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Evaluation Report
PROJECT CONCERN INTERNATIONAL
THE GAMBIA

Primary Health Care Project

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ABBREVIATIONS

CHN	Community Health Nurse
CHW	Community Health Workers (includes both VHWs and TBAs)
DDC	Divisional Development Committee
FVA	Bureau for Food and Peace for Voluntary Assistance
GOTG	Government of The Gambia
IMR	Infant Mortality Rate
MCH	Maternal and Child Health
MG	Matching Grant
MOH	Ministry of Health
MRC	Medical Research Council
MSH	Management Sciences for Health
PCI	Project Concern International
PCI/TG	The PCI/Gambia Program
PHC	Primary Health Care
PHCCC	Primary Health Care Coordination Committee
PCI	Project Concern International
PCI/TG	The PCI Program in The Gambia
PVO	Private Voluntary Organization
RHT	Regional Health Team
TBA	Traditional Birth Attendant
USAID	United States Agency for International Development
VDC	Village Development Committee
VHW	Village Health Worker

I. EXECUTIVE SUMMARY

From 1979 to 1985 Project Concern International (PCI) received Matching Grant funds from AID to assist the Government of The Gambia in designing and testing a nationwide primary health care (PHC) system. The six year program experience in The Gambia demonstrates Project Concern's many strengths in designing, implementing, and institutionalizing good PHC training programs, but also indicates areas where PCI management of field programs can be improved. The PCI/Gambia program (PCI/TG) indicates that sustained, long-term commitment is required to test and develop nationwide primary care systems. USAID missions as well as PVOs should be aware that one or two three-year Matching Grants (MGs) will not be sufficient to establish PHC systems and subsystems.

PCI's major contributions to the improvement of basic health services throughout much of The Gambia are evident:

- PCI's approach to developing a low cost, self-financing PHC system for the Government of The Gambia (GOTG) to replicate in unserved areas has proven to be the right approach in The Gambian political and economic environment, and would appear to be adaptable to other African settings;
- the PHC system which PCI is helping to create relies on volunteer village health workers (VHWs) chosen by their village who feel a sense of duty to it and are proud of their status; though many complain of the lack of village support, and want to be paid, very few drop out;

- PCI's primary focus on PHC training is sound, and the Gambian health workers trained in PCI-supported training programs are not only increasing the availability of health services in rural areas but are also likely to be effective in improving health standards (although we were not able to document the latter);
- PCI's direct involvement in the government bureaucracy, while it may delay some project achievements, maximizes the possibility that the systems established and the results achieved by those systems will be replicable and sustainable;
- Field staff members, backed up by a well-organized administrative support system in San Diego, appear to have been competent and effective, and have trained a host country counterpart who has now been able to take over administration of the training aspects of the project;
- Unlike many other PVO projects in health and nutrition, PCI's strategy in PHC training was designed to build local control and responsibility, and did not create dependence on foreign funds or technical assistance; when the AID MG ended, PCI was able to close down its Gambia project completely, having achieved nearly all of its major training objectives, leaving behind a tested, affordable system for PHC training which the GOTG had not merely accepted, but thoroughly adopted as its own, and was committed to sustaining and strengthening; and,

Unfortunately PCI/TG also demonstrates what appears to be a common weakness in several PVO primary care programs:

PCI was not able to take the next steps which are clearly necessary to ensure (a) that PHC is fully developed, with strong community participation and full community financing, and (b) that its effectiveness and impact have been measured and documented.

In Section IV of this report, Analysis of Project Results, and in two detailed appendices, we recommend specific steps to strengthen PHC which could be taken by the GOTG and PCI, if it had remained in The Gambia. Those involved in current PHC development in The Gambia may also find these suggestions useful in planning the expansion to a nationwide system. Moreover, we believe that many of the lessons learned in this evaluation -- particularly those encouraging more effective village development committees, use of job descriptions, and village level information systems -will apply to other countries where PCI or other AID grantees are promoting PHC.

II. BACKGROUND

A. Health in Rural Gambia

Annual per capita income in The Gambia is about \$300; life expectancy is under 40 years. 43% of Gambia's 800,000 population is under age 15. Gambian children suffer frequent bouts of diarrhea, often caused by drinking polluted water or eating weaning foods contaminated by bacteria. Many Gambian woman lose weight during pregnancy and lactation, resulting in low birth weights (especially of babies born in the wet season).¹ There are high death rates from malaria, especially among children and mothers.

Infant mortality is estimated to be as high as 200 deaths per thousand live births under age one in rural areas (which include 85% of the population). Deaths of children under five are reportedly primarily from gastro-enteritis or diarrhea; Gambian mothers usually perceive the four major causes of death to be diarrhea, fever, malaria, and cough. Because of comparatively successful immunization coverage, some immunizable diseases -- particularly measles -- have been decreasing as causes of death. Gambia's small size and improved health systems help to ensure that most Gambians live within 90 minutes of a health facility and 80% see a health worker twice a month.

¹ From Save the Children, report on Upper Baddidu High Impact Area Studies Report (Draft), March 1985.

B. Primary Health Care in The Gambia

1. PHC Action Plan

The GOTG's goal is a nationwide PHC system by the year 2000, with one Village Health Worker (VHW) trained to deliver basic preventive and curative services to every 500 Gambians.² The Gambia PHC Action Plan, in effect from 1980/81 to 1985/86, aims to "extend health services to the entire Gambian population, . . . (including) the underserved majority who live and work in the rural areas."³ The plan began an important shift of emphasis toward a new health system based on primary care supported by secondary and tertiary services, emphasizing the full participation of the community in development decision-making. In 1979 PHC received the political support of the President of The Gambia when he affirmed the government's commitment to "the intersectoral approach implicit in the PHC concept."

The Action Plan focused on four strategies:

- a) the establishment of village health services, initially concentrating on least served areas;
- b) reorganizing and strengthening the national health system to support extension of health care to rural villages;
- c) promoting community participation and self-reliance; and

² PCI, "Program Profile: The Gambia," San Diego, undated.

³ From paper on PHC in the Gambia, prepared by PCI/Gambia, Oct. 1985.

- d) mobilization of resources through multi-sectoral cooperation at all levels.

The Plan's major target was to set up village health services in 200 villages with over 400 inhabitants by 1986. In October 1985, 240 such village services are operating, staffed by health workers trained and supervised under the PCI-assisted program. Although the Plan originally aimed to provide one trained VHW and two trained Traditional Birth Attendants (TBAs) per village, for logistical reasons only one TBA per village was trained in the program (but each has a designated assistant whom she trains on the job). The Plan envisaged one CHN in each of the 40 "Key Villages" to supervise five or six villages; in October 1985, 46 CHNs were in service.

