
- Training modules for in-service training and IPCC are developed by DFID.

- Placement of clinical officers at district hospitals after attending OB/GYN skills enhancement training is secured by MOHP and the districts concerned.
- Review of maternal mortality and morbidity is conducted prior to review of care protocols.
- Availability of blood transfusions at district level is improved by proposed EU-funded project.
- Diagnostic test kits for blood screening are provided under proposed EU-funded project.
- Management skills and supervision are improved under EU-funded decentralisation and management project.
- Retention of health workers at rural health facilities is improved after decentralisation and improved management.
- Human resource database is established.
- All established posts of MOHP facilities are filled.
- Graduates from the Malawi College of Health Sciences increase as planned under DFID-supported project.
- Project activities are supported by the national policy (i.e., health sector reforms) which promotes decentralisation and community participation.
- MOHP provides locum tenens for heath facilities while selected clinical officers attend OB/GYN skills enhancement course.

7.2.12 PDM

PDM is shown as Table 7. 4.

7.2.13 Timetable

The timetable for project activities is shown in Table 7. 5.

Table 7. 4 PDM for Project 2

PROJECT DESIGN MATRIX (PDM) | PROJECT TITLE: Comprehensive Maternal Health | DURATION: five years

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
OVERALL GOAL The maternal mortality rate is reduced	Reduction in the maternal mortality ratio	DHS, Census, community surveys	National data will accurately reflect the changes in the project area
PROJECT PURPOSE More women receive improved essential obstetric care (EOC)	Increase in the proportion of institutional deliveries	Annual District Health Report, surveys, qualitative research	Project benefits are sustained long enough to demonstrate impact on project goal
SPECIFIC OBJECTIVES (OUTPUTS) 1 Capacity for programme management is built 2 Quality and availability of EOC at health facilities are improved 3 Routine obstetric referral is improved. 4 Delays in obtaining emergency obstetric care are reduced 5 Reproductive Health Information System is strengthened 6 Research on maternal mortality and morbidity in Malawi is promoted 7 Understanding of safe motherhood, gender and women's rights issues in the communities is increased 8 Understanding of women's health, their rights, and gender issues by policy makers is increased	1 Implementation of a uniformed supervision with use of standardised format of documentation 2 Increased No. of health facilities providing BEOC and CE functions per unit (500,000) of population 3 Increased proportion of women with obstetric complications referred 4 Increased No. of women with obstetric emergencies transported to referral centres 5 RHI routinely obtained 6 Increased No. of reports on maternal mortality and morbidity 7 Increased understanding in the communities 8 Increased understanding by policy makers	Study using checklist of functions Maternity registers, referral slips Ambulance logbooks RHI report, RHI forms Project progress report, other reports qualitative research, surveys, in-depth interviews, newspaper clippings	- Placement of clinical officers at district hospitals after attending OB/GYN skills enhancement training is secured by MOHP and the districts concerned - Availability of blood transfusions at district level is improved by proposed EU-funded project - Diagnostic test kits for blood screening is provided under proposed EU-funded project - Retention of health workers at rural health facilities is improved after decentralization and improved management - Standardised radio communication system is installed at all health facilities by another proposed project
ACTIVITIES 1.1-1.3 Train project manager and National Safe Motherhood Co-ordinator at Master's level in programme management 1.4-1.6 Train DHMT in reproductive health management and supervision 2.1 Refine care protocols 2.2 Develop skills of health workers in EOC/LSS 2.3 Develop skills of health workers in IPCC 2.4 Conduct on-site facility management and motivational training 2.5 Provide in-country OB/GYN skills enhancement training for COs 2.6 Provide essential equipment, drugs and supplies 3.1 Revise ANC guidelines 3.2 Establish monitoring system for referral feedback 3.3 Conduct operational research on reproductive health handbook 4.1 Develop clear guidelines for distribution of ambulances 4.2 Develop clear guidelines for prioritisation of ambulance dispatch 4.3 Train transportation officers and hospital administrators on prioritisation guidelines	**INPUTS** Personnel: Long-term experts: Project advisor 1 X 60MM Obstetrician/gynaecologist 1 X 60MM Midwife 2 X 60MM, 3 X 36MM Health education/IEC 1 X 60MM Equipment/maintenance 1 X 60MM Co-ordinator 1 X 60MM Short-term experts: Health system/planning 1 X 2MM X 3 Logistics of drugs & supplies 1 X 2MM X 3 Health information system 1 X 2MM X 5 Obstetrician/gynaecologist 1 X 1MM X 5 Epidemiologist 1 X 4MM X 3 Project management (Support staff, office equipment, transport, office running costs): US$1,029,700 Drugs and consumables: US$79,000 Medical equipment US$390,000 Staff development In-country: US$987,600 Overseas: US$94,800		**PRE-CONDITIONS** - Training modules for in-service training and IPCC are developed by DFID - Health facilities run by ministries other than MOHP and CHAM in the project districts agree to send their heath workers for training. - Project activities are supported by the national policy - Communities are motivated to participate in the activities

ACTIVITIES (continued)	INPUTS (continued)		
4.4 Train drivers on prioritisation guidelines	IEC/advocacy	US$250,000	
4.5 Carry out 6-monthly audit of ambulance logbooks	Baseline studies	US$10,000 X 5: US$50,000	
4.6 Conduct operational research on alternative transfer system between villages and health facilities	Planning and workshops	US$4,800 X 10: US$48,000	
5.1 Review national training manual and forms	Monitoring and evaluation	US$50,000	
5.2 Make modifications to manual and forms	Operational research (pilot activities)	US$161,270	
5.3 Conduct training of staff concerned in RHIS	Grand total	US$3,126,570	
5.4 Send generated data to the Project Support Group for compilation			
5.5 Evaluate the information system			
6.1 Produce confidential national report on maternal deaths			
6.2 Investigate relationship between HIV infection and maternal mortality			
6.3 Investigate incidence of maternal morbidity and prevalence of permanent complications related to pregnancy / delivery			
6.4 Review all maternal deaths at district level			
7.1 Conduct baseline studies for IEC activities			
7.2 Design IEC activities			
7.3 Identify community members as IEC providers			
7.4 Develop training materials for the IEC providers			
7.5 Develop IEC materials (pre-test, revise)			
7.6 Conduct training of the IEC providers			
7.7 Carry out IEC activities			
7.8 Monitor the IEC activities			
7.9 Evaluate the IEC activities			
7.10 Formulate a working group for community maternal death audit programme			
7.11 Train the working group			
7.12 Train the community members			
7.13 Implement the programme			
7.14 Monitor the programme			
8.1 Organise meetings with partners to develop IEC strategy			
8.2 Develop IEC materials targeting policy makers			
8.3 Conduct the IEC activities			
8.4 Organise advocacy meetings and workshops			
8.5 Monitor and evaluate the activities			

Table 7.5 Timetable for Project 2

Activities	1st year	2nd year	3rd year	4th year	5th year
(Preparatory activity) Establish ties					
1.1-1.3 Send project manager and National Safe Motherhood Coordinator for Master's level training					
1.4-1.6 Train DHMT in reproductive health management and supervision					
2.1, 3.1 Refine care protocols and ANC guidelines					
2.2-2.3 Develop skills of health workers in EOC/LSS and Interpersonal Communication					
2.4 Conduct on-site facility management and motivational training					
2.5 Provide in-country OB/GYN skills enhancement training for clinical officers					
2.6 Provide essential equipment, drugs and supplies					
3.2 Establish monitoring system for feedback on referral					
3.3 Conduct operational research on reproductive health handbook					
4.1-4.2 Develop guidelines for distribution of ambulances and prioritisation of ambulance dispatch					
4.3-4.4 Train transportation officers, hospital administrators and drivers on prioritisation guidelines.					
4.6 Conduct operational research on alternative referral system between villages and health facilities					
5.1-5.2 Review national training manual and forms for RHIS and make modifications					
5.3 Conduct training of staff concerned in RHIS					
6.1-6.4 Carry out research on maternal mortality and morbidity in Malawi					
7.1. Conduct baseline studies for IEC activities					
7.2-4&5. Design IEC activities and develop IEC materials					

PROJECT 3: PROMOTING COMMUNITY-BASED MANAGEMENT OF CHILDHOOD ILLNESSES (CBMCI)

7.3.1 Introduction

This project aims to improve the nutritional status of children through lessening the burden of diseases and offering a better follow-up system for the under five population. Basic health services for common childhood illnesses will be offered in the communities by community-based health workers/volunteers and drug sellers. Health workers/volunteers involved in CBMCI will be supported by peripheral health facilities.

7.3.2 Problems Addressed

The nutritional status of children in Malawi is so dire that more than 50 percent of children under five are classified as undernourished. In Chapter 4, the main causes of this serious situation were analysed and summarised as follows:

1) The growth monitoring programme (GMP) has failed to effectively prevent the mildly undernourished from manifest malnutrition.
2) Measures to prevent a relapse in children who have been discharged from NRUs following treatment for severe malnutrition are inadequate.
3) The quantity and quality of oral food intake are neither sufficient nor proper.
4) Frequent bouts of infectious diseases rob the appetite and obstruct the absorption of nutrients.

The main issues that this project addresses are the following:

1) Frequent infections

There is a vicious cycle of frequent infections and malnutrition. Infectious diseases directly increase the risk of undernutrition as well as IMR and U5MR. In addition, undernutrition most likely increases child mortality rates, as WHO remarks that more than half of the child deaths in developing countries are related to undernutrition. Therefore, the prevention, early diagnosis and proper treatment of common infectious diseases can be a potent intervention to reduce the prevalence of undernutrition as well as to directly decrease IMR and U5MR.

2) Difficulty in offering a wide range of heath services as a package

Many conditions are necessary in order to reduce common childhood diseases:

- Outbreaks of vaccine-preventable diseases, especially measles, are controlled through improving immunisation coverage.
- Morbidity of diarrhoeal diseases and parasite infestation is reduced by means of securing safe water, boiling drinking water, cooking well, and other hygienic practices.
- Vermifuges are regularly given to school-aged children.

- Severe malaria cases are reduced by early treatment, and morbidity of malaria is reduced by having children sleep under bed nets.
- Low birth weight babies are reduced by improving the coverage of malarial prophylaxis among pregnant women.
- Severe ARI cases are decreased by early diagnosis and proper treatment of mild cases.

Unfortunately, it is very difficult to offer such a wide range of health care services to the whole population, especially to those who live in areas distant from health facilities.

3) Sales of improper drugs by shopkeepers

Groceries are used as the first source of treatment for childhood illnesses by about half of all households in rural areas. Of all households actually purchasing medicines, over 80 percent bought them from a grocery. About 70 percent of all drug purchases for children were because of fever or presumed malaria. Shopkeepers generally know the symptoms of malaria, but only a small percentage actually stocked or sold SP, the proper drug for treatment. The second most common complaint that brought people to groceries was a cough, but illegal antibiotics were sold more frequently for this than legal cough remedies.

4) Insufficient performance of current GMP

The current GMP is weak in predicting and detecting children likely to become malnourished, and preventing them from falling malnourished. Measures are not taken until children are found to be underweight.

5) Frequent relapses of malnutrition

A relapse of malnutrition often occurs in children who are discharged from NRU. This is partly because the follow-up system for them is inadequate. There is no systematised support to mobilise GMVs and HSAs for this purpose. And in many districts, a feedback referral system (from NRU to health centres and/or community health workers) has not been established.

7.3.3 Overall Goal, Project Purpose and Specific Objectives

Overall Goal

Improved nutrition status of U5 children.

Project Purpose

More effective community-based management of common childhood illnesses

Specific Objectives (Outputs)

1) Enhanced knowledge and skills regarding common childhood illnesses among community health workers/volunteers and informal drug sellers
2) Effective IMCI provided at all health facilities
3) Strong co-ordination established between CBMCI and IMBI
4) Drug sellers role in CBMCI recognised and developed

7.3.4 Strategies

1) Integration and standardisation

The tendency in Malawi has been to address different health problems individually through vertical programmes. This type of system is difficult to coordinate and expensive to run due to duplications, and in actuality has had little impact on childhood nutrition or mortality rates. Recently however, there has been a move in the PHC sector to combine growth monitoring, food supplementation, immunisation, basic curative services and health education. WHO and UNICEF are both supporting the scheme of Integrated Management of Childhood Illnesses, through which standardised health care is provided to a wider population based on better coordination among the vertical programmes from the grass-roots to higher decision-making levels. Expanding IMCI to all 26 districts has been adopted as a goal of NHP 1999-2004.

2) Health for all

Promoting facility-based IMCI will not fully cover the population in Malawi because more than half of the people live more than five kilometres from a health facility. Therefore, it is essential to mobilise community-based health workers and volunteers in order to offer a basic health service for all. In this project, a new concept in Malawi, community-based management of childhood illnesses (CBMCI), is proposed.