2. PHC Review of 1985

A review of the first four years of the national PHC program was undertaken in 1984; the review team of 18 experts included the GOTG (12 members, including the PCI Field Program Director), WHO (five members), and the Netherlands (one member). Its objectives were to conduct a national survey to review the implementation of the PHC Action Plan, to identify program achievements and constraints, and to recommend improvements. Specifically, the review looked at such PHC issues as community health attitudes and participation, including the function of the VDCs, MOH, and the performance of TBAs. A survey of 588 households in 28 PHC

villages and 27 non-PHC villages was undertaken in nine, randomly selected districts. The major conclusions of the Review were that several of the Action Plan objectives for 1986 had already been achieved; those in which PCI was involved were the following:

<u>1986 Objective</u>	<u>Feb. 1985 Achievement</u>
° establish PHC in 200 villages with over 400 inhabitants	° 230 PHC villages established
° train one VHW and one TBA in each PHC village	° 230 VHWs and 241 TBAs were trained
° 40 CHN Supervisors in 40 key villages supervise PHC villages	° 37 CHNs in service in 37 key villages
° create or strengthen 200 VDCs	° 230 VDCs operating

Other Action Plan goals involved areas which did not relate to PCI activities. For example, pursuant to a target of a reorganized health data system by 1981, the MOH's Epidemiological/Medical Statistics Unit was established and has undergone reorganizations almost annually since 1980 "but still needs further refinement." The Plan also recommended stronger cooperation between the MOH and the Medical Research Council (MRC), "especially in the field of epidemiology and PHC applied research;" a PHC study is soon to be completed in the Farafenni area.

Priority disease control programs were targeted. Those in operation by 1985 included programs for diarrhea, immunizable diseases, MCH, and TB/leprosy. Programs still being developed included malaria, child spacing, nutrition, primary eye and oral health care, control of STD, and schistosomiasis.

Despite its finding that the Action Plan's PHC coverage objectives had been achieved, the PHC Review found deficiencies in PHC services, and made recommendations accordingly. Those deficiencies and related recommendations relate directly to PCI and to the findings of this present evaluation. This is because many of the deficiencies discussed in the Review are ones which the PCI project did not have the time or the resources to address before its role was terminated in 1985. They are summarized in Appendix B.

C. PCI Overview

PCI is a private, non-profit, nonsectarian health care training and development organization which provides services to governments of developing countries and local organizations in underserved communities. Founded in 1961, PCI receives most of its support from individual and institutional donations in the US, Canada, Australia and New Zealand. PCI has received about \$450,000 annually from AID -- 9.5% of its total program budget or 13% of its total cash budget. Its funding operations are supported by a network of volunteers throughout the USA. PCI volunteers have donated many hours of work in support of various headquarters activities including accounting, processing of contributions, mailing productions, and clerical services.

Presently PCI has programs in Bolivia, Belize, Guatemala, Mexico, Indonesia, and The Gambia, as well as disadvantaged areas in the U.S. in Navajoland and Eastern North Carolina. A program is presently being developed in Somalia. PCI/Hong Kong is a

self-supporting international affiliate.

The main focus of PCI's program has evolved from its initial curative medical approach to a multi-sectoral PHC approach in the 1980s. The organization describes this approach as being in complete accord with The Alma-Ata Declaration, in which "it is as necessary for the health of individuals and communities to have the knowledge and skills to produce appropriate water and food supplies and to protect the environment as it is for them to be immunized and receive adequate curative care."⁴

PCI programs emphasize training and closely follow WHO guidelines for promoting PHC systems. Preventive activities, the development of support systems, and community organizations are also central to PCI's approach. An evaluation of PCI's program in Bolivia by MSH in 1984 documented that PCI has been successful and innovative in bringing together traditional Andean medicine and "modern" medicine within the government's rural health program.

The objectives of Project Concern's overall program are to:

1. "Bring an affordable, socially acceptable and accessible system of health care to underserved communities;
2. Demonstrate to the country's central governments the feasibility of a low-cost, effective PHC system;
3. Develop host country capacity to assume responsibility for projects;
4. Provide financial and technical support within a given time frame;

⁴ See PCI: "An Approach to Primary Health Care," San Diego, January, 1986

5. Promote local responsibility for the development of future PHC health care services;
6. Establish host country nationals as CHW trainers; and
7. Train CHWs in basic curative health and, more important, preventive health education.

AmDoc/Option is a subsidiary of PCI which recruits and refers medical, dental and related health professionals to service opportunities in developing countries and disadvantaged areas in the U.S. In 1984, 72 individuals were placed in 15 countries overseas.

At headquarters in San Diego, California, PCI's Chief Executive Officer is supported by a Director of Administration and Personnel, a Financial Officer, a Director of Resource Development, and a Director of Operations. A part-time volunteer Medical Director, a half-time Director of Program Planning and Evaluation, and two Regional Program Directors, one of whom serves as Deputy Director of Program Planning and Evaluation, are responsible for field program design and support. This staff in turn is supported by a full complement of administrative secretarial, clerical and logistical personnel.

⁵ PCI Matching Grant Proposal, San Diego, 1982.

D. PCI Matching Grants, 1979-1985

1. First Matching Grant, 1979-1982

PCI's approaches to improving health in developing areas are closely related to AID's health sector strategy, particularly in three respects:

- By focusing almost entirely on PHC, considered by AID to be "the most immediately available, effective means to reduce infant and child deaths." (AID Health Sector Strategy Paper, Washington, 1984);
- By working directly within regional or central offices of ministries of health, thus pursuing AID's strategy to "assist host countries to effectively deliver existing and improved health care technology through policy reform, manpower development support, management improvement, institutional development and promotion of private sector participation in financing and service delivery;" (Ibid) and
- By concentrating its resources primarily on "training mid-level and community-level health workers and on upgrading the skills of traditional health providers, particularly midwives, to deliver key preventive and curative services" and "training in management and planning skills" (Ibid).

Because PCI has developed a track record over several years in health training activities of high priority to AID, PCI re-

ceived its first MG in 1979. This grant supported the development of programs in The Gambia, Belize, Bolivia, Guatemala, and Mexico.

2. Second Matching Grant, 1983-85

The second MG awarded to Project Concern by AID became effective in January 1983 and committed a total donation of \$1.2 million for a three-year period. PCI's contribution to the grant program is projected at \$1.206 million, or 50.1% of the total estimated expenditures. Country programs begun under the previous MG, including The Gambia, were to be continued and expanded; in addition to the initiation of several new programs.

The ultimate goal of PCI programs is to attain "self-reliance," that is "the ability of the program to sustain itself indefinitely on in-country resources, without the need for personnel, money or equipment from outside the country." The overall MG program goal is to "improve the health status of people living in underserved communities and areas by bringing an affordable and accessible system of health care to the population..." Health programs focus on the most vulnerable population groups and preventive health services are stressed. Several criteria are given as indicators of goal achievement including increased promotional and preventive activities at the community level; and a reduction in the incidence of common illnesses.

The purpose of PCI's program, as expressed in the MG proposal, reflects organizational objectives. In addition, the proposal asserts Project Concern's intent to increase "the capabilities of ministries of health and other levels of health service in plan-

ning, designing, implementing, and evaluating programs of PHC at the village level." PCI's PHC strategy focuses on the training of villagers, the use of local resources, and encouraging self-reliance and host country replication.

The indicators of purpose achievement and the specific outputs of the program activities are somewhat overlapping in the MG proposal. Basically, these refer to the establishment of detailed plans and the development of support systems; the training of supervisors, trainers, and support personnel; the training of VHWs and TBAs; and the establishment of functioning local committees and local sources of financing. To accomplish these objectives and activities, PCI commits itself to providing field staff of PHC specialists to work with the MOHs and funding for additional technical assistance, materials, equipment, and administrative support. Host governments are to provide counterpart personnel, physical infrastructure, and limited support funds.