CBMCI covers the following:

- Preventive health care such as securing safe water, boiling drinking water, promoting hygienic behaviour and sanitation, promoting exclusive breast feeding up to six months, and timely introduction of energy- and nutrient-rich complementary foods while breast feeding is continued up to two years or more
- Curative health services for malnutrition, diarrhoea, malaria, anaemia, ARI, worm infestation, common eye diseases, etc.
- Supply of basic drugs including oral rehydration solution (ORS), antimalarials, antibiotics, vermifuges, and antipyretics

Many of these items are also listed in a booklet titled as " Improving family and community practices – A component of the IMCI strategy", which is published by WHO.

3) Mobilisation of shopkeepers

A large majority of rural Malawians rely on groceries as a primary source of medicines. Although these shopkeepers are generally trusted by communities, their knowledge and practices are not sufficient, and may even be causing harm. Failure to recognise the important role of shopkeepers and bring them into the frontline of PHC could undermine the efforts of CBMCI.

Shopkeepers are in a position to contribute to PHC. If a large number are properly trained and begin to give better advice according to the guidelines developed, they will boost CBMCI activities. In communities where DRFs are not established, shopkeepers may be

utilised to dispense drugs under the CBMCI scheme. In places where there is no active VHC, shopkeepers play a more important role, complementing CBMCI activities.

4) Human resources development

To successfully promote either IMCI or CBMCI, the adequate training of health workers/ volunteers is essential. The training provided under the project will be a valuable chance for health workers to update their knowledge and skills. Training in local languages will be especially useful for CBMCI workers and shopkeepers because they will be expected to deliver health education using IEC materials written in local languages.

7.3.5 Linkages

This project is integrated with Project 4 (Improved Community-Level PHC Through Effective Self-Medication); and linked with Project 6 (Community-based Nutrition Management Project, CONMAP).

WHO, UNICEF, UNDP and other UN agencies in Malawi are launching a new project with similar purpose and methodology in a couple of districts. Therefore, this project will target different areas in order to avoid duplication.

7.3.6 Beneficiary Groups

Under five children are the primary beneficiaries. The benefits of improved knowledge, skills and drug supplies will also spill over to older children and adults in the community. Secondary beneficiaries include all those receiving training: health workers and volunteers and owners of groceries.

7.3.7 Activities

1) Prepare training materials and train team of trainers

1-1) Prepare textbooks, trainer's guides, supervisor's manuals, etc.
One district will be selected as the pilot area for IMCI/CBMCI training activities. A Malawi IMCI textbook will be developed based on the international WHO/UNICEF IMCI manual, but reflecting the local situation, health policy and treatment guidelines. The CBMCI textbook, GMP logbook, teaching materials including trainer's guides and transparencies for overhead projectors (OHPs), supervisor's check lists and supervisor's manuals will also be prepared. The CBMCI textbook will be translated into *Chichewa* and other local languages to make it most accessible .

1-2) Train trainers of IMCI/CBMCI workers
Train four to five people as trainers of IMCI for the pilot district based on the materials

prepared at the district training sites (see 1-3). These trainers will be either clinical officers or medical assistants. Another four to five people will be trained as trainers of CBMCI for the same district. They will be chosen from the ranks of environmental health officers, primary health nurses, clinical officers, medical assistants or health assistants. In the second year, four to five people from each district will be trained as trainers of IMCI based on the materials developed at the regional training sites. Another four to five people from each district will be trained as trainers of CBMCI.

1-3) Prepare for training of shopkeepers (drug sellers)
Preparatory activities for the shopkeeper training will be carried out in the same district selected as the pilot area for IMCI/CBMCI training. NGOs will be selected to provide the training under the scheme. Decisions will be made on the appropriate level of training, and then the CBMCI training materials and KEMRI shopkeeper training manuals will be adapted for the local shopkeeper training course.

1-4) Train trainers of shopkeepers
Initially five trainers will be trained and evaluated. They should have previous health service training experiences.

1-5) Equip regional/district training sites
Existing regional and district HSA training sites will be utilised for this training. The sites will be equipped with an OHP, screen, video player with monitor and reference books.

1-6) Improve capacity for programme management at central level
Send candidates for graduate level training in programme management.

2) Implement IMCI at health facilities in all districts

2-1) Train facility-based health workers on IMCI
In the first year, the facility-based health workers (MAs and HAs) from the pilot district will be trained as practitioners of IMCI. The five-day training courses will be based on the IMCI textbook, be held at the district training site, and be facilitated by the district level IMCI trainers. The textbook and teaching materials will be revised following each training.

In the second and third years, facility-based health workers will be trained on IMCI nation-wide. The two-week training course will be based on the revised IMCI textbook, be held at district training sites, and be facilitated by the district level IMCI trainers. As each training will hold up to 30 participants, five to seven sessions will be required in each district for training IMCI practitioners.

2-2) Train hospital-based staff on the feedback referral system
Both IMCI and CBMCI stress the importance of timely referral to higher health facilities. A feedback referral system from health facilities to community-based health

workers/volunteers is also important, particularly for the patients who are discharged from NRUs after rehabilitation for severe malnutrition. Because these children are at risk of relapsing into malnutrition soon after discharge, they must be closely observed by community health workers. Standardised referral forms and feedback referral forms will be prepared and distributed under the scheme of IMCI/CBMCI in order to establish a reciprocal referral system between health facilities and community health workers. The feedback information will be beneficial for CBMCI practitioners, too, as a means of on-the-job training.

2-3) Visit health centres to supervise IMCI
Trained supervisors from the district health office will conduct supervisory visits to health centres/posts regularly and review the IMCI/CBMCI activities in a systematic manner following a checklist. Drugs and vaccines will be provided at the same time. Motorcycles will be provided to the district health offices as the means of transport. Solar systems and electricity-driven refrigerators will also be installed at all health centres that do not have electricity for cold storage for vaccines.

2-4) Supply IMCI textbooks for the pre-service training of MAs/HAs.

3) Introduce CBMCI in close co-ordination with IMCI

CBMCI will be introduced mainly in villages not covered by health facilities.

3-1) Select villages
CBMCI will be introduced to selected areas in each district based on rapid needs assessment surveys. In general, more remote communities are considered to have a greater need because of difficult access to health facilities. It is expected that in these areas, the CBMCI scheme will achieve success because of high motivation among both health workers and beneficiaries to receive information on the diagnosis of common diseases and prescription of basic drugs.

3-2) Establish and sensitise VHCs
VHCs will be established in villages where they are not currently active and committee members will be sensitised to CBMCI. In other villages, VHC members will be informed about the proposed CBMCI scheme.

3-3) Train VHC members on CBMCI
A five-day training course will be held based on the local language version of the CBMCI textbook. Trainers will be dispatched from the district level for village-based training. Since each training session will accommodate up to 30 participants, VHC members from neighbouring villages will be trained together.

3-4) Carry out initial evaluation of CBMCI

3-5) Train GMVs on new GMP techniques
GMVs in participating villages will attend relevant training sessions in order to be re-

trained on the new GMP techniques such as GMP logbook, home visits and community-based feedings.

3-6) Train HSAs on supervision of CBMCI activities
HSAs who cover areas where CBMCI is to be introduced will be trained as CBMCI supervisors using the supervisor's manual/checklist. Since each training will accommodate up to 30 participants, five to seven sessions will be required in each district.

3-7) Conduct regular supervisory visits to villages
HSAs will be responsible to carry out regular supervisory visits to VHC members and GMVs regarding CBMCI and GMP activities. Bicycles will be provided to the health centres and health posts as a means of transport for supervisory visits.

3-8) Introduce DRFs to CBMCI villages
For CBMCI to effectively operate, a stable supply of vaccines and basic drugs is necessary. DRFs are considered the ideal way for villages to secure drugs, so they will be introduced along with CBMCI. The same VHC members running CBMCI will operate the DRFs which would supply drugs at a reasonable cost. In areas where free medicine supply schemes have been introduced through the BMHI, it will be better to re-train BMHI workers on CBMCI and to promote co-ordination with IMCI rather than to newly train VHC members.

4) Train shopkeepers (drug sellers) to provide CBMCI services

4-1) Train shopkeepers
A three-day training session has been planned by the Malaria Control Programme, which could be expanded to four days in order to include ORT and cough. The initial training will be offered in the pilot district. After an initial evaluation (4-2), the revised training programme will continue throughout the remainder of the project. Depending on the number of NGOs and target districts, training may be scheduled simultaneously in several districts. Assuming four days (one week) training for each group of 30 shopkeepers, and 30 weeks per year, each NGO group could train 900 shopkeepers per year, or approximately the entire number per district. The training also could be spread out over two or three years.

4-2) Conduct initial evaluation of shopkeepers' performance
An intensive evaluation will be carried out several months after the initial training. Problems regarding the effectiveness of the training, community reaction, and sustainability issues will be evaluated and solutions devised. The training programme and other strategies will be revised accordingly.

4-3) Disseminate information
Media messages such as printed leaflets in local languages to complement drug sales, posters and radio messages will be developed in the initial phase and tested in the

pilot district. Community discussions, posters and mass media campaigns will be tested nation-wide during the expansion phase.

4-4) Monitor shopkeepers

NGO staff and IDH Taskforce members will make random visits to trained shop owners to check on their performance, discuss problems, and ensure that no prohibited drugs are on the premises. These monitoring teams may include some of the trained trainers. In addition, a system will be established for comparing the changes in drug usage and morbidity/mortality in project districts and control districts.

7.3.8 Administrative Structure

The department of Acute Respiratory Infection/Control of Diarrhoeal Diseases (ARI/CDD) of Community Health Sciences Unit (CHSU) and UNICEF will be the main providers of technical guidance for the project. MOHP headquarters will have ultimate control over the project and will be responsible for overall co-ordination, especially with regard to further expansion of IMCI and introduction of CBMCI. Under the Controller of Prevention Services, PHC co-ordinators, Planning Section, Nutrition Unit, Human Education Unit, Departments of ARI/CDD, malaria, schistosomiasis (helminths infestation), and tuberculosis of CHSU, and EPI section will oversee policy making and implementation of activities in their respective areas. Representatives of CHAM and some district MCH co-ordinators will be included in the national-level co-ordinating body.

1) IMCI/CBMCI steering committee at the central level

The central-level committee will be composed of the Controller of Prevention Services, PHC co-ordinators, and representatives from the Planning, Nutrition, Human Education and EPI sections of MOHP. Managers from vertical programmes such as ARI/CDD, malaria, schistosomiasis, and tuberculosis will also be invited to join the committee. Some of the district MCH co-ordinators and representatives from CHAM and the IDH taskforce will also join the committee. Some of these members will be IMCI/CBMCI supervisors.

2) IMCI/CBMCI steering committees at the district level

The district-level committee will be composed of the DHO, DEHO, MCH co-ordinator, and representatives of MAs and HSAs. Some of these people will be IMCI/CBMCI trainers or supervisors in the district. Supervisors sent from the central level will attend the committee meeting.

3) CBMCI committees at the health centre level

These will be composed of health workers from the health centres (MAs and HSAs), and representatives of VHCs and GMVs. Supervisors from the district level will attend committee meetings.

4) Administrators of shopkeepers training

This component will be managed by a subcommittee with members from the IDH taskforce and NGOs with district-level responsibilities.

7.3.9 Monitoring and Evaluation

The following indicators will be used to monitor and evaluate the project:

- Number of trainers trained
- Quantity and quality of training materials prepared
- Number of health workers trained on IMCI
- Percentage of cases that are treated effectively at PHC facilities (evaluated by reviewing records)
- Number of VHCs trained on CBMCI
- Percentage of mild cases that are treated properly at the community level (evaluated by reviewing records)
- Availability of basic drugs for CBMCI (evaluated by reviewing records)
- Changes in the first-line treatment patterns (drugs sold) by shopkeepers (evaluated through mid-term and final household surveys)

7.3.10 Budget

Preparation of textbooks, trainer's guides, supervisor's manuals, etc.	US$34,200
Advocacy and preparatory activities for shopkeepers' training	US$78,020
Equipment for regional/district training sites	US$37,700
Master's level training for management staff	US$105,000
Selection of villages that introduce CBMCI	US$7,300
Training of trainers for IMCI/CBMCI and drug sellers	US$123,920
Training of facility-based health workers, VHC members and HSAs	US$1,070,980
Training and monitoring of shopkeepers	US$2,133,333
Monthly IMCI supervisory visits to health centres (including motor bikes, parts and fuel)	US$333,344
Monthly CBMCI supervisory visits to villages (including bicycles and parts)	US$626,600
Quarterly visits by the project team and initial evaluation of CBMCI	US$80,060
Total:	US$5,325,000 (including 15% contingencies and inflation)

7.3.11 Required Human Resources

1) Local

Steering Committee members, trainers, health workers (COs, MAs, HAs, HSAs), and volunteers (VHCs, GMVs) will be selected to operate IMCI/CBMCI. Some VHC members

will be newly recruited. Similarly, a subcommittee composed of members from the IDH taskforce and NGOs will be involved in the shopkeepers' training. The Project will hire a small number of local staffs.