III. PCI PROJECT IN THE GAMBIA (PCI/TG)

A. PCI/The Gambia

1. Project Development

PCI's initial contacts with the GOTG occurred when a PCI representative visited there in the spring of 1978. The MOH expressed interest in receiving technical assistance from PCI and a decision was made to continue negotiations. PCI then sent a health planner in July 1978 to work with the MOH to develop a plan of cooperation and enter into a program agreement. After The Gambian delegation's attendance at the WHO-UNICEF-sponsored PHC Conference in Alma Ata, the GOTG decided to undertake a nationwide VHW Program. The GOTG asked PCI to assist in training trainers and PHC workers.

PCI's first Program Administrator, Mr. Gary Leinen, arrived in The Gambia in March 1979, to begin work with the MOH to assist in the planning and implementation of workshops to introduce and promote the concept of a PHC worker (VHWs) program. The Program Agreement was signed in June 1979. PCI assisted the MOH in shifting the emphasis of The Gambia health system from curative, clinic-based care to PHC. The first Matching Grant from AID to PCI for work in The Gambia covered the period 1979 to 1982.

PCI's second Program Administrator, Dr. Pankaj Parekh, who took over the program in January 1980, sought to help the MOH develop a full-fledged PHC delivery system. Dr. Parekh worked

with MOH staff to plan and coordinate various aspects of The Gambia's PHC program; and, was involved in developing the 1981-86 PHC Action Plan. PCI contributed to overall PHC program design, community organization techniques, curriculum development, and logistics for both training and support of CHWs. The initial training strategy, training dresser/dispensers to serve as the trainers and supervisors of CHWs (including VHWs and TBAs) was shifted so that PCI and Gambian tutors served as the primary and direct trainers of CHWs. CHNs were then trained as supervisors of CHWs rather than as dresser/dispensers.

The basic coordinating, planning and monitoring role in PCI/TG came to be vested in the Primary Health Care Working Party (PHCWP), established in 1980. Dr. Parekh was the first Secretary of the PHCWP, a role which all PCI Program Administrators and directors have continued to play throughout PCI's involvement in the program.

2. Establishment of CHW training

Basic techniques for community sensitization, a drug list, equipment and supplies for CHWs, and training materials were developed in 1980. The first group of 18 VHWs and 19 TBAs from the Lower River Division began pretraining in December 1980. Pretraining was designed to prepare the newly selected PHC workers for the main training in PHC subject matter. Main training was carried out in May-June 1981. After the first round of training, the CHW training curriculum was modified in the light of the experienced gained.

Throughout 1981 and early 1982, the progress of the first groups of trained VHWS and TBAs was closely monitored. Post testing and performance assessment of the first training group was carried out by the training unit and the RHT. The RHT concept was tested during this period as well. An evaluation of the training of CHWs in the first 18 villages covered by the PHC program was conducted by the training unit and the RHT in May-June 1982. Eleven villages were rated fair; six villages were rated good, and one poor. Testing on drug recognition and dosage showed that 13 of 18 VHWS had correct knowledge of all the drugs in the VHW drug formulary. The other five VHWS made two or more errors.

Another important PCI contribution in 1980-1981 was the improvement and construction of training facilities for CHWs. The MOH and PCI evenly shared the cost.

After the training of the third training group in December 1982, over 60 VHWS and 40 TBAs were at work. The replication and expansion phase of The Gambia PHC program to a nationwide program was now fully under way. Throughout the development of the program training curriculae, VHW and TBA reporting forms and other support mechanisms were also being modified and improved.

3. PCI Involvement in Gambian PHC Program

PCI contacts in 1978 with The Gambian MOH began when the MOH was considering the development of a national PHC program. PCI assistance put PCI on the ground floor of PHC development; PCI played a major role in the planning of PHC and in training CHWs

-- the first step in implementing the program. The importance of that contribution was acknowledged by a GOTG official in 1981:

" . . . Project Concern International, I dare say, Mr. Chairman, is the backbone of this phase of PHC implementation -- material and logistic support, and technical assistance in the humble person of the ever-smiling, good-natured, and never-tiring, Dr. Pankaj Parekh."⁶

Similar words of praise for PCI's early contributions were used by Dr. Phil Gowers, GOTG Medical Officer for Health and a leading expert on community participation in PHC. In his view, PCI deserves considerable credit for launching Gambian PHC before it had become fully accepted by the GOTG. "Getting PHC started in the early 1980s," Dr. Gowers told us, "was much more difficult than keeping it going in recent years."

The development of nationwide PHC has been particularly difficult because the support of WHO in the process had been expected but was delayed until recently. In November 1979, WHO had supported the ambitious Action Plan, but the needed resources proposed by WHO were not provided. Accordingly the MOH, in order to move forward, had to make judicious use of the donor resources that were firmly available. An effective and coordinated combination of inputs from PCI, the GTZ (German development organization) and later, Save the Children-UK, along

⁶ Dr. Cham, reported at the closing ceremony of first CHW training course at Mansakonko, Lomer River Division, January, 1981

with MOH resources, enabled The Gambia to make striking progress. A 1981 WHO Mission observing that progress, then proposed sizable amounts of WHO assistance which are only now becoming available. Most observers of the PHC program in The Gambia acknowledge the key contributions which PCI made to this development. They also speak highly of the work of many of PCI's five Field Project Administrators.⁷

B. Project Inputs

The PCI/TG budget during the second MG, from 1983-85, totaled \$278,350, a fraction of the total PCI MG program of \$3,151,625 (of which AID provided 50%). From 1983 to 1985, PCI actually

⁷ PCI/Gambia Field Project Administrators were:

Mr. Bruce Davidson, MPL, MPH, Health Planner/Consultant,
August 1978 - October 1978.

Mr. Gary Leinen, MAT, MPH, Program Administrator-Trainer,
March 1979 - January 1980.

Dr. Pankaj Parekh, MPH, D. Env., Program Administrator,
Planner/Trainer, January 1980 - June 1981.

Ms. Denise Batson, Program Administrator, July - August 1981.

Mr. John Wahlund, MPH, Program Administrator-Trainer,
Planner, October 1981 - September 1983.

Mr. Anthony Natho, MPH, Program Director-Trainer/Planner,
September 1983 - October 1985.

spent the following amounts in four major categories of local in-country expenses:

	<u>1983</u>	<u>1984</u>	<u>1985</u>
Primary Health Care	\$ 5,612.49	\$ 3,151.83	\$ 1,067.14
Training Providers	16,341.10	4,070.11	3,943.79
Planning/Monitoring	3,048.51	1,807.06	126.87
Development Support	<u>10,889.90</u>	<u>8,223.92</u>	<u>4,712.96</u>
TOTAL BY YEAR:	\$35,892.00	\$17,252.92	\$ 9,850.76
TOTAL	\$62,995.68		

A further breakdown of expenditures is shown in Appendix C.

C. Project Outputs

1. First Matching Grant

PCI's major outputs in the 1979-82 period were as follows:

- Nine trainers, 12 CHNs, 38 CHWs, and 40 TBAs trained;
28 Health posts outfitted.
- Helped to establish a planning and decision-making unit for PHC development within the MOH.
- Helped to define and carry out a task analysis of duties that led to a final job description for CHWs.
- Carried out planning for logistics and procurement for the first training cycle; this became a model for use in subsequent training programs.
- Helped establish training curriculum for CHWs and TBAs.
- Developed training materials for CHWs and TBAs.

- Developed visual aids for training and health education.
- Helped establish drug and equipment formularies for CHWs and Village Health posts.
- Developed methods for sensitizing (orienting) villages to PHC.
- Helped to establish the training module for first level PHC supervision by CHNs.
- Helped to develop referral forms for CHWs; revised monthly reporting forms for CHWs.
- Planned a baseline survey in selected villages.
- Revised training curriculum for main training of CHWs to include more practical work and village site demonstrations for trainees.
- Weak supervision of CHWs by CHNs was found to be a limiting factor in CHW effectiveness in getting community health projects going. PCI succeeded in drawing CHNs more closely into the training of CHWs and stimulated more interest in their supervisory activities and in working more closely with CHWs.
- Developed annual statistical forms for PHC.
- Improved the PHC drug supply line and devised a scheme for annual orders.
- Provided support for the construction of housing for trainers at the first training site with the MOH to provide over half the cost.

There is ample evidence that PCI's principal objectives in

The Gambia under the first MG were achieved. Under the leadership of several recent Program Administrators, PCI created and developed a CHW training system which appears to provide effective training on the most important health problems to VHWS and TBAs who were selected and will be supported by their communities.

USAID/Gambia described PCI as an invaluable resource to The Gambia's PHC program. Unlike many donor projects, PCI's program was designed with sufficient flexibility to absorb constant change while maintaining a high and consistent output. As one of the oldest and most successful programs in the MHD, PCI has become a prominent influence and focal point in the PHC program. However, MHD staff stress that PCI activities are components of a total PHC program. No single institution works alone, The Gambian PHC program is an integrated-activities project.

"PCI representative John Wahlund worked closely with OAR/Banjul staff, as stated in early cables. The mission is pleased with PCI achievements and strongly endorses efforts to keep PCI involved with the implementation of improved rural health services to The Gambia." (USAID/Gambian cable, January 1983)

2. Second Matching Grant

In 1982, PCI applied to AID for a second MG to continue its work in PHC in The Gambia. The following (taken from PCI's MG proposal to AID) shows the goals and "targets" (outputs) which PCI and AID agreed on for the 1983-85 period:

- a. Assist MOH in expanding PHC development to at least four to five new districts.

b. Training/Skills Development

- Assist existing nine trainers and train others as required;
- Train 30 to 40; Supervisors (CHNs);
- Directly assist in training 140 VHWs (secondary training assistance to an additional 70);
- Directly assist in training 120 TBAs (secondary training assistance to an additional 60);
- Develop in-service Training programs with training teams; and
- Assist in organization of village development committees (VDCs) in 140 villages.

c. Subsystem Continuation

- Drug, Equipment and Resupply;
- Treatment and Referral;
- Supervision; and
- Information.

d. Subsystem Evaluation

- Consult with training team and PHC working party (PHC planning unit in MOH) to establish training impact indicators;
- Integrate evaluation feed-back into training process and curriculum revisions; and
- Coordinate with MOH an expanded program of immunization, and RHT in integrating the above into PHC impact evaluation system.

IV. ANALYSIS OF PROJECT RESULTS

A. Project Outputs

All outputs under a. (Expansion) and b. (Training/Skill Development) were completed largely as planned prior to the final program termination of November 1, 1985. However, the major activities under c. and d. (Subsystem Continuation and Evaluation) were only partially completed. PCI did assist the MOH in continuing to develop the five subsystems as planned, but each subsystem needed improvement and consolidation (see Section IV for detailed analysis).

The major reason that those subsystems were not adequately developed was that USAID/Gambia subsequently reversed its earlier decision of completely supporting PCI continuation through 1986, and requested the termination of the PCI program two years early. This was due partly to USAID/Gambia's decision not to support health projects, partly to poor communications between the three parties (USAID/Gambia, PCI/Gambia and AID/ Washington) and partly to USAID/Gambia's view that "Gambians will be ready to assume all training responsibilities by September 1984." Although it was probably true that all training could be done by Gambians within the MOH, other PCI-supported staff were needed to develop and test PHC subsystems in such areas as VDC strengthening and CHW compensation. In our view the USAID/Gambia concern that Gambians take over the training program is to be commended, but PCI should have been supported by AID to complete many other important tasks too. The decision by the Mission to terminate the PCI project,

opposed by AID/Washington, effectively prevented PCI from developing the long-term commitment necessary to develop PHC subsystems. Cables from 1983-86 documenting the history of PCI/TG make it clear that the USAID mission bears the primary responsibility for the decision to terminate the program prematurely, and thus for PCI's inability to complete the work on the five PHC subsystems which it had planned -- and which it was uniquely qualified and positioned to do.

The five subsystem areas not adequately developed are as follows:

- Drug Supply Systems were established in new and consolidated in old FHC villages. The evaluators found no major difficulties in the drug supply chain at the regional store keeper or village level, but financial systems involving sales of drugs often led to abuses and needed revisions.
- The referral system continued to improve, benefiting from Gambia's small size and accessible health facilities; many villages, nonetheless, feel a need to improve emergency transport to the nearest health center or hospital. Also mid-level staff at health facilities need to be better coordinated with CHWs.
- Supervision is more frequent than in PHC programs in some other countries, but the quality of interaction between CHNs and CHWs can be improved.

- Information from CHWs to RHTs is barely adequate in most respects; for example, infant mortality and morbidity are not being reported accurately and several CHWs have failed to submit reports. Moreover, CHW reports are not analyzed at the regional or central levels, nor is there feedback about those reports from those levels to either health workers or villagers. Much more can be done to use information in PHC program planning, supervision and evaluation.
- Evaluation Systems have not been well developed. Neither "training impact indicators" nor a "PHC impact evaluation system" coordinated with the EPI and RHT programs, both of which were to be developed by PCI, were established. PCI did ensure that feedback from the PHC trainees during training serves to improve the training process.

However, a serious omission by PCI in the second MG period was that PCI's plan for a new baseline survey, to replace an inadequate survey attempted under the first MG, was never implemented. Thus, PCI and the PHC program have no baseline data comparing the PHC and non-PHC villages. Only the comparative MRC data, to be published in 1986, may be able to document whether, and at what cost, the PHC program is effective. The PHC program outputs, thus PCI's outputs, can be measured in terms of health workers trained and supported, VDCs established, and health services provided, not by behavioral or health status (impact) indicators.

B. Project Impact

The evaluation team could not substantiate the impact of The Gambian's PHC program on health standards. We worked with the RMO/Mansakonko to analyze data on infant and child mortality from all PHC villages in the Central Region in hopes of comparing it to non-PHC villages, or to pre-PHC periods, but infant mortality rates (IMRs), we found, generally under 50, demonstrate only that infant mortality is under-reported, not that PHC has lowered it. MRC data to be published in 1986 will measure some of the differences in health standards between PHC and non-PHC villages, but will probably not be very helpful in explaining the complex socioeconomic factors causing those differences.

In the next section the team presents our analysis of what we found to be the most important issues affecting the quality of PHC services in the villages we visited, based on interviews with villagers, health workers, and supervisory personnel, on the National PHC Review, and on our experiences in other countries. We have categorized those issues (somewhat artificially because they constantly overlap) into community involvement and financing, and health worker performance, training, and supervision. Unlike previous sections of this report, which are largely factual and objective, what follows is often anecdotal and always subjective, yet it may reveal some of the options unexplained by epidemiological data.

C. Community Involvement

In this report, community involvement is considered as a management system, akin to training, supervision and other more common management systems. Treating community involvement as a central focus rather than integrating it with or appending it to other systems is fully justified by (1) its importance to the success of the program; (2) by the intricacy of the relationships among the units and individuals concerned; and, (3) by the need to plan and manage these relationships in order to further develop and sustain the program.