2) Outside

External experts required for this project include a project leader, one person each in the areas of curative medicine, hygiene/preventive medicine, and health information system, and a co-ordinator for the shopkeepers' training.

7.3.12 Important Assumptions

- Budget for vaccines is sufficient.
- Formal (government) drug delivery system will be able to supply basic drugs to the frontline of IMCI/CBMCI programmes.

7.3.13 PDM

PDM is shown as Table 7.6

7.3.14 Timetable

The timetable for project activities is shown in Table 7.7.

Table 7.6 PDM for Project 3

PROJECT DESIGN MARIX (PDM) — PROJECT TITLE: Community-based Management of Childhood Illnesses

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
OVERALL GOAL Improved nutrition status of U5 children	Reduction in malnutrition	Results of National Nutrition Survey	
PROJECT PURPOSE Common childhood illnesses are effectively managed in the communities.	Percentage of cases treated properly at the community level	Review of records	
OUTPUTS 1. Enhanced knowledge and skills at community level	Training material prepared		
2. IMCI is provided at all health facilities	Number of health workers trained on IMCI	Review of records	
3. Strong co-ordination established between CBMCI and IMCI	Number of VHCs trained on CBMCI	Review of records	
4. Drug sellers' role in CBMCI recognised and developed	Changes in the first-line treatment patterns in the project areas	Mid-term and final household surveys	
ACTIVITIES 1.1 Prepare textbooks, trainer's guides, supervisor's manuals, etc. 1.2 Train trainers for IMCI/CBMCI workers 1.3 Preparatory activities for shopkeepers' training 1.4 Train trainers for shopkeepers 1.5 Equip regional/district training sites. 1.6 Improve programme management capacity 2.1 Train facility-based health workers on IMCI 2.2 Train hospital staff on feedback referral 2.3 Visit health centres to supervise IMCH 3.1 Select villages 3.2 Establish and sensitise VHCs 3.3 Train VHC members on CBMCI 3.4 Initial evaluation of CBMCI 3.5 Train GMVs on new GMP techniques 3.6 Train HSAs on supervision of CBMCI activities 3.7 Practise regular supervisory visits to villages 3.8 Introduce DRFs to CBMCI villages 4.1 Train shopkeepers on CBMCI 4.2 Initial evaluation of shopkeepers' performance 4.3 Media dissemination (through media) 4.4 Monitoring of shopkeepers	**INPUTS** **Personnel:** Steering Committee members, IDH taskforce members, trainers, health workers (COs, MAs, HAs, HSAs), volunteers (VHCs, GMVs), NGOs, local staff for Project **Equipment:** textbooks, manuals, OHPs, motor bikes, bicycles **Operational costs:** development of training materials, training courses, fuel Total estimated operational costs: US$5,325,000		PRE-CONDITIONS 1. Budget for vaccines is sufficient 2. Official drug delivery system is able to supply basic drugs to the frontline of IMCI/CBMCI programmes

Table 7.7 Timetable for Project 3

Activities	1st year	2nd year	3rd year	4th year	5th year
1.1 Preparation of textbooks, trainer's guides, supervisor's manuals, etc.	———				
1.2 Training of trainers for IMCI/CBMCI workers	.....	———			
1.3 Preparatory activities for shopkeepers' training	———				
1.4 Training of trainers for shopkeepers	.....	—	—	—	
1.5 Equipping of regional/district HSA training sites	—				
2.1 Training of facility-based health workers on IMCI	....	———	———		
2.2 Training of hospital staff on feedback referral	....	———	———		
2.3 IMCI supervisory visits to health centres	.....	———	———	———	———
3.1 Selection of villages	....	———	———		
3.2 Establishing and sensitising VHCs	....	———	———		
3.3 Training of VHC members on CBMCI	....	———	———		
3.4 Initial evaluation of CBMCI	—				
3.5 Training of GMVs on new GMP techniques	....	———	———		
3.6 Train HSAs on supervision of CBMCI activities	....	———	———		
3.7 Regular suervisory visits to villages	....	———	———	———	———
3.8 Introduction of DRFs to the CBMCI villages	.....	———	———	———	———
4.1 Training of shopkeepers	.....	—	———	———	—
4.2 Initial evaluation of shopkeepers' performance		—			
4.3 Information dissemination (through media)	—	— —	———	— —	

PROJECT 4: IMPROVING THE ROLE OF DRUG-SELLERS IN PRIMARY HEALTH CARE

7.4.1 Introduction

Village groceries are the most frequently used source of first-line treatment for common childhood illnesses. This project aims to correct the deficiencies in knowledge and practice of shopkeepers through training and mass media. It is expected that referrals will be encouraged and the sale and inappropriate usage of antibiotics reduced.

7.4.2 Problems Addressed

1) High usage of drugs purchased at nearby groceries due to poor access to health facilities

In rural areas, groceries are used as the first source of treatment for child illnesses by about half of all households. Of all households actually purchasing medicines, over 80 percent bought them from a grocery.

2) Lack of community awareness of the seriousness of childhood fevers/malaria, diarrhoea, and ARI, and appropriate treatments

People often do not respond to childhood illnesses appropriately. This is mainly because they lack awareness of the seriousness of the disease and the best way to treat it, or because they do not have the resources (time, transport, money) to seek the required treatment.

People generally trust the shopkeepers but do not often ask for advice. Shopkeepers generally only sell people the medicine they ask for, that is, they do not "prescribe". Few shopkeepers advised a simulated patient to bring a child whose condition did not improve to a health facility.

Most shopkeepers were aware of at least one aspect of irrational drug use. All shopkeepers sampled said they would welcome additional training, mainly because it would enable them to serve their customers better. One or more people other than the owner also worked in the shops at times.

3) Low usage of SP treatment for child fevers due to unavailability or cost

About 70 percent of all drug purchases for children were because of fever or presumed malaria, but the preferred first-line drug SP was bought in only 10 to 17 percent of fever cases. Shopkeepers generally knew the symptoms of malaria, but a relatively small percentage actually stocked or sold SP. The price of SP was fairly high compared to other common medicines. The only source of SP on the GSL is from Pharmanova, which is strip-packed in packages of 3 tablets, with instructions.

4) High level of illegal sales of antibiotics and other dangerous drugs

Groceries and other general merchandise shops can legally sell only the drugs registered on the Malawi General Sale List. However, while there is legislative basis, there is no means of enforcing the law regarding drug sales. Groceries do not need to be licensed by

any authority, and the Pharmacies, Medicines, and Poisons Board does not have any local officers.

Antibiotics are sold in about 18.2 percent of all cases of child illness. Apparently this is demand-driven: people believe that antibiotics are the most effective medicine for certain conditions. Many of the antibiotics and other drugs of dubious origin were not properly stored.

Few shopkeepers sold any treatment for diarrhoea other than antibiotics. Salt-sugar solution (ORS) was fairly well-known in a few places.

7.4.3 Overall Goal, Project Purpose and Specific Objectives

Overall goal
Reduction in child mortality and morbidity due to key diseases through more effective self-medication

Project purpose
Improvement of the availability and appropriate use of GSL (OTC) drugs from groceries in villages without a DRF

Specific objectives (Outputs)
1) Shopkeepers' role in PHC developed
2) Improved access to correct information and appropriate treatment for some of the most common potentially fatal childhood illnesses, specifically malaria, diarrhoea, and acute respiratory infection among mothers/caretakers
3) Risk of accelerated resistance to antibiotics reduced
4) Reduced illegal sales of antibiotics and other drugs not authorised for general sale

Sub-objectives
- Grocery and kiosk operators sell more appropriate drugs and give more accurate advice about selected illnesses.
- Drug sellers sell fewer antibiotics
- People are better informed about self medication and when children should be taken to a health facility
- SP more available at a low price
- Drug-selling activities of groceries actively monitored

7.4.4 Strategies

1) Coverage
The Master Plan for this activity proposes nation-wide geographical coverage.

Public education through mass media: Public education through the mass media will be nation-wide, through AM broadcasting on Malawi Broadcasting Company.

By its nature, mass media reaches a large number of people. In Malawi, there is no feasible way to limit this to certain geographical areas, although use of FM broadcasting

would be essentially limited to the main urban areas, but the primary target of this project is rural areas. On the other hand, storekeeper training and monitoring can be focused on specific target areas, the number of which would be limited by the budget and other available resources.

Self-sustaining storekeeper training programme: Storekeeper training will be conducted in all districts according to priorities and available resources. The programme will be partially self-sustaining by requiring shopkeepers to pay part of the training costs.

Improved physical access: Key primary health care services will be made more available within close range of communities. Physical access has been shown in Malawi and other countries to be the most important determinant of the choice of first treatment. The Cycle 2 study found that mothers bought drugs at village groceries 50 percent of the time when their child was ill.

2) Work through existing resources and organisations

Existing resources and organisations will be utilised, primarily the small grocery shops and kiosks which already exist in most of Malawi's 46,000 villages. These are relatively stable small informal commercial enterprises, which are connected to supplies of drugs through an established network of chain and independent wholesalers. NGOs with prior experience in Village Health Committee and DRF training will be used for managing training activities. Monitoring functions will be done by the NGOs with the help of the IDH Taskforce. The PHC division and Malaria Control Programme can provide technical support.

3) Community empowerment through health education

Communities will be empowered through additional knowledge, awareness and ability to buy correct drugs at affordable prices. This is the same strategy behind the DRFs, which has been effective.

4) Improved usage of antibiotics

Improper usage of antibiotics will be reduced by an increased awareness of the dangers through civic education. Shopkeepers who are trained will be under an obligation not to sell antibiotics and other illegal drugs. This is the only feasible alternative to active enforcement, which is beyond the ability of MOPH at this time.

5) Monitoring of activities and results

Monitoring activities and results will be completed in all districts.

7.4.5 Linkages

The project will have close linkages with the following public and private entities:

- Wholesalers, manufacturers, and importers of drugs
- Village Health Committees, to coordinate selection of shopkeepers and provide face-to-face training
- The Illicit Drug Handling Taskforce and the Pharmacy, Medicines, and Poisons Board
- Social Marketing Programme, for coordination with the ORS (Thanzi) and bednet programmes

- Malaria Control Programme, for technical advice
- KEMRI (Kenya) Shopkeepers training programme, for training materials and technical advice
- International Network on Rational Use of Drugs (INRUD), for technical support
- CBMCI Project(s)

7.4.6 Beneficiary Groups

Under five children are the main beneficiaries of this proposed project. The benefits of improved drug usage will also spill over to older children, pregnant women, and adults.

7.4.7 Activities and Timetable

1) Preparatory activities

1-1) Select initial pilot area and NGO for project implementation.
One district will be chosen for initial shopkeeper training activities. The NGO selected should have some experience in training Village Health Committees and establishing Drug Revolving Funds.

1-2) Select trainers.
Trainers should have previous health service training experience. Initially, five trainers will be trained and evaluated. Once the large-scale training starts, five trainers from each of two districts will be trained at each session.

1-3) Adapt training materials.
Decide on shopkeeper training levels, and adapt curriculum materials from VHW training and KEMRI shopkeeper training manuals. A trainer's manual and a shopkeeper's manual will be produced.

1-4) Coordinate with ORS (*Thanzi*) and Impregnated Bednets Social Marketing Programme
Although these two products have been introduced through commercial channels, there are currently no plans to train shopkeepers.

1-5) Develop media messages.
The package design for child SP in local languages, posters and radio messages will be developed.

1-6) Negotiate with SP suppliers.
The present Novidar is stripped in 3's and contains incomplete dosage information. A special child package for SP, with local language and/or pictorial instructions will be developed. Promotional possibilities will also be discussed, for example, a lower initial price in exchange for a media campaign funded by the project.

1-7) Baseline study.
The pre-project pattern of first-line treatment of child fever, diarrhoea, and cough will be assessed through a household survey similar to that done in Cycle 2 of this study. The use of antibiotics can be monitored using the same instrument.

2) Training of trainers

Approximately five trainers for the initial pilot district will be trained. Training curriculum will include the project philosophy and design, didactic methods, and the actual training material. After the initial evaluation, the training of trainers activity will be modified, and trainers trained in groups of ten. Other NGOs will be asked to attend the TOT and put forward proposals for participating in the project during the large-scale phase.

3) Initial training of shop owners

There are approximately 46,000 villages in Malawi. If half of them have a grocery which sells drugs, this means that on average there are over 800 shops per district. Clearly a compromise must be made between quality and quantity of training. A three-day training session has been planned by the Malaria Control Programme, which could be expanded to 4 days in order to include ORT and cough. The final target number of trained shopkeepers will depend on the budget available and the results of the initial evaluation. The willingness of shopkeepers to pay for training will also be explored during this initial training period.

4) Media dissemination

Posters, community discussions, and mass media campaigns will be tested in this period.

5) Initial evaluation

An intensive evaluation will be carried out several months after the initial training. Problems regarding the effectiveness of the training, community reaction, and sustainability issues will be evaluated and solutions devised. The training program and other strategies will be revised accordingly.