The most basic strengths of the community involvement strategy adopted by The Gambia's PHC program are that (1) it is built upon a community organization; (2) the community organization is multi-sectoral; and, (3) care is taken to assist the community to understand the program before the organization is established and activities begun. These decisions of four years ago are now taken for granted. However, they were not necessarily obvious at the time they were made; several other countries at a similar stage in development of their program made different decisions which they later regretted.

In The Gambia's PHC program, the major institution through which community involvement is manifest is the VDC. Other community-level individuals and organizations may at times play roles but, in nearly all instances, these are in conjunction with the VDC, rather than isolated from it. Therefore, focus of this

analysis was on the formation, process of functioning, responsibilities, and effectiveness of the VDC.

Each of the major components of the VDC system were analyzed by the evaluation team in discussions with VDC leaders and CHWs, and are discussed in depth in Appendix D, Analysis and Recommendations for Improving VDC Effectiveness. We found a consistent need for the PHC program to take steps to strengthen the VDC system; each of those steps suggest definite areas where PCI could play a role in improving community participation. We found, for example, that:

- VDC members should be selected more carefully;
- VDCs need more substantial sensitization;
- GOTG should better coordinate sensitization;
- Improved reporting by CHWs to VDCs will improve the roles of all concerned;
- VDC education programs should be improved; and
- Guidance is need for the VDCs to utilize community funds more effectively.

D. Community Financing

1. Role of VDC

There are several ways in which VDCs are involved in financial activities. They receive funds from drug sales, from the GOTG (a grant of D120 per year), and from other fund raising schemes which they may devise. They must keep, account for, and disburse these funds. Some of these funds are used to buy more drugs; the rest is supposed to go toward non-health activities determined by

the VDC or the community.

Funds from drug sales are given by the VHW to the VDC for safe-keeping. When the VHW needs to obtain a re-supply, he receives the appropriate amount from the VDC cashier, then goes to the regional center, buys the drugs, and returns. One or two VDC members are responsible for holding funds; the CHN checks their financial reports monthly.

In reality, there are considerable difficulties with the accounting procedures and considerable leakage of funds. Most VDC members handling funds usually have little experience with the responsibilities they are expected to exercise. Training and supervision in accounting procedures needs to be further developed.

The PHC program has established prices for all the drugs used in this system. Prices charged to patients are high enough so that they should produce at least D2 income for every D1 needed to pay for an equivalent re-supply. Although it was clear that the "profit" which VHWs and their VDCs report from drug sales is far less than this 2:1 ratio would suggest, we were unable to determine the actual extent of this shortfall.

A second source of funds for the VDC is a cash grant of D120 given annually by the Government. In the region we surveyed, the RHT had established criteria for VDC and VHW activity and integrity which were required to be fulfilled before a VDC could receive this grant. Four of the 81 VDCs in this region were denied these funds last year. In two villages we visited, previous denial of the grant has stimulated the village to improve its program,

suggesting that objective and judicious withholding of this grant can be an effective means for improving a poor-quality program. (We understand, however, that the RHT has been instructed not to withhold these funds in the future; the justification for this instruction is unclear).

A final source of funds for the VDC is any other form of fund raising. VDCs have the power to raise money through both voluntary and required procedures. However, very little of this appears to be occurring. Methods mentioned in our survey were only the proceeds from communally owned land and payment for youth group labor. Other potential methods include (but are not limited to): individual or compound tax, donation campaign, charge for social or cultural events, fines, fixed charge for consultations (instead of for medications), variable charge for services based on an individual's ability to pay, and donation at time of services.

Aside from paying for the resupply of drugs, the funds collected by the VDC may be used for any other purpose. The most obvious might be a stipend for the health workers; this is discussed in the following section. The money may also be used for any other development oriented activity -- not limited to health. Uses of VDC funds mentioned to us were: cement for well construction and protection, repair and paint for the mosque, kola nuts as a "payment" to youth for doing communal work, meals for visitors and workers who dig their well, and a wagon for removal or refuse. Our impression was that VDCs could use

assistance in identifying appropriate development-oriented ways of using community funds, as long as this assistance is of a passive rather than directive nature.

2. Compensating the VHW and TBA

During the sensitization process VDCs are told that it is their responsibility to financially support their VHWs and TBAs. It is recommended they provide a regular cash payment, a payment in kind, or that they work for the VHW and TBA in lieu of a payment. In all instances the VDCs made a formal commitment to provide some form of compensation for both VHWs and TBAs. The actual situation regarding compensation by the community to the VHWs and TBAs is complex. For the most part, they do receive something. For example, in the NPHCR, only two of 27 VHWs reported never having received any compensation; all others had received cash, in kind support, help with their farmwork, or some combination of these. However, as our study showed, much of this compensation is irregular. There are at least some situations where a VHW who used to receive some compensation no longer does or where a former cash compensation has been discontinued and replaced with farm assistance. The end result is that most VHWs are dissatisfied: two-thirds of the VHWs surveyed in the NPHCR felt that they are inadequately supported by the VDC. Subsequently, 14 VHWs have been dismissed for mismanagement of funds. In virtually all communities it is suspected (simply from reviewing the expected profits from drug sales) that VHWs are regularly "eating" some funds.

The compensation situation is less bleak for TBAs. In most instances, they continue to receive the cash and in kind payments for delivery which they traditionally received as TBAs before attending training. In some cases the VDC adds some form of community compensation. Nevertheless, 15 of 26 TBAs surveyed in the NPHCR still felt they were inadequately compensated by their village. Some of the suggestions in the previous paragraph concerning VHWs could also be applied to TBAs.

VDCs were told during their sensitization process that they should not use profits from drug sales to compensate VHWs. At the central level we were told that this was not a rule but simply a recommendation. Nevertheless, it was certainly considered to be a definitive restriction by the VDCs we interviewed. The basic justification for this restriction was that it might result in insufficient funds to pay for drug resupply. A secondary justification was the fear that a direct relationship between drug sales and VHW income would lead to too much of an emphasis on this aspect of the program. On the other hand, drug sales appear to be the most reliable source of funds.

It appears that, in many instances, the VHW reports the receipt of enough income to replace his stock of drugs, and keeps the rest for himself. Thus, it is to his advantage to sell as much drugs as possible. This is totally contrary to Government policy. But since the VHW feels that he should be compensated and other forms of compensation through the VDC do not seem to be effective, this under-the-table approach is the result.

We assume that it would be better for all concerned if there were mutually acceptable, above-board compensation procedures which do not "force" the VHW to rely on cheating to achieve what he considers adequate compensation. We do not have a single, simple suggestion for this complicated issue. Rather, we suggest that each of the following be tried:

- Provide improved training in auditing procedures for the VDC, including emphasizing that there should be a substantial profit from the sale of drugs;
- strongly encourage the VDC to provide adequate compensation to the VHW;
- review the decision to forbid use of drug sale profits for VHW compensation;
- provide examples to villagers of other villages' success in alternative fund-raising approaches;
- conduct a study to assess why some VDCs repeatedly promise to compensate their VHW yet fail to do so; and
- have two VHWs per village so that each has time for farming.

Other recommended options for community financing are in

Appendix E.

E. Health Worker Performance and Effectiveness

1. Job Descriptions

During their main training VHWs and TBAs do not receive formal, written job descriptions. No one we asked at any level could produce one. Clearly, neither workers nor their supervisors refer to job descriptions for any purpose with regularity.

Similarly, although these job descriptions may originally have been used to design the curriculum for VHW and TBA training, the curriculum does not clearly aim at teaching the trainees the specific tasks they are supposed to perform. Even if it were available, a job description is of little value unless it is used regularly by the workers, their trainers, and supervisors. Pictorial job descriptions matching the pictorial monthly reporting forms now in use could be developed for training and for on-the-job guidance.

2. Actual and Perceived Job

a. Curative vs. Preventive

A nearly-universal problem encountered by PHC programs in many countries is the difficulty in getting both villagers and the workers themselves to understand the importance of preventive measures. During our survey, we were very positively impressed by the fact that many VHWs and their VDCs have at least learned to give the right responses when outsiders ask about such matters. In many instances, our impression was that their understanding of and support for preventive and promotive activities is genuine. Nevertheless, it is probably true that for most villagers, the major reason they approve of this program is that it results in drugs being closer to home and less expensive.

In essence, we believe that the Gambian program has correctly focussed on a combination of curative and preventive/promotive measures. Through the training and supervision of workers,

sensitization and continuing talks by the CHN to the VDCs, it has gone much further than most similar programs in helping people to understand and recognize the importance of "beyond curative" activities. In part, as a result of the popularity of this portion of their job, VHWs also find this portion to be most interesting and devote relatively more time to it. Nevertheless, further efforts in this area continue to be warranted.

The VHW's "beyond curative" responsibilities include conducting health education talks on various topics and visiting all households in the village on a regular basis. Our impression is that in most instances these tasks do occur; yet their frequency is difficult to assess. For example, according to VHW response to the NPHCR, they gave an average of 12.3 health education talks during the previous month: if correct, this would be extraordinarily - and probably excessively high.

b. Specific Health Interventions

For many of the key health interventions, clear responsibilities by each worker do not appear to be well understood. For example, nutrition surveillance (using armbands) is done by some VHWs, but not by all. It is also done by an occasional TBA, and it is by the CHNs, but the relationship of the village's workers to the malnourished children identified by the CHN is unclear. In one village, an outside team from the Nutrition Unit had conducted a survey and discovered a large number of malnourished children; the VHW's only "action" was to wait until the team

returned to tell him what to do.

There is weak public understanding of why ORT is important, that it treats dehydration and not diarrhea itself. People do not often, if ever, discuss how to prevent or manage diarrhea.

One of the weakest areas of the entire program is family planning; very little motivation and even less distribution of contraceptives is occurring. Only 1.8% of the health education talks by VHWs in the previous month concerned family planning. We never saw more than five family planning acceptors reported on any of the VHW and TBA report forms in the villages we visited.

For each of these key interventions, it would be highly desirable to develop clear, unambiguous responsibilities for each worker. In some instances responsibilities might also be encouraged for the VDC and/or other village groups. It is important, however, to develop the responsibilities in a coordinated manner, so that each person supports, rather than ignores or conflicts with, the work of others.

After the VHW's and TBA's expected tasks in the areas of nutrition, immunization, family planning are clarified, these can be combined to form the basis of revised job descriptions.

3. Job Performance

With few exceptions, VHWs and TBAs continue to function actively, even four years after receiving training. Despite complaints about inadequate compensation, the number who decide to drop out is very low (less than five of 240 VHWs, and about as

few TBAs). On this basis alone, this program is an outstanding success. But we do not know how effectively VHWS and TBAs perform. With the exception of some anecdotal evidence, we were not able to obtain any impact data.

VHWS are seeing patients and prescribing drugs. To a lesser (but still significant) extent, they are also giving talks on health topics, visiting households to recommend specific action and to assess nutritional status, leading cleanup campaigns, and performing a few other tasks.

TBAs are seeing pregnant women and performing most deliveries, at least in small villages. Those surveyed in the NPHCR had delivered an average of three babies per month during the previous three months, and had seen 70% of the mothers at least three times during the pregnancy. (They also claimed that the babies they delivered represented 93% of the total number of babies born, but this is highly suspect; we do not know the proportion of babies delivered by trained personnel.)

F. Health Worker Training

Our only opportunity to learn about the training of the VHWS was through reviewing the curricula and through discussions with trainers and workers. No training program was in session during our visit.

The basic structure of training, described in Appendix F, is unusual. After selection, trainees go to the key village daily for 4-5 hours for a four-week "pre-training" course

in which both future VHWS and TBAs are together. After pre-training, they return to their homes for a month and, in some instances, begin to perform some educational tasks. They then return to the training center for the final six weeks of "main training."

All training staff but one have attended a WHO training-of-trainers course in Nigeria. Most have also attended other short courses, both in The Gambia and elsewhere. We were not able to assess the quality of any of this training.

The written curricula for both courses are generally well written. Sometimes they emphasize participatory teaching/learning methodologies during the practice of skills. VHWS reported to us that during training they actually dig latrines, mix ORS, conduct health talks, and identify malnourished children. In other countries this is frequently recommended but rarely done, largely due to the perception that getting one's hands dirty is a lower status activity. The fact that trainees actually perform these tasks is a major strength of the program.

However, one important flaw was also noted in the curricula: they do not include clear descriptions of the tasks each worker is expected to perform. For the major roles - providing antenatal care and delivering babies (TBA) and diagnosing illnesses and prescribing drugs (VHW) - this is not much of a problem. For the less common but often (in our outsider's view) more important roles concerning nutrition, diarrheal disease, immunization,

community education, etc., this lack is crucial. The absence of a clear set of tasks means that each worker learns some general knowledge and some specific skills, but does not know how to use them effectively. Without practical and continual applications the workers will likely lose both the knowledge and skills rapidly. On a small scale, we verified this by asking a few VHWS and TBAs about nutrition and nutritional surveillance. Although they had studied these topics, they did not remember enough to be of value. By comparison, VHWS could prescribe most drugs correctly, a more important aspect of their job from the villagers' perspective.

In-service training of VHWS and TBAs (referred to as "re-training") has been provided at least once, for one week, to each worker. The intention of the program is to provide one week of retraining for each individual each year. Training has been conducted at regional centers, although consideration has been given to conducting this training locally at key villages.

In addition to this formal training, some CHNs provide brief in-service training to their workers on an informal basis. However, as this has never been structured with clear objectives, curriculum and prepared training aids, we prefer to refer to this type of in-service training as an integral aspect of supervision rather than training.

CHNs have not been given any training in how to conduct training. All workers questioned, including CHNs, felt that they could benefit from additional training.

Although there clearly is an interest on the part of all con-

cerned to provide appropriate in-service training, there is as yet no overall plan to do so. It would be desirable to develop such a plan, with the objective of providing to each worker, on a frequent basis, training to help upgrade existing skills and to learn new skills. One model which could be used to begin an overall in-service training plan is a simple two-axis matrix:

Type of Worker	T O P I C					Etc.
	Nutri- tion	Immuni- zation	Drug Presc.	Giving Talks	Account- ing	
TBA						
VHW						
CHN						
etc.						