6) Large-scale training

The revised training programme will continue through the final year of the project. Depending on the number of NGOs and target districts, training could occur simultaneously in several districts. Assuming one week (4 days) training for each group of 25 to 30 shop owners, repeated 6 to 8 times per year, each NGO group could train 150 shopkeepers per year. Continued for 3.5 years, this would allow training of 600+ shopkeepers, out of an estimated average of 900 per district.

7) Continuous site monitoring and co-ordination with linkages

NGO staff and the IDH Taskforce will make random visits to trained shop owners to check on training, discuss problems, and ensure that no prohibited drugs are on the premises. These may include some of the trained trainers. In addition, a system will be established for comparing the changes in drug usage and morbidity/mortality in project districts and control districts.

7.4.8 Administrative Structure

The project will be managed through a subcommittee of the IDH taskforce and NGOs with district-level responsibilities. As mentioned above, NGOs currently active in each district will be invited to propose a mode of participation in the shopkeepers training and monitoring. They will use their own facilities, personnel, and transport. Costs incurred by the IDH taskforce in their monitoring activities will be covered by this project.

7.4.9 Monitoring and Evaluation

The overall project accomplishments will be evaluated by the criterion of the changes in the first-line treatment patterns in the project areas. This will be done through mid-term and final household surveys.

The advantage of using a national media campaign but a local training programme is that it becomes possible to evaluate the individual impacts of the shopkeeper training and of the mass media campaign, by comparing outcomes in project districts with non-project districts. Since the project districts will have received interventions 1) + 2), and the non-project districts will have received intervention 1) only, comparison with a baseline of the outcomes in the non-project districts will measure the impact of the mass media campaign by itself, while the difference in results between the non-project and project districts will represent the impact of intervention 2) alone.

7.4.10 Budget

National media campaign	**MK**	**1,451,000**
Radio message production	MK	7,000
Air time	MK	1,444,000
Local media (per district)	**MK**	**500,000**
Poster design	MK	100,000
Poster production	MK	40,000
Drama briefings	MK	360,000
Direct personnel costs (per district)	**MK**	**1,560,000**
NGO organisation and project management staff	MK	1,200,000
Honorarium to IDH Task Force for monitoring	MK	300,000
Trainers for TOT	MK	60,000
Shopkeeper training costs (per district)	**MK**	**1,750,000**
Per group of 30 shopkeepers (4 days)	MK	1,750,000
Monitoring team costs (per district)	**MK**	**33,000**
Transportation	MK	6,000
Allowances	MK	27,000
Per-district Total	**MK**	**3,843,000**
Total costs (National + Per-district)	**MK**	**5,294,000**
Inflation and contingency	MK	529,000
Total for one district	**MK**	**5,823,000**
		(= US$129,400)

If N is the number of districts in which this project is implemented, the total cost over 5 years of implementing this project would be: 1.45 + (N x 3.84) million MK, plus 10 percent for contingencies and inflation.

7.4.11 Required Human Resources

NGO personnel with general health experience will be needed. Staff with training and project management experience will be sought.

7.4.12 Important Assumptions

NGOs will be willing to assume responsibility for training activities.

7.4.13 PDM

PDM is shown as Table 7.8.

7.4.14 Timetable

The timetable of project activities is shown in Table 7.9.

Table 7.8 PDM for Project 4

PROJECT DESIGN MATRIX (PDM) **PROJECT TITLE:** Improving the Role of Drug-Sellers in Primary Health Care

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
OVERALL GOAL Reduction in child mortality and morbidity due to key diseases through more effective self-medication			
PROJECT PURPOSE Improvement in the availability and appropriate use of GSL (OTC) drugs from groceries in villages without a DRF	90% correct home case management of child malaria, diarrhoea, and ARI, with referral at appropriate stage if necessary	Baseline household-based study followed by periodic monitoring	Local organisation (NGO) will be identified to manage project
OUTPUTS 1. Shopkeepers role in PHC developed (i.e., they are trained to sell more appropriate drugs and give more accurate advice about selected illnesses) 2. Improved access to correct information and appropriate treatment for some of the most common potentially fatal childhood illnesses, specifically malaria, diarrhoea, and acute respiratory infection among mothers/caretakers 3. Risk of accelerated resistance to antibiotics reduced 4. Reduced illegal sales of antibiotics and other drugs not authorised for general sale	1. At least half of all village grocery owners and co-workers trained in target districts 2. Changes in drug sales pattern and individual behaviour 3. Media messages broadcast, groceries displaying posters, village health committee IEC activities 4. Number of groceries selling antibiotics and other drugs not on GSL	1.Records of training sessions and "final exam" results 2. Random simulated patient surveys, periodic household child illness case studies 3. Household KAP monitoring, broadcast audits, monitoring visits to groceries 4. Random periodic monitoring of village groceries	Donor can fund broadcast media

ACTIVITIES (continued)	**INPUTS**		
1. Preparatory: 1.1 Select Initial Pilot Area and NGO for project implementation 1.2 Select trainers 1.3 Adapt training materials 1.4 Co-ordinate with ORS (*Thanzi*) and Impregnated Bednets Social Marketing Programme 1.5 Develop media messages 1.6 Negotiate with SP suppliers 1.7 Baseline study	**National media campaign** Radio message production Air time	**MK1,451,000** MK 7,000 MK1,444,000	
	Local media (per district) Poster design Poster production Drama briefings	**MK500,000** MK100,000 MK40,000 MK360,000	
2. Training of Trainers	**Direct personnel costs (per district)** NGO organisation and project management staff Honorarium to IDH Task Force for monitoring Trainers for TOT	**MK1,560,000** MK1,200,000 MK 300,000 MK60,000	
3. Initial training of shop owners	**Shopkeeper training costs (per district)** Per group of 30 shopkeepers (4 days)	**MK1,750,000** MK1,750,000	
4. Information dissemination			
5. Initial evaluation	**Monitoring team costs (per district)** Transportation Allowances	**MK33,000** MK6,000 MK27,000	
6. Large-scale training	**Per-district Total**	**MK3,843,000**	
7. Continuous site monitoring and co-ordination with linkages	**Total costs (National + Per-district)**	**MK5,294,000**	
	Inflation and contingency	MK529,000	
	Total for one district	**MK5,823,000** (= US$129,400)	

Table 7.9 Timetable for Project 4

	1st year	2nd year	3rd year	4th year	5th year
1. Preparatory Activities	.....				
2. Training of trainers	___	_____	_____	_____	
3. Initial shopkeeper training	___				
4. Information design and dissemination	___ _____	_____ ___	_____ _____	___ _____	_____
5. Initial evaluation	xxx				
6. Large-scale trainings		1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3
7. Monitoring and co-ordination	==========	==========	==========	==========	==========

PROJECT 5: INTEGRATED MATERNAL AND CHILD HEALTH CARE

7.5.1 Introduction

Both master plans on reduction of childhood malnutrition and maternal mortality indicated that an improvement in the quality of primary care provided by health workers would alleviate the situations surrounding children and women. The master plan on malnutrition recommended an intervention to increase health workers capacity in providing better treatment of common childhood illnesses by expanding training on Integrated Management of Childhood Illnesses (IMCI). The other master plan proposed training of health workers in life saving skills (LSS) including essential obstetrics care (EOC) to provide quality care for expectant mothers. Because these two interventions are both aimed at capacity building of health workers, they have been integrated here.

The weakness of the current health system at the community level was also raised in the problem analyses. A large percentage of communities lack access to fixed or formal health services and need to rely on groceries and traditional remedies to obtain some form of health care. This proposed project aims to actively involve communities in IMCI, and will test different approaches to involving communities in the provision of basic health services.

7.5.2 Overall Goals, Project Purpose and Specific Objectives

Overall Goals

1) Reduction in prevalence of malnutrition among children under five years old from 50 to 25 percent by 2004
2) Reduction in maternal mortality by 50 percent by 2004

Project Purpose

Quality care provided to all women and children at all health facilities and at the community level

Specific Objectives (Outputs)

1) Increased access to, use of and benefits from health services provided at health facilities by:
   - improved skills of health workers on life saving/essential obstetrics care and integrated management of childhood illnesses
   - strengthened referral system from community to health centres and from health centres to hospitals
   - improved training capacity of selected health facilities and training centres
   - improved treatment capacity of tertiary care facilities
2) Increased access to, use of and benefit from community level health services including drug revolving funds
3) Alternative models of community-based management of childhood illnesses established

4) MOHP's capacity to plan and implement activities for community participation and empowerment strengthened
5) Greater awareness and application of participatory methods to improve community participation in PHC by MOHP officials
6) Importance of community initiatives in PHC understood by MOHP officials
7) District level capacity to initiate and sustain community participation in PHC developed

7.5.3 Strategies

1) Phased approach

The project will have three phases: pilot, expansion and evaluation. During the pilot phase, one district (pilot district) will be identified to test various training methods and materials developed under the project. After an initial evaluation of the pilot phase, the project will expand to additional districts. In the evaluation phase, based on the pilot and three additional districts, the project will be thoroughly evaluated and documented for future expansion and reference.

2) Comprehensive coverage of health services

The project aims to build capacity in the health system as a whole rather than strengthen a specific level of health care. The proposed health system is dynamic and responsive to needs from the community level to the tertiary level. The initial focus, however, will be placed on strengthening the skills of health workers. Three types of training courses are proposed for this purpose: Integrated Management of Childhood Illnesses (for Medical Assistants), Life Saving Skills including ANC (for Nurse/Midwives) and Interpersonal Communication Skills (for all health workers). Also, a shortened version of the LSS course will be offered to Medical Assistants (MAs).

3) Community focus

The project recognises the importance of community empowerment for the sustainable provision of health care services. A sustainable community program requires commitment from both the community and project sides, as well as careful planning (i.e., that which considers social and cultural factors). Though the importance of community involvement in PHC has long been recognised, MOHP does not have extensive experience in community-based projects compared to other line ministries. In order to develop capacity to manage community based projects within the Ministry, the project will raise awareness and transfer knowledge on community participation in health among MOHP staff.

The project activities related to community participation will take place in the pilot project. The basic approach for community involvement in this project is Community Based Management of Common Illnesses (CBMCI). CBMCI can be seen as a strategy to strengthen the Drug Revolving Fund (DRF) programme. Village Health Committees (VHCs) will be used as a channel for introducing activities. VHC members will be trained in management, supervisory skills, and DRF operation.

Health Assistants and Senior Health Surveillance Assistants will become area supervisors and Health Surveillance Assistants will act as supervisors and liaison officers for VHCs.

4) Strengthening the referral system

Ensuring people that appropriate treatment is provided when needed through an effective referral system is one of the key underlying principles of Primary Health Care. Improving the quality of health care provided at referral health facilities as well as the linkages between those referral facilities and the catchment health centres are important aspects of the project. The project also aims to build capacity in the Paediatric and Obstetrics departments of Lilongwe Central Hospital.

5) New incentives for Health Surveillance Assistants and community volunteers

In order to ensure a high retention rate of HSAs and community volunteers, several incentive schemes will be tried in the pilot district. The incentive schemes include income generating activities, micro-credit schemes, and recognition for achievement. The schemes will need to be developed in hand with VHCs and be culturally sensitive and acceptable.

6) Drug supply mechanism

The DRF scheme suffers from a weak logistics system, which has caused some funds to cease operation. To ensure a stable supply of required drugs, the project will test various logistics systems such as the use of the private sector and NGOs, and a drug mailing system.

7) Selection of villages

Criteria will be established to select villages within target districts for piloting of community-based activities. Proposed criteria include distance to formal health services, population size, past performance of VHC activities, and willingness to participate. A population size of 1000 or more will be required, but smaller villages can form a consortium of villages.

8) Establishment of MCH Centre at Lilongwe Central Hospital

The project will establish an MCH Centre at Lilongwe Central Hospital. The primary objective of the Centre will be institutional development for high standard care for Maternal and Child Health and coordination of IMCI-related activities. The centre will be operated by dedicated government staff and experts from the National Safe Motherhood Program, the OB/GYN and Paediatrics Departments of the Hospital, and experts on community participation and empowerment.

The centre will also function as the project secretariat and liaison office for country experts, administration units (such as district councils) and NGOs concerning MCH and community participation in health.

9) Information dissemination

The project will test various schemes to improve community participation in PHC. Since not all districts will experience the same schemes, good documentation of activities and

dissemination of information is necessary. The project will publish a periodic newsletter and organise a series of workshops and seminars to ensure that all experiences are shared.

7.5.4 Linkages

1) Linkage with National Health Plan

Through the introduction of an essential health package (EHP), the National Health Plan aims to increase people's access to basic health care services. The activities proposed in this project are essentially the "main activities" described in the Plan.

2) Linkage with National Safe Motherhood Programme

The activities related to Safe Motherhood will be implemented as part of the National Safe Motherhood Programme. As proposed in the Administrative Structure section of this proposal, the project support group will include a representative of the Programme.