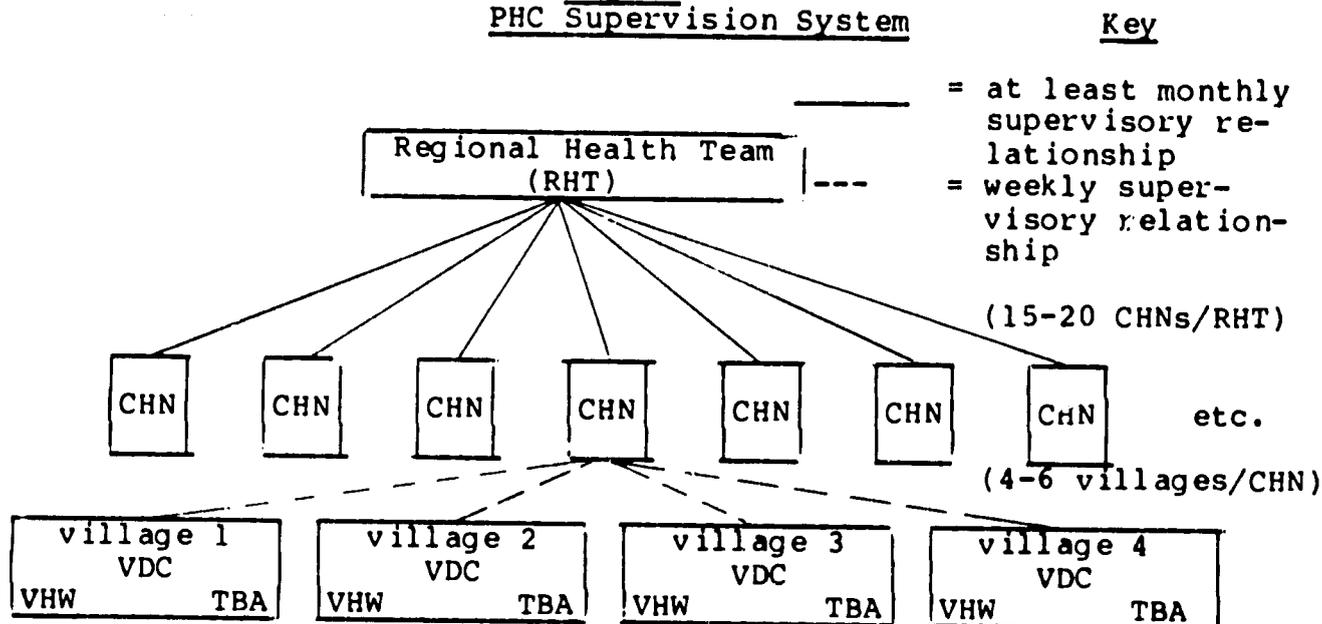
Within each cell of this matrix, one could indicate the priority for this type of training for this type of worker. Further planning could continue using this structure as a guide to ensure comprehensiveness, i.e., that no important topics or individuals are forgotten.

G. Supervision of Health Workers

1. System

The basic structure of the PHC supervision system is summarized in Figure 1. In essence, each CHN supervises all the activities of the two trained workers and their VDC in 4-6 villages.

Figure #1
PHC Supervision System



The RHT supervises the CHN and also provides some intermittent direct supervision of the various village activities. The VDC has a supervisory relationship vis-a-vis the village's workers (as this is discussed in Chapter IV, it will not be dealt with here.) Health Centers and Dispensaries are currently not involved in supervision of PHC activities.

A very rough guideline in judging the potential effectiveness of such a supervisory system is that each supervisor should be responsible for no more than 5-7 units. By this criterion, CHN supervision of its villages is ideal; RHT supervision of CHNs is not as good. Therefore, either expansion of the RHTs or establishment of an intermediate supervisory level would be desirable.

There have been initial attempts to incorporate some Health Center and Dispensary personnel into the supervisory system, but thus far these attempts have been highly tentative. Further exploration of a more meaningful relationship between clinic person-

nel and the PHC villages should be encouraged, as this is likely to be the least costly solution to this problem.

2. Frequency

CHNs are supposed to supervise each village in their circuit once per week. The reality is slightly less than this - about three times per month - mostly to GOTG red tape and delay in reimbursing CHNs for transport costs, as well as petrol shortages inhibiting the CHNs' mobility. Nevertheless, this frequency of supervision, compared with similar programs in other countries, is high. In many countries monthly supervision is a distant dream; triple this amount would be considered lavish. The frequent presence of the CHN in the village, almost regardless of what he does when he visits, may help explain why attrition of workers is very low and the program continues to function.

The RHT is supposed to supervise each circuit and health center and dispensary once per month. (It is also responsible for distributing fuel, kerosene, vehicles, maintaining the information system, etc.) Actual frequency of visits is less, averaging about once per six weeks. Given the larger number of places each RHT is required to supervise, this accomplishment is highly creditable.

CHNs purchase motorcycles (at market prices) to do their supervising. The cost is extremely burdensome, to the extent that some CHNs have refused this 'assistance,' preferring to use bicycles. The idea of selling the CHNs these vehicles, so that ownership may stimulate improved care, is a sound approach;

however, it would be more effective and more equitable if the CHNs could purchase these motorcycles at a heavily subsidized price.

Shortage of petrol and poor maintenance of vehicles has been something of a stumbling block for the supervision system. However, it is not quite clear whether this factor is only an irritation or is really a detriment to effective supervision. The reported high frequency of supervision (e.g., 59% of VHWS interviewed in the NPHCR claimed they are supervised at least once per week; 81% of them at least twice per month; and 100% at least once per month) suggests that this problem is only an annoyance. On the other hand, the frequency and vehemence of supervisors' complaints suggest that this is a more substantial problem.

3. Quality

Without being able to observe real supervisory visits, it is difficult to assess the nature and quality of what actually occurs at this time. Nevertheless, several observations, obtained from discussions with supervisors and supervisees, may provide some insight into this important system.

Both RHTs and CHNs have supervisory checklists which they can use to help them guide this interaction. However, they are not universally used. The checklists which do exist are not intended to be filled in during each supervisory visit, and thus are not useful for any type of consultation with the worker or subsequent

follow-up.

Also, since precise task responsibilities for some health interventions are not clear, supervisory checklists can only refer to the worker's job in a general way. Our impression is that they are only of moderate value to the supervisory process. A concerted effort should be made to develop a clear, task-oriented checklist, to be reviewed during each supervisory visit, discussed with the supervisee, then used as a basis for followup action. It could be pictorial, similar to the VHWS monthly reporting form. Copies might be reused to save paper.

CHNs are perceived as helpful by the VHWS and TBAs. Although a major focus of each supervisory visit consists of checking records (it is the CHN's responsibility to consolidate the data collected by the VHW and TBA), several VHWS reported that CHNs also help them to visit compounds and to conduct community talks on health topics; they appreciate this assistance and want it to be both continued and expanded.

The frequent visits to the village by the CHN and occasional visits by the RHT do much to raise the status of VHWS and TBAs. This is an important function of supervision which has clearly been effective. The extent to which CHNs help VHWS and TBAs to correct erroneous beliefs and actions varies, depending in part upon the CHN's knowledge and skill, and in part upon the quality of the personal relationship between them. In a few instances, the CHN and their supervisees reported that the CHN helps the

workers to interpret the data they have collected. However, we also saw several instances in which CHNs had not addressed what appeared to be very obvious problems.

Most CHNs have a direct relationship with the VDC, attending some of their meetings and discussing problems with individual members. Several VDCs reported that their CHN regularly gives talks on health topics to the VDC; this procedure should be encouraged by the PHC program through provision of training suggestions and visual aids.