3) Co-ordination with other donor funded projects

There are several projects in the country with similar objectives supported by various donors. UNICEF, WHO and other UN agencies support IMCI and intend to expand their activities to the community level. Donor agencies such as DFID and UNFPA have activities related to Safe Motherhood. This project proposes to establish active partnership with these donor agencies and the projects supported by them to collaborate and avoid duplication of efforts. Areas where co-ordination is anticipated include 1) training modules and manuals, 2) research and studies, 3) monitoring and evaluation, and 4) procurement and supplies. Activities listed under 'Improve community participation through awareness raising and training' are specifically designed to strengthen co-ordination with other projects.

7.5.5 Beneficiary Groups

The primary beneficiary groups of the project are children under five years old and women of reproductive age. The estimated target population is 650,000. In addition to the primary beneficiary groups, the remainder of the population of target districts would benefit from improved quality of care and health worker's communication skills.

Benefits from improved neonatal care at the tertiary level will not be limited to newborns of target districts, but will extend to all districts that fall into the catchment area of Lilongwe Central Hospital.

7.5.6 Activities

1) Establish MCH Centre

An MCH Centre will be established within the premises of the Lilongwe Central Hospital. The land will be provided by the Ministry of Health and Population. The Centre will be staffed by a director who will take additional responsibility as the project manager, a financial and administrative manager, secretaries, office clerks, and project technical advisors. The Centre will also accommodate the National Safe Motherhood Programme office.

1-1) Establish project management secretariat
1-2) Develop plan for MCH Centre
1-3) Construct MCH Centre

2) Build programme management capacity

The MCH director/project manager and National Safe Motherhood Coordinator will be trained at the masters level in programme management in their relevant fields. During the project life, three people will be sent abroad for graduate level training.

3) Develop LSS/EOC skills of Nurse/Midwives

The duration of the LSS/EOC course is two weeks. The project aims to train all nurse/ midwives in project districts in LSS at least once during the life of the project. A training of trainers will be carried out at Lilongwe Central and Bottom Hospitals and the training of health workers will be carried out at the district or central level. A group of master trainers will be identified and trained. Master trainers will also include identified senior health workers from districts not included in the project. In order to secure undisrupted health services, the project will provide locum tenens to health facilities while staff are in Lilongwe for training.

3-1) Identify master trainers
3-2) Review and revise training module
3-3) Train master trainers
3-4) Develop training plan
3-5) Conduct training
3-6) Evaluate

4) Develop interpersonal communication skills of health workers

All health workers including Medical Assistants, Health Assistants, Clinical Officers, Nurse/ Midwives, and District Medical Officers will be trained in interpersonal communication skills. The project will adapt training modules developed by the Safe Motherhood Project according to the local culture and the requirements of each level of health worker.

4-1) Review existing training materials
4-2) Conduct needs assessment for interpersonal communication skills
4-3) Develop training modules and materials
4-4) Conduct training of trainers
4-5) Pilot test training course

4-6) Evaluate pilot training course
4-7) Modify training modules and materials
4-8) Conduct large scale training courses
4-9) Evaluate training courses

5) Develop IMCI skills of Clinical Officers and Medical Assistants

The original IMCI manual was developed by UNICEF and WHO. The project will review the content of the IMCI manual and develop a new version for Malawi, reflecting the local environment, health policy, treatment guidelines, and local languages. A trainer's manual will also be developed. A group of master trainers will be identified. They will rotate responsibility for conducting trainings in target districts. The project will also provide locum tenens to health facilities while health workers are being trained. The intention is to train workers at district headquarters.

5-1) Identify master trainers
5-2) Review and revise training module
5-3) Train master trainers
5-4) Develop training plan
5-5) Conduct training
5-6) Evaluate

6) Develop skills of health workers at Lilongwe Central and Bottom Hospitals

The skills of health workers will be developed to enable them to provide adequate tertiary-level care. Clinical Officers will be offered skills enhancement training courses in paediatrics or obstetrics. The capacity of ICU staff will be strengthened to provide specialised care for severe cases in both paediatrics and obstetrics. In addition to the training of COs, selected medical doctors will be trained overseas in specialised skills. Trained medical doctors and clinical officers will be required to sign contracts to remain in their position for at least four years after the completion of training courses.

6-1) Negotiate with College of Medicine to conduct skills enhancement course for Clinical Officers in Obstetrics and Gynaecology
6-2) Conduct training
6-3) Assess needs for training of medical doctors
6-4) Identify training institutions
6-5) Train medical doctors

7) Conduct research on Community Based Management of Childhood Illnesses

CBMCI will be piloted in the pilot district.. The project will formulate a CBMCI committee at the national level and a project management team at the district level to oversee activities. Members of the team will include the District Health Officer, Community Health Officer, MCH coordinator, District Environmental Health Officer, representatives of the district council, and a technical advisor. The team will be trained in the Rapid Rural Appraisal Method and then carry out the research. HSAs will be trained to identify villages that fulfil the established

criteria. The committee will be responsible for evaluating the suitability of the candidate villages.

One of the aims of the activity is to test and evaluate various community participation models. Therefore, the national committee and district team will collaborate with experts in community participation to develop pilot schemes.

7-1) Develop Terms of Reference for CBMCI committee
7-2) Form CBMCI committee

7-3) Develop Terms of Reference for district project management team
7-4) Form project management team
7-5) Develop detailed pilot project proposal
7-6) Train district project management team in RRA
7-7) Train HSAs in identification of villages
7-8) Evaluate villages
7-9) Identify community volunteers
7-10) Develop training modules and materials for community volunteers
7-11) Conduct training
7-12) Conduct research on incentives for community volunteers
7-13) Evaluate
7-14) Disseminate findings from pilot phase
7-15) Implement in two additional districts

8) Improve supplies and equipment

The shortage of necessary drugs and equipment has caused problems at both the health facility level and community level where DRFs have been implemented. At the facility level, while waiting for the reform of Central Medical Stores to be completed, the project will supply a limited amount of necessary drugs and equipment. This support will be for a maximum of two years.

At the community level, the project will investigate schemes to ensure an uninterrupted supply of drugs.

8-1) Compile list of essential drugs and equipment for health facilities
8-2) Circulate the list to target districts and compile requirements needed
8-3) Purchase and distribute identified supplies
8-4) Develop pilot scheme for drug supply to DRFs
8-5) Assess scheme as part of CBMCI activity
8-6) Document the assessment process
8-7) Evaluate the activity and disseminate the results

9) Improve community participation through awareness raising and training

9-1) Form MOHP, other line ministries and NGO alliance for community participation

9-2) Publish quarterly newsletter on community participation
9-3) Organise a series of lectures, seminars and workshops in community empowerment and participation for PHC

7.5.7 Administrative Structure

A Project Management Committee will be established at the national level. The committee will be responsible for the overall management and evaluation of the project. The proposed committee will be headed by the Principal Secretary, MOHP. The Principal Secretary will be assisted by a controller who will be appointed by the Principal Secretary. The Project Manager for the project will serve as the secretary of the committee. Proposed members of the committee include the controllers of clinical medicine, preventive medicine, nursing services, and technical services; representatives of CHSU, IMCI, and technical organisations including the College of Medicine and the College of Nursing; international agencies; technical advisors of the project; and NGOs including CHAM. The committee will meet every six months to review progress made by the project and revise the project plan.

Actual implementation of the project will be handled by the Project Support Group which will be established at the proposed MCH Center. MOHP will appoint a Project Manager who will be also a director of the MCH Center. The Project Support Group will consist of the project manager, technical advisors, representative of health education unit, appointed officials of the MOHP, and representatives of each project districts. The Project Support Group will be responsible for daily implementation and management of the project and will issue six monthly project report prior to the Project Management Committee meeting.

At the district level, two types of District Project Team will be established. One type is for the Pilot District for community participation and the other is for districts with plan for capacity building only. The core District Project Team will be the same; a district health officer assisted by other staff will be in charge of the team. The MCH co-ordinator, Reproductive Health Co-ordinator, District Environmental Health Officer, a project technical advisor and the person in charge of health education at district level will be members of the team. For the pilot district, in addition to the core members, representative of NGOs, representatives from VHCs will be part of the team. The team will meet monthly to review progress made and report to the Project Support Group.

7.5.8 Monitoring and Evaluation

Responsibility for monitoring and evaluation of the project will be under the proposed Project Management Committee assisted by the Project Support Group. The committee will develop a comprehensive evaluation strategy during the first phase of the proposed project. The strategy will include identification of indicators, methods of verification, organisations responsible, and a time frame.

Data to monitor project outputs will be generated by the District Project Team. As discussed earlier, the Project Support Group will be responsible for preparing regular district reports based on the data in a timely manner, and acting on any problems or shortcomings found.

Though the project targets all children under five and women of reproductive age, some activities are pilot based and therefore call for extensive evaluation. For each pilot activity, a baseline survey will be conducted in order to grasp the pre-intervention situation. If possible, the survey will also include control areas where project activities will not be implemented.

7.5.9 Budget

Project Management	
Equipment	US$142,200
Transport	US$583,200
Support staff	US$120,000
Office running costs	US$200,000
Sub-total	US$1,045,400
Construction of MCH Centre	US$105,000
Drugs and consumables	US$161,000
Medical equipment	US$658,200
Staff development (in-country)	US$1,110,400
Staff development (in Japan or in third country)	US$158,000
Baseline studies (US$10,000 x 5)	US$50,000
Operational Research on CBMCI	US$100,000
Planning Workshop: US$2,400 x10	US$24,000
Broaden Knowledge Base (information dissemination)	US$12,000
Monitoring and evaluation (including $13,000 for the regular field visits by the district health units)	US$70,000
Total	US$ 3,494,000

7.5.10 Required Human Resources

7) Long-term experts

Team leader*	1 X 60 MM
Long-term expert on Paediatrics/ Neonatal care	1 X 60 MM
Long-term expert on community participation	1 X 60 MM
Long-term expert on OB/GYN	1 X 60 MM
*one of the three long-term experts can serve concurrently as the team leader	
Long-term expert on IMCI	1 X 60 MM
Co-ordinator	1 X 60 MM

2) Short-term experts

Short-term expert on surveillance	15 MM
Short-term expert on epidemiology	15 MM
Short-term expert on OB/GYN, Paediatrics	15 MM
Short-term expert on HMIS	12 MM
Short-term expert on sociology, medical anthropology, qualitative research	20 MM
Short-term expert on health education	15 MM
Short-term expert on health planning	10 MM
Short-term expert on evaluation	8 MM

7.5.11 Important Assumptions

- Training modules for in-service training and IPCC are developed by DFID.
- Placement of clinical officers at district hospitals after attending OB/GYN specialised training is secured by MOHP and the districts concerned.
- Availability of blood transfusions at the district level is improved by a proposed EU-funded project.
- Diagnostic test kits for blood screening are provided under the proposed EU-funded project.
- Management skills and supervision are improved under the EU-funded decentralisation and management project.
- Retention of health workers at rural health facilities is improved after decentralisation and improved management.
- Human resource database is established.
- All established posts of MOHP facilities are filled.
- Graduates from the Malawi College of Health Sciences increase as planned under DFID-supported project.
- Project activities are supported by the national policy (i.e., health sector reforms) which promotes decentralisation and community participation.
- Communities are motivated to participate in the activities.
- MOHP provides locum tenens for heath facilities while selected clinical officers attend OB/GYN specialised course.

7.5.12 PDM

PDM is shown as Table 7.10.

7.5.13 Timetable

The timeframe of activities is shown in Table 7.11

Table 7.10 PDM for Project 5

PROJECT DESIGN MATRIX (PDM) — PROJECT TITLE: Integrated MCH Project

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
OVERALL GOAL MMR is reduced by 50% by 2004	Number of facility based maternal deaths	Health Management Information System	- Facility delivery is increased. - Facility based data reflect the changes in MMR in the country
PROJECT PURPOSE Quality care is provided to all children and women at all health facilities and at community level	- Increase in the proportion of institutional deliveries - Increase in the proportion of under five cases treated with standard protocol of care at health facilities and at community	- Project Progress reports - Facility based observations - Community surveys	- Project benefits are sustained long enough to demonstrate impact on project goal
SPECIFIC OBJECTIVES (OUTPUTS)			
1 Access, use and benefit from health services provided at health facilities are improved by: - Skills of health workers on LSS/EOC and IMCI are developed - Referral system from community to health centres and from health centres to hospitals is strengthened - Training capacity of selected health facilities and training centres is improved - Treatment capacity of tertiary care facilities is improved	- Number of staff trained in EOC/LSS - Number of staff trained in IPCC - Number of staff trained in IMCI - Increased No. of women and children with complications referred - Number of training conducted at designated health facilities	- Project Progress reports - Project Progress reports - Project Progress reports - Health Management Information System - Project Progress reports	- Availability of blood transfusion at district level is improved - Diagnostic test kits for blood screening are provided - Health Management Information System is strengthened - Retention of health workers at rural health facilities is improved
2 Access, use and benefit from community level health services including DRF are improved	- Number of staff trained in tertiary patient care - Number of villages with functional community level health services	- Project Progress reports - Project Progress reports	
3 Alternative models of community based management of childhood illnesses established	- Established alternative models of community based management of childhood illnesses	- Project Progress reports	
4 MOHP's capacity to plan and implement activities for community participation and empowerment is strengthened	- Number of meetings with VHCs	- Project Progress reports	- Management skills and supervision supervision at district level is improved
5 Knowledge base of methodologies to improve community participation in PHC is broadened	- Number of workshops and seminars organised - Number of Project Newsletters published	- Project Progress reports - Project Newsletters	
ACTIVITIES	**INPUTS**		
1 **Establish MCH Center**			
1.1 Establish project management secretariat			
1.2 Develop plan for MCH Center	1) Long-Term Experts		
1.3 Construct MCH Centre	Team Leader	1 X 60 MM	
2 **Build programme management capacity**	Pediatrics/ Neonatal care	1 X 60 MM	
3 **Develop LSS/EOC skills of Nurse/Midwives**	Community participation	1 X 60 MM	
3.1 Identify master trainers	Ob/GYN	1 X 60 MM	
3.2 Review and revise training module	* one of the three long term expert can serve concurrently as the team leader.		
3.3 Train master trainers	IMCI	1 X 60 MM	
3.4 Develop training plan	Co-ordinator	1 X 60 MM	
3.5 Conduct training			
3.6 Evaluate			
4 **Develop IPC skills of health workers**	2) Short-Term Experts		**PRE-CONDITIONS**
4.1 Review existing training materials	Surveillace	1 X 15MM	
4.2 Conduct needs assessment for IPC skills	Epidemiology	1 X 15MM	- Training modules for inservice training and IPCC are developed by DFID
4.3 Develop training modules and materials	OB/GYN, Paediatrics	1 X 15MM	
4.4 Conduct training of trainers	HMIS	1 X 12MM	- Health facilities run by ministries other than MOHP and CHAM in the project districts accept to participate in the project
4.5 Pilot test training course	Sociology, medical anthropology, qualitative research	1 X 20MM	
4.6 Evaluate pilot training course	Health education	1 X 15MM	- The project activities are supported by the national health policy
4.7 Modify training modules and materials	Health planning	1 X 10MM	
4.8 Conduct large scale training courses	Evaluation	1 X 8MM	
4.9 Evaluate training courses			
5 **Develop IMCI skills of Clinical Officers and Medical Assistants**	3) Costs		
5.1 Identify master trainers	Project Management (support staff, office equipment, transport, office running costs)	US$1,045,400	
5.2 Review and revise training module	Construction of MCH Centre	US$105,000	
5.3 Train master trainers	Drugs and consumables	US$161,000	
5.4 Develop training plan	Medical equipment	US$658,200	
5.5 Conduct training	Staff development (in-country)	US$1,110,400	

ACTIVITIES (Continued)	INPUTS (Continued)		
5.6 Evaluate	Staff development (in Japan or in third country)	US$158,000	
6 **Develop skills of health workers at Lilongwe Central and Bottom Hospitals**	Baseline studies (US$10,000 x 5)	US$50,000	
6.1 Negotiate with College of Medicine to conduct specialised course for Clinical Officers in OB/GYN	Operational Research on CBMCI	US$100,000	
6.2 Conduct training	Planning Workshop (US$2,400 x10)	US$24,000	
6.3 Assess needs for training of medical doctors	Broaden Knowledge Base (information dissemination)	US$12,000	
6.4 Identify training institutions	Monitoring and evaluation (including $13,000 for the regular field visits by the district health units)	US$70,000	
6.5 Train medical doctors	Total	US$ 3,494,000	
7 **Conduct research on CBMCI**			
7.1 Develop Terms of Reference for CBMCI committee			
7.2 Form CBMCI committee			
7.3 Identify pilot district			
7.4 Develop Terms of Reference for district project management team			
7.5 Form project management team			
7.6 Develop detailed pilot project proposal			
7.7 Train district project management team in RRA			
7.8 Train HSAs in identification of villages			
7.9 Evaluate villages			
7.10 Identify community volunteers			
7.1 Develop training modules and materials for community volunteers			
7.1 Conduct training			
7.1 Conduct research on incentives for community volunteers			
7.1 Evaluate			
7.2 Disseminate findings from pilot phase			
7.2 Implement in two additional districts			
8 **Improve supplies and equipment**			
8.1 Compile list of essential drugs and equipment for health facilities			
8.2 Circulate the list to target districts and compile requirements needed			
8.3 Purchase and distribute identified supplies			
8.4 Develop pilot scheme for drug supply to DRFs			
8.5 Assess scheme as part of CBMCI activity			
8.6 Document the assessment process			
8.7 Evaluate the activity and disseminate the results			
9 **Improve community participation through awareness raising and training**			
9.1 Form MOHP, other line ministries and NGO alliance for community participation			
9.2 Publish quarterly newsletter on community participation			
9.3 Organise a series of lectures, seminars and workshops in community empowerment and participation for PHC			

LS: life saving, LSS = life saving skills
EOC: essential obstetrics care
IMCI: integrated management of childhood illnesses
DRF: drug revolving fund
IPC: Interpersonal Communication
CBMCI: Community Based Management of Childhood Illnesses
OB/GYN: Obstetrics and Gynaecology
RRA: Rapid Rural Appraisal

Table 7.11 Timetable for Project 5

Activities	1st year	2nd year	3rd year	4th year	5th year
Establish MCH Centre	———	———			
Send the project manager and National Safe Motherhood Coordinator for Master's level training.	———	———	———		
Develop LSS/EOC skills of Nurse/Midwives	———	———	———	———	———
Develop IPC skills of Health workers	———	———	———	———	———
Develop IMCI skills of CO/ MA	———	———	———	———	
Develop skills of health workers at LCH/ Bottom Hospital	———	———	———	———	———
OR on Community Based Management of Childhood Illnesses		———	———	———	
Provide essential equipment, drugs and supplies		———	———		
Improve community participation through awareness raising and training		———	———	———	
Baseline survey and evaluation	———				———
Monitor and evaluate project activities	———	———	———	———	———

PROJECT 6: COMMUNITY-BASED NUTRITION MANAGEMENT PROJECT (CONMAP)

7.6.1 Introduction

In the course of formulating the Master Plan for Reducing Childhood Malnutrition, it was found that Growth Monitoring Programme (GMP) activities were frequently cancelled due to HSAs' unavailability or subordination to other work. These frequent cancellations had undermined mothers' motivation to participate in the programme. A lack of proper knowledge and equipment on the part of Growth Monitoring Volunteers (GMVs) has also weakened the effectiveness of the programme. Thus, the Master Plan recommends that training GMVs is essential to strengthen the current programme, or more specifically, to prevent mildly undernourished children from becoming severely undernourished.

The importance of food security at the community and household level was also highlighted in the Master Plan. In Malawi, people tend to sell the bulk of their staple food supply soon after the harvest at a low price. Seasonal fruits and vegetables also go to waste due to lack of knowledge (and technology) on preservation. Both of these factors are a major cause of children's micro-nutrient deficiencies as well as protein energy malnutrition.

The two problems can be tackled separately, but for optimal impact on the nutritional status of U5 children, they should be addressed simultaneously.

7.6.2 Overall Goal, Project Purpose and Specific Objectives

Overall Goal
Nutrition status of children under five years old improved in Malawi.

Project Purpose
Nutrition status of children under five years old improved in target area.

Specific Objectives (Outputs)
1) Central officials gain capacity in managing malnutrition
2) Community-based Growth Monitoring Programme strengthened
3) Community gardens for food security established
4) Improved understanding of proper nutrition and childcare among villagers

7.6.3 Strategies

1) Focus on prevention
The focus of the project will be placed on prevention of malnutrition and management of mild to moderate cases rather than acute care or nutritional rehabilitation of severe malnutrition.

The project is also aimed at improving the current follow-up system on children discharged from the Nutrition Rehabilitation Unit (NRU) to minimise the number of relapse cases.

2) Intensive training of Growth Monitoring Volunteers (GMVs)

The qualitative research results indicated that a lack of proper training of GMVs is one of the major constraints to the smooth and effective implementation of the current GMP in communities. Therefore, the project proposes intensive training for GMVs through developing a new training module/curricula and constructing a National Nutrition Training Centre (refer to Strategy 3).

3) Establishment of National Nutrition Training Centre (NNTC)

Although the training activities under the project will focus on villagers and extension workers in the target area, the project also proposes to establish a national-level focal point for training on proper nutrition and childcare. To fulfil this objective, the project will construct an NNTC in Lilongwe or its suburbs, and also provide necessary equipment such as audio-visual and IEC materials. In the training centre complex, several practical facilities such as a kitchen with an improved stove for cooking demonstrations, a demonstration garden, accommodation for trainees/trainers, and a day care centre will also be constructed.

4) Strengthening the current Growth Monitoring Programme

To strengthen the current GMP at the community level, the project will produce and distribute Child Health Cards to GMVs, who will be trained how to maintain records. The project will also provide GMVs with weighing scales and other necessary equipment to manage the programme without the presence of an HSA.

5) Incentives for volunteers and villagers

In the villages where community-based GMP becomes self-sustaining through the efforts of the health volunteers and villagers, construction materials (cement and sheet iron) will be provided for constructing U5 shelters as an incentive. The intensive training at the new training centre (NNTC) will serve as another incentive for volunteers (both GMVs and Nutrition Management Committee members), who as representatives of the village would be responsible for disseminating acquired knowledge to other villagers after the training. The trained volunteers will also be provided with a shoulder bag, which can be used for their community activities, as well being a symbol of their volunteer efforts.

6) Expansion of the MOHP Communal Gardening Programme

Lack of food security is an another cause of malnutrition in children. The field research confirmed that nutrition education alone would not be effective: people must be able to secure food. Therefore, the project proposes to expand the government's Communal Gardening Programme and establish 50 community gardens in the target district by providing initial inputs such as seeds and fertilisers. Target villages will be selected based on criteria such as availability of land, leadership capacity, and perceived commitment. The project will recommend establishing a Nutrition Management Committee (NMC) in each target village with three members who will delegate responsibilities to as many villagers as

possible. NMC members and extension workers (HSAs, Field Assistants and Community Development Assistants) will be trained in agricultural technology, public health and communication skills in order to distribute project benefits as widely as possible and to ensure project sustainability.

7) Emphasis on a consolidated approach

A consolidated approach that includes all relevant institutions, particularly MOHP, Ministry of Agriculture (MOA) and Ministry of Women, Youth and Community Services (MOWYCS) is most ideal for the effective implementation of the planned activities. A Central Advisory Committee will be established to facilitate joint activities such as reviewing the many community-based nutrition training programmes currently run by different ministries. To build capacity of relevant institutions for programme management, three officials will be sent abroad for graduate level training.

8) Introducing new IEC techniques for villagers

The project will sensitise target villagers to the importance of CONMAP activities. Drama, songs and posters/calendars are all potential IEC techniques, the most effective tools will be explored under the project. Cooking demonstrations will be introduced to GMP to improve mothers' knowledge on cooking and feeding practices.

9) Gender-sensitive approach

The project will take a gender sensitive approach to enhance men's awareness of the importance of childhood nutrition and to enable women to properly manage the nutrition problems of their children. Women will be given priority for all training programmes since in general they have less access to information and technology in spite of being the key agricultural producers. A day care centre will be set up within the premises of the training centre to assist mothers who are obliged to bring their small children to the training.

10) Concentration of inputs

Community-based and integrated projects can be difficult to implement, so careful research and planning are necessary. At first, the project will concentrate on one district to establish sustainable and replicable mechanisms for project activities. The proposed criteria for the selection of the target district includes the percentage of malnourished children, availability of land for community gardens, access to the NNTC, commitment of the district office, progress of decentralisation, and the number of donor–assisted development projects in the past and at present. A national workshop will be held at the end of the project to disseminate information and lessons learnt to other districts.

7.6.4 Linkages

1) Linkage with the Communal Gardening Programme of the Government of Malawi

The 1998 presidential speech on the "Bakili Muluzi Health Initiative" (BMHI) addressed the importance of implementing focused community-based feeding programmes to combat

childhood malnutrition. Based on this initiative, MOHP introduced the Communal Gardening Programme with the co-operation of MOA at the end of 1998. Nine districts were randomly selected for the Programme and in 1999 MOHP plans to extend the Programme to another nine districts.[1] The proposed project will liaise closely with the MOHP programme.

2) Co-ordination with programmes/projects supported by bilateral and multilateral organisations

The project will co-ordinate with several others in a variety of ways:

- Population, Health and Nutrition sector credit programme (PHN) in the development of manuals/IEC materials, training of HSAs/CHVs, construction of U5 shelters, implementation of community garden programme, provision of weighing scales, Child Health Cards and farm inputs
- United Nations Children's Fund (UNICEF) to ensure supplementation of vitamin A capsules to U5 children in target areas
- Community Health Partnership (CHAPS) of the United States Agency for International Development (USAID) by exchanging information on construction of U5 shelters and the Community Grain Bank
- Non-governmental Organisations (NGOs) such as Canadian Physicians for Aid and Relief (CPAR), World Vision International, Concern Universal and International Eye Foundation by exchanging information on technology for seed multiplication, lessons learnt on organising community garden activities, technology for growing vitamin-A rich vegetables/fruit and other essential food and experiences of applying Participatory Rural Appraisal to projects
- Bunda College by exchanging information on appropriate agricultural technology for food preservation and dietary diversification

7.6.5 Beneficiary Groups

Primary beneficiaries are children under the age of five in selected districts, and the secondary beneficiaries are mothers, fathers and other childcare givers.

7.6.6 Activities

1) Improve capacity for programme management at central level

1-1) Identify candidates for graduate level training in programme management
1-2) Develop training plan for graduate level training
1-3) Send candidates for training

[1] The original nine districts include Chikwawa, Blantyre, Balaka, Machinga, Lilongwe, Dowa, Salima, Mzimba and Karonga.

2) Strengthen community-based GMP

2-1) Construct the National Nutrition Training Centre (NNTC) in Lilongwe district or its suburbs
2-2) Develop training modules and curricula for the training of HSAs and GMVs
2-3) Select 50 target villages according to the criteria established
2-4) Train HSAs in the new GMP scheme, supervision, facilitating and leadership skills (5 days)
2-5) Recruit 4 GMVs in each target village
2-6) Train 200 GMVs in the new GMP scheme, facilitating and communication skills (5 days)
2-7) Supervise GMVs' village surveys for identification of household location and numbering of households
2-8) Register U5 children according to the household number
2-9) Produce and distribute Child Health Cards to GMVs
2-10) Conduct community-based GMP and home visits for high risk children
2-11) Develop a checklist for HSAs to supervise GMVs' activities
2-12) Monitor community-based growth monitoring activities
2-13) Construct U5 shelters in selected villages

3) Establish community gardens

3-1) Develop an integrated training curriculum and manual for the training of extension workers (HSAs, FAs and CDAs) by reviewing the existing training curricula and manuals
3-2) Recruit trainers
3-3) Train HSAs, FAs and CDAs in agricultural technology, nutrition, facilitating skills, etc. (5 days)
3-4) Recruit three members for Nutrition Management Committee (NMC) in each target village
3-5) Train 150 NMC members in agricultural technology, nutrition and participatory approach, etc. (5 days)
3-6) Select participants of the community garden and decide working schedule, usage and storage of the harvest, etc.
3-7) Provide villages with farm inputs such as seeds and fertiliser in the first year of activities
3-8) Introduce soya, groundnuts, sweet potatoes, green vegetables, fruits, etc. as protein-/vitamin-rich food
3-9) Hold regular technical review meetings among extension workers, NMC members and project staff for monitoring

4) Improve understanding of proper nutrition and childcare among villagers

4-1) Conduct participatory meetings with villagers to identify nutrition problems
4-2) Train villagers on usage of Child Health Card at GMP

4-3) Develop appropriate IEC materials
4-4) Train villagers in proper childcare, nutrition, sanitation, etc. with the IEC materials
4-5) Conduct cooking demonstrations at GMP to educate mothers on proper cooking
4-6) Evaluate the impact of activities

7.6.7 Administrative Structure

A Central Advisory Committee (CAC) will be established and be responsible for overall supervision of the project. CAC will be headed by the Principal Secretary, MOHP. CAC will be comprised of the controller of preventive medicine, and representatives from the nutrition section, PHC section and the health education unit of MOHP, the food & nutrition section of MOA and the nutrition section of MOWYCS.

A project operation unit will be established at the central level in the NNTC (hereafter called the Central Project Unit) as the overall implementing body of the project. The primary counterpart of the project will be the nutrition section of MOHP. The Unit will report on the progress of the project to CAC at a review meeting to be held every six months, and revise project plans as necessary.

A project operation unit will also be established within the District Health Office (DHO) in the target district (hereafter called the District Project Unit). The DHO will be responsible for the smooth implementation of the planned activities in the target area. Project activities will be implemented in collaboration with staff from other relevant institutions such as DHO, ADD/RDP and the Community Services Office.

7.6.8 Monitoring and Evaluation

The Central Project Unit will have overall responsibility for monitoring and evaluation. Before implementing the project, the Unit will conduct a baseline survey with co-operation of relevant organisations to identify the pre-intervention situation on the nutrition status of U5 children, volunteers' knowledge on nutrition and childcare, degree of nutrition knowledge among villagers in the target area and so on.

HSAs will monitor the community-based growth monitoring activities by direct observation and the Child Health Card records. HSAs will analyse the data and report monthly to the Central Project Unit through the participating heath facilities. HSAs, FAs and CDAs will monitor community garden activities by direct observation and report through the regular technical review meetings of NMC members. HSAs will also report on the progress of community garden activities to the Central Project Unit on a monthly basis. The Central Project Unit will thoroughly analyse the data and information obtained, and also conduct quarterly field visits for direct observation. The Unit will write a comprehensive report of the project and submit it to the Central Advisory Committee every six months.

At the end of the project, an evaluation survey will be conducted by the Central Project Unit with co-operation from relevant organisations. At the middle and end of the project, evaluation might be also conducted by outside experts. The results of the evaluation activities will be reported to the Central Advisory Committee for the future policy making.

7.6.9 Budget

Project Management (support staff = US$80,400, office equipment = US$47,600, transport = US$113,800, office running costs = US$25,300)	US$267,100
Construction of training centre (including dormitory and project office)	US$347,900
Construction of 30 U5 shelters	US$69,000
Audio equipment	US$11,100
Consumables	US$62,100
Staff development (in-country)	US$64,300
Staff development (overseas)	US$105,000
IEC/Advocacy	US$27,800
Baseline & evaluation surveys	US$10,000
National workshop	US$11,200
Monitoring & evaluation	US$23,900
Total	US$999,400
Inflation & contingency (15%)	US$149,910
Grand total	US$1,149,310

7.6.10 Required Human Resources

1) Long-term experts

Project advisor (leader)	1 X 60MM
Nutrition/Public health	1 X 60MM
Socio-economic analysis (includes gender, rural approach)	1 X 60MM
Agriculture	1 X 60MM
Co-ordinator	1 X 60MM

2) Short-term experts

Project Management	1 X 1MM X 3 times
Agriculture technology	1 X 2MM X 3 times

7.6.11 Important Assumptions

- MOHP, MOA and MOWYCS will co-operate for the smooth implementation of the project

- Decentralisation will go forward as planned, and the responsibilities and flow of the health budget will be made clear between the central ministry and district offices
- Severe drought will not occur in the target area
- Few trained extension workers will resign or be transferred to other districts

7.6.12 PDM

PDM is shown as Table 7.12.

7.6.13 Time table

The timetable for project activities is shown as Table 7.13.

Table 7.12 PDM for Project 6

PROJECT DESIGN MATRIX (PDM) PROJECT TITLE: Community-based Nutrition Management Project (CONMAP) (draft) Target group: U5 children

Date: October, 1999

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
OVERALL GOAL Nutrition status of U5 children is improved in Malawi	Prevalence of underweight among U5 children is reduced from 50% to 25% (1999 rate)	Results of national nutrition survey	Government priority on childhood malnutrition remains
PROJECT PURPOSE Nutrition status of U5 children is improved in target area	Prevalence of underweight among U5 children is reduced to 50% of that in 1999 in target area	Results of baseline and evaluation surveys	Outbreak of children's illnesses does not occur
OUTPUTS 1. Capacity building of central officials	1-1 Number of Central Advisory Committee meetings held 1-2 Number of field visits conducted by central, district and community levels 1-3 Number of reports received from district level	1-1 Annual report of Central Advisory Committee 1-2Annual report of Central Advisory committee, quarterly field visit report of the district project unit and monthly report of the District Project Unit 1-3 Reports of the District Project Unit	The central officials do not resign after the training
2. Community-based GMP is strengthened	2-1 Percentage of U5 children regularly monitored in target area 2-2 Percentage of U5 children properly followed up in target area	2-1 Monthly report of the District Project Unit regarding number of attendance of GMP 2-2 Monthly report of the District Project Unit regarding number of home visits	Outbreak of children's illnesses does not occur.
3. Community Garden is established for food security	3-1 Amount of maize, soya and other vegetables harvested from community gardens 3-2 Number of meals & variety of foods taken in a certain of period	3-1 Monthly report of the District Project Unit regardeing Community garden 3-2 Results of the baseline and evaluation surveys	
4. Villagers' understanding of nutrition and proper childcare is improved	4.1 Number of attendance of GMP 4.2 Percentage of exclusive breast feeding 4.3 Number of diarrhoea cases	4-1Monthly reports of the District Project Unit 4-2 Results of the baseline and evaluation 4-3 Results of the baseline and evaluation	
ACTIVITIES 1.1 Identify candidates for graduate level training in programme management 1.2 Develop training plan for graduate level training 1.3 Send candidates for training 2.1 Construct the National Nutrition Training Centre 2.2 Develop a training module and curricula for HSAs training and GMVs training. 2.3 Select 50 target villages according to the criteria 2.4 Train HSAs in the new GMP scheme, supervision, facilitating and leadership skills 2.5 Recruit GMVs 2.6 Train 200 GMVs in new GMP scheme, etc.	**INPUTS** **Personnel:** Central Advisory Committee members, local staff for Project Operation Unit, trainers, extension workers (HSAs, FAs, CDAs), GMVs, NMC members, technical advisers **Land:** Land for National Nutrition Training Centre (NNTC) **Facilities:** NNTC (including the dormitory for trainees/trainers, a day care centre, Project Operation Unit) **Equipment:** Audio-visual, IEC materials, computers, 4WD vehicles, bicycles, additional Child Health Cards, weighing scales, seed, fertilizer, etc. **Operaton cost:** cost for fuel, water/electricity, salary for local staff, development for training materials, workshops/meetings Total estimated costs: US$1,149,310		1. Severe drought does not occur 2. Most of the trained extension workers do not resign or are not transferred to other districts **PRE-CONDITIONS** 1. Land for National Nutrition Training Centre is secured 2. Mutual co-operation among MOHP, MOA and MOWYCS is established 3. Responsibilities and flow of health budget is made clear between central ministries and the district offices.

ACTIVITIES (continued) 2.7 Identify household location and number all households 2.8 Register U5 children according to the household number 2.9 Produce and distribute the Child health Cards to GMVs 2.10 Develop a HSA's checklist 2.11 Supervise GMVs' village-based GMP 2.12 Monitor GMVs' home visits 2.13 Construct U5 shelters in selected villages 3.1 Develop an integrated training curriculum for the training of extension workers (HSAs, FAs and CDAs) 3.2 Recruit trainers 3.3 Train extension workers (HSAs, FAs and CDAs) 3.4 Recruit Nutrition Management Committee members 3.5 Train 150 NMC members 3.6 Select participants of community garden and decide the details of activities 3.7 Provide villages with farm inputs in the first year 3.8 Introduce protein-/vitamin-rich food 3.9 Hold regular technical review meetings 4.1 Conduct participatory meetings with the villagers and identify their nutrition problems 4.2 Train villagers on Child Health Card at GMP 4.3 Develop appropriate IEC materials 4.4 Train villagers in proper childcare, nutrition, etc. 4.5 Conduct cooking demonstration at GMP 4.6 Evaluate the impact of activities		

Table 7.13 Timetable for Project 6

Activities	1st year	2nd year	3rd year	4th year	5th year
1.1 Identify candidates for graduate level training.	—				
1.2 Develop training plan for graduate level training.	—				
1.3 Send candidates for training.		—	—		
2.1 Construct the National Nutrition Training Centre (NNTC).	—				
2.2 Develop a training module and curricula for HSAs training and GMVs training.	—				
2.3 Select 50 target villages according to the criteria.	—				
2.4 Train HSAs in the new GMP scheme, supervision, facilitating and leadership skills.		—	—	—	
2.5 Recruit GMVs.		—	—	—	
2.6 Train GMVs in new GMP scheme, etc.		—	—	—	
2.7 Identify household location and number all households.		—	—	—	
2.8 Register U5 children according to the household number.		—	—	—	
2.9 Produce and distribute the Child health Cards to GMVs.		—	—	—	
2.10 Conduct community-based GMP/home visit.		—	—	—	—
2.11 Develop a checklist for HSAs.	—				
2.12 Monitor community-based GMP/home visit.		—	—	—	—
2.13 Construct U5 shelters in selected villages.			—	—	—
3.1 Develop an integrated training curriculum for the training of extension workers (HSAs, FAs and CDAs).	—				
3.2 Recruit trainers.	—	—	—		
3.3 Train extension workers (HSAs, FAs and CDAs).		—	—	—	
3.4 Recruit Nutrition Management Committee members.		—	—	—	
3.5 Train NMC members.		—	—	—	
3.6 Select participants of community garden and decide the details of activities.		—	—	—	
3.7 Provide villages with farm inputs in the first year.		—	—	—	
3.8 Introduce protein-/vitamin-rich food.		—	—	—	
3.9 Hold regular technical review meetings.		—	—	—	—
4.1 Conduct participatory meetings with the villagers and identify their nutrition status.		—	—	—	
4.2 Train villagers on Child Health Card at GMP.		—	—	—	
4.3 Develop appropriate IEC materials.	—				
4.4 Train villagers in proper childcare, nutrition, etc.		—	—	—	—
4.5 Conduct cooking demonstration at GMP.			—	—	—
4.6 Evaluate the impact of activities.			—	—	—

7.7 EVALUATION OF PROJECTS

7.7.1 Introduction

Six prioritised projects have been proposed as a result of the Study. Each project is derived from the Master Plans and aims to improve one or two of three core health problems, that is, childhood malnutrition, high maternal mortality, and inappropriate drug usage. Although all projects are related to PHC, their scales, budgets, and strategies differ significantly from each other in an attempt to respond to the complex nature of the core health problems.

To a certain extent, all of the projects are indispensable for the purpose of improving the health status of Malawian children and women of reproductive age. However, the limited availability of human, financial, and organisational resources preclude these projects from being implemented at the same time. Therefore, an attempt was made to prioritise projects based on objective criteria. The priority order and methodologies used to decide it were discussed extensively with representatives of the MOHP on 27 Oct. 99 and were endorsed by them.

7.7.2 Methodology

Five criteria (further explained below) were used to evaluate and rank the six projects: 1) Appropriateness, 2) Effectiveness, 3) Project inputs, 4) Efficiency, and 5) Urgency. Each criterion is made up of one to nine factors, with 20 total factors. Study team members graded each project by assigning a value from one (least) to five (most) for each evaluation factor. The final score for each project was then calculated by adding the points given by each team member. Projects were then ranked in order of priority, with the project with the highest score being placed at the top.

Evaluation Criteria:

1) Appropriateness of the project

- Relevance of the project overall goal to the National Health Plan
- Relevance of the project purpose to the National Health Plan
- Relevance of the project specific objectives to the National Health Plan
- Relevance of the project activities to the National Health Plan

The factors above evaluate the degree of correspondence with the National Health Plan (NHP). The NHP is used as the framework of the Master Plans. Good correspondence at the purpose level does not guarantee good correspondence at the activity level. The other factors include:

- Appropriateness of technology: This factor examines whether or not the technology proposed for the project and/or the capacity required are appropriate to the country.

Even if the technology does not currently exist in the country, it may still be deemed appropriate if the country possesses capacity to absorb it. It was also considered possible that even if the technology is relatively new and appears to be "high-tech", introducing it may serve to lift the level of the country, so in this sense is positive.

- Expected contribution to attaining equity: One of the major objectives of assistance is attainment of equity in health. This factor evaluates the extent to which the proposed project would contribute to achieving equity. One project may narrow the geographical/ socio-economical gap in access to health services, thus increasing equity, while another project may increase the gap.
- Sustainability of the project: This factor considers the possibility of continuation of project activities in project areas after the completion of the project. Sustainability is divided into two types: financial and technical. Financial sustainability considers the possibility of continued financing of project activities while technical sustainability evaluates to what extent the technology transferred will be maintained and utilised.
- "Replicability" of the project: Sustainability evaluated the possibility for continuation within project areas. However, some projects (e.g., pilot studies) are designed to be replicated or expanded to other areas. This factor examines the likelihood of successful replication of project activities in other areas once the project is completed. For some projects, this factor is not relevant.

2) Effectiveness of the project

- Number of beneficiaries: The number of primary beneficiaries was calculated.
- Potential contribution of the project to attainment of overall goals: This factor evaluates the contribution of the project to attaining the overall goals once all project activities have been carried out.

3) Project inputs

- Total cost
- Personnel (number required to implement project)
- Organisational support
- Provision of facilities, equipment and supplies

This criterion considers the appropriateness and availability of planned inputs of a project. For example, if the organisational capacity of the intended implementing agency is considered weak and the project is not planning to build capacity to address the issue, then a low score would be assigned. Similarly, if a project is expected to increase demand for drugs at the community level, but does not include activities to ensure an adequate supply, then the project would be given a low score.

4) Efficiency of the project

Project cost per beneficiary per year was calculated.

5) Urgency of the project (and relation to overall development needs)
Based on the current situation of the country, the degree of necessity for project activities was judged in terms of:

- Personnel
- Organisation
- Finance
- Overall development needs

For personnel, organisation, and finance, it was considered whether the project was the best possible use of those limited resources.

7.7.3 Projects in Order of Priority

Seven members of the study team were available to score the projects according to the methodology above. The scores given to each project are shown in Table 7.14. Project 1: Improvement of health facilities for provision of essential obstetrics care, received the highest score and Project 6: Community-based nutrition management project (CONMAP), the lowest. As a result, the priority order of the projects is proposed as follows:

Project 1: Improvement of health facilities for provision of essential obstetrics care
Project 2: Comprehensive maternal health
Project 3: Promoting community-based management of childhood illnesses (CBMCI)
Project 4: Improved community-level PHC through effective self-medication
Project 5: Integrated maternal and child health care
Project 6: Community-based nutrition management project (CONMAP)

Finally, in order to simplify the scores according to each criterion, three grades based on numerical scores were given: A (good): 29-35, B (average): 21-28, C (below average): 14-20. The resulting grades are shown in Table 7.15. Generally speaking, the projects received high scores on appropriateness of the project goal, purpose, objectives and activities, while technical and financial sustainability received lower scores. Project inputs and urgency of the project differed according to the project, but most received average scores.

Table 7.14 Numerical Scores of Proposed Projects

Evaluation Criteria		Project 1 Facilities Improvement								Project 2 Comprehensive Maternal Health								Project 3 CBMCI								Project 4 Drug Sellers								Project 5 Integrated MCH								Project 6 Community Nutrition							
		1	2	3	4	5	6	7	Total	1	2	3	4	5	6	7	Total	1	2	3	4	5	6	7	Total	1	2	3	4	5	6	7	Total	1	2	3	4	5	6	7	Total	1	2	3	4	5	6	7	Total
1	Overall Goal	5	4	5	4	5	5	5	33	5	4	5	4	5	5	5	33	5	4	5	5	4	5	5	33	4	4	4	4	4	5	4	29	5	5	5	4	5	5	5	34	5	5	5	4	5	5	5	34
1	Purpose	4	5	5	4	4	4	4	30	5	5	5	5	5	5	4	34	4	5	4	4	4	4	4	29	4	4	4	4	4	3	3	26	4	5	4	4	4	4	4	29	4	4	4	4	4	5	4	29
1	Objectives	5	5	5	4	5	4	3	31	5	5	5	4	5	5	5	34	4	4	4	4	4	4	4	28	3	3	3	4	4	3	3	23	5	5	5	4	5	5	5	34	3	3	3	4	3	5	4	25
1	Activities	5	5	5	5	4	4	4	32	5	5	5	5	4	5	5	34	5	4	3	4	4	4	5	29	4	4	3	4	4	3	4	26	5	5	5	5	4	5	5	34	3	3	2	4	3	5	4	24
2	Technology	4	5	4	4	4	4	4	29	4	4	4	4	4	4	4	28	5	5	3	4	4	4	5	30	5	5	5	5	5	5	5	35	4	4	4	4	4	4	4	28	4	4	2	4	3	4	4	25
2	Equity	5	5	5	4	4	3	5	31	4	4	5	4	4	3	4	28	5	5	4	5	4	4	5	32	4	5	4	5	5	3	5	31	4	3	3	4	4	3	3	24	4	3	4	3	3	3	3	23
1.7 a	Technical Sustainability	3	3	4	3	4	4	3	24	3	3	4	3	3	3	3	22	3	3	3	3	3	3	3	21	4	4	4	4	3	4	4	27	3	3	3	3	3	3	3	21	3	2	2	3	3	3	3	19
1.7 b	Financial Sustainability	2	2	3	2	4	2	2	17	2	2	4	2	3	2	2	17	2	2	2	2	3	2	2	15	3	5	4	2	3	3	2	22	2	2	3	2	3	2	2	16	2	3	2	2	3	2	2	16
2	"Replicability"	5	4	4	4	3	4	4	28	4	4	3	4	3	3	4	25	4	4	3	4	4	3	4	26	3	3	4	5	4	3	3	25	4	4	4	4	3	3	4	26	2	2	2	4	3	3	3	19
2	Beneficiaries	5	5	5	4	4	4	4	31	4	4	4	4	4	3	4	27	5	5	5	4	5	4	4	32	4	4	4	4	4	4	4	28	4	4	4	4	5	4	4	29	2	2	2	3	2	3	2	16
2	Contribution	4	3	4	4	4	4	4	27	4	4	5	4	4	4	4	29	4	4	4	4	4	3	4	27	3	4	3	3	3	4	3	23	3	4	3	4	4	4	3	25	4	4	4	4	3	4	4	27
3	Total Cost	4	4	4	4	4	4	4	28	3	3	4	4	4	4	3	25	3	3	2	4	4	4	4	24	3	3	3	4	4	4	3	24	3	3	4	4	4	4	3	25	4	2	4	4	3	4	4	25
3	Personnel	5	4	5	3	4	4	4	29	4	3	4	4	4	4	4	27	4	3	4	3	3	3	4	24	4	3	4	4	4	5	4	28	4	3	4	4	3	3	4	25	4	2	3	4	3	4	4	24
3	Organisational Support	4	4	4	4	4	4	4	28	4	4	4	4	4	3	4	27	4	4	3	4	4	3	4	26	3	3	3	3	3	4	3	22	4	3	2	3	3	3	4	22	4	3	3	4	3	3	3	23
3	Facilities/Equip/Supplies	4	5	4	4	5	4	4	30	4	4	4	4	4	3	4	27	4	3	2	4	4	3	4	24	4	4	4	4	4	4	4	28	4	3	4	4	4	3	4	26	4	3	3	4	4	3	4	25
4	Efficiency	3	3	5	3	4	4	3	25	3	3	4	3	4	2	4	23	4	4	4	4	4	5	4	29	4	4	4	4	4	5	4	29	4	4	3	3	4	4	3	25	2	2	2	2	3	2	2	15
5	Personnel	4	3	4	4	4	5	4	28	3	5	5	4	4	5	4	30	3	4	2	4	5	3	4	25	5	5	4	5	4	5	5	33	3	5	4	4	4	4	4	28	3	4	2	4	4	5	3	25
5	Organisation	4	4	3	4	4	4	4	27	4	4	4	4	3	4	4	27	3	4	3	4	4	4	4	26	3	3	2	5	4	4	3	24	4	3	2	4	4	4	4	25	4	3	3	4	4	4	4	26
5	Finance	5	5	5	5	5	4	3	32	3	4	4	4	4	4	3	26	4	5	5	4	4	4	3	29	3	5	5	4	4	4	3	28	3	4	3	4	4	4	3	25	4	4	3	5	4	4	3	27
5	Overall Needs	5	5	5	5	5	5	5	35	5	4	5	5	5	5	5	34	5	4	5	5	5	5	5	34	3	4	3	5	4	4	3	26	5	5	5	5	4	5	5	34	5	5	4	5	5	5	5	34
	Total score	85	83	88	78	84	80	77	575	78	78	87	79	80	76	79	557	80	79	70	79	80	74	81	543	73	79	74	82	78	79	72	537	77	77	74	77	78	76	76	535	70	63	59	75	68	75	70	481

Table 7.15 "Grades" of Proposed Projects

Evaluation Criteria			Project 1 Facilities Improvement	Project 2 Comprehensive Maternal Health	Project 3 CBMCI	Project 4 Drug Sellers	Project 5 Integrated MCH	Project 6 Community Nutrition
1. Appropriateness	1	Overall Goal	A	A	A	A	A	A
	2	Purpose	A	A	A	B	B	A
	3	Objectives	A	A	B	B	A	B
	4	Activities	A	A	A	B	A	B
	5	Technology	A	B	A	A	B	B
	6	Equity	A	B	A	A	B	B
	7a	Technical Sustainability	B	B	B	B	B	C
	7b	Financial Sustainability	C	C	C	B	C	C
	8	"Replicability"	B	B	B	B	B	C
2. Effectiveness	1	Beneficiaries	A	B	A	B	A	C
	2	Contribution	B	A	B	B	B	B
3. Project Inputs	1	Total Cost	B	B	B	B	B	B
	2	Personnel	A	B	B	B	B	B
	3	Organisational Support	B	B	B	B	B	B
	4	Facilities/Equipment/ Supplies	A	B	B	B	B	B
4. Efficiency	1	Cost/Beneficiary	B	B	A	A	B	C
5. Urgency	1	Personnel	B	A	B	A	B	B
	2	Organisation	B	B	B	B	B	B
	3	Finance	A	B	A	B	B	B
	4	Overall Needs	A	A	A	B	A	A

A: 29-35 B: 21-28 C: 14-20