The CHN serves as an additional auditor of the funds collected by the VHW from the sale of drugs. This relationship with both the VDC and the VHW is perceived as helpful in some instances, meddlesome in others. Resolution of this problem requires additional training for VDC members and modification of the current procedure for compensation of VHWs.

We were unable to assess the quality by which RHTs supervise CHNs. However, since both the RHT and CHNs complained about the brevity of these visits, it is unlikely that there is enough time devoted to observing the CHN supervise and then help him to improve his performance. This should be the major element of the supervision of CHNs by RHTs. Despite the fact that supervision is the crux of their job, CHNs feel a need for more training in methods of supervision and the management of their activities. At least one RHT member expressed a similar need. It would be highly desirable to provide each supervisor with a well-planned, relevant course in the functions and methods of supervision.

In conclusion, the supervision system is structurally sound. The quantity of supervision is adequate. Relatively minor adjustments, such as greater involvement of Health Center personnel and rapid financial reimbursement to CHNs for transportation, would help improve an already good system. Some focussed assistance is desirable to improve the quality of supervision. CHNs need work plans with written objectives, targets for disease reduction, immunization, VDC activities, etc. Supervisory guidelines which can be reviewed with VHWS and VDCs during each visit, then used to help improve the worker's functioning, should be developed, tested, improved, then used. RHT supervision of CHNs should focus more on improvement of the CHNs' supervisory skills. Training should be provided to all supervisors.

In Appendix D, we have consolidated the observations made in Section IV into three specific suggestions for improvements:

- continuing education for VDC members;
- job description revision and active use; and
- a village-focussed information system.

V. SUMMARY OF CONCLUSIONS

A. Project Strengths

Analysis of community involvement in PHC programs in other countries suggests that the most important requirements for an effective program are:

- a community organization whose members are knowledgeable about health matters and committed to community improvement;
- real decision-making by the community organization (not simply implementing decisions made by others);
- frequent activities implemented continuously by the community organization (not just project start-up activities);
- direct health-related activities (e.g., promoting immunization, weighing children, digging latrines) as well as the more common indirect health-related activities (e.g., as constructing a building or raising funds);
- community financing of at least some aspects of the program; and
- management systems by the health sector focussed on the development and continuing support of VHWs, TBAs, and sub-systems (such as information and drugs).

The Gambia's program is one of the few PHC programs we have seen which has already achieved an excellent start on each of these elements. Its basic structure is sound; no major changes are needed at this time. The program is, nevertheless, at a cross-roads wherein positive, continual decisions could result in a good

program becoming better, or the lack of effective decision-making could result in a good program slowly decaying.

Each of the recommendations made in the previous sections and explained in detail in the appendices has several components to it, and tends to cut across the traditional management support system. Each suggestion requires an initial developmental phase, followed by expansion to a larger scale. Each could form the basis for a 'project' within the overall program. If any or all of these or similar suggestions for improvements are undertaken, we believe they will significantly improve the quality of The Gambia's PHC program. Helping in the development and implementation of these suggestions could be a desirable focus for a relatively small amount of technical and financial assistance. Current conditions are such that relatively little input could produce a major impact on the health of The Gambian people.

The following is a summary of the major achievements of this project:

1. Village-Based System in Place

PCI's efforts during six years of involvement with the Medical and Health Department of The Gambia's MOH have been instrumental in creating an accessible, low-cost, and nearly self-financing, rural, PHC system. This system is centered within the village around VHVs who are selected and to some extent supported by village leaders. The model used is not unusual in its design, nor innovative in its implementation; the unusual feature of The Gambia's PHC program is

that it is in place throughout most of the country, and that it is beginning to work effectively.

2. Village Development Committees (VDCs)

Also promising in The Gambia's PHC program is its growing use of VDCs to promote preventive health activities, to support and supervise health workers, and to link health and health-related development activities. Again, it is not the concept or the introduction of the VDCs role which is special in this program, but the fact that that role is becoming effective in a large number of villages -unlike many African countries where VDCs are ineffectual or even counterproductive in PHC.

3. Supervision by Nurses

Despite major fuel shortages, The PHC program is impressive in the number and frequency of supervisory visits by CHNs to the programs' villages. Those visits are essential to the motivation and competence of health workers in any PHC program, but few African nations have been able to ensure that supervision is regular, dependable, and functional. While the quality of these visits needs improvement, the fact that a supervisory system is in place portends well for future progress.

4. Political and Donor Support for PHC

The current system of PHC planning and oversight in The Gambia's MOH contains serious administrative flaws, yet awareness of the need for PHC seems high at all levels and among various health-related departments. The Gambia is small enough and its

development programs implemented effectively enough for this to be a choice testing-ground for model PHC activity. Both the Government and international donors support the PHC program adequately and are responsive and flexible in planning its changing course when necessary. The difficulties faced at all levels, from the VDCs up to Ministry-level planning groups, can be seen as the inevitable growing pains which must be tolerated in evolving a sound, well-tested PHC system.

B. Project Weaknesses

1. Incomplete Development of PHC Subsystems

Despite these many strengths, important next steps which should have been taken by PCI to help The Gambian PHC program move beyond the establishment of a solid training program have not been completed. Those next steps, most of them planned to occur under the second MG, are described in the "Deficiencies and Recommendations" of the National PHC Review (Appendix B). They involve strengthening CHN supervision systems; health management training; information and evaluation systems; integration of PHC with secondary care, MCH, nutrition, EPI, and other health and (nonhealth) programs; village financing; village health committee enhancement; drug management; and more.

2. Inadequate Technical Support by PCI

The evaluators also believe that despite the constraints of time and funding imposed by USAID's early termination, PCI should have been able to make a better start than it did at developing

or strengthening new PHC subsystems. Many of the activities PCI did not complete in The Gambia are discussed in this report. For example, no baseline or benchmark surveys to measure the effect or impact of training on MCH were ever completed. Improved systems for supervision of CHNs by CHNs, involving clearer job descriptions or simple checklists for inspection visits, might have been (and should still be) tested. New approaches to village health information systems to the enhancement of VDCs, or to financing health activities through drug sales could have been tested on a limited scale. Small random samples of "sentinel" villages could have been used to test and/or measure any number of PHC subsystem innovations.

PCI's inability to complete such tasks at least partly to severely limited funds and professional/technical manpower at its headquarters in San Diego. There seems little doubt that given adequate financial and staff support by AID, PCI's program in The Gambia, already successfully exceeding its initial PHC training objectives, would have moved even closer to creating and documenting the model nationwide PHC system which Gambia -- and much of Africa -- so desperately needs.

C. Lessons Learned

MSH found that this PCI project is one of the better examples of PVO/host government collaboration in PHC that we have evaluated to date. But it also illustrates that a PVO program with 50% AID funds can be subject to policy changes within an USAID Mission. It

further indicates that a PVO without a large funding base (such as that provided by a church or by child sponsorships) may have difficulty finding the money and/or the PHC expertise to develop and monitor sophisticated PHC systems which can explore beyond standard, tested approaches.

Although PCI has left in place a functioning PHC infrastructure, it is nonetheless unfortunate that PCI did not have more time and more USAID support to remain in The Gambia to do further testing and expansion of major PHC subsystems. The Gambian PHC system, particularly in the support, supervision, and financing of health workers, is one of Africa's best PHC models, but it needs, and merits, much fine tuning. USAID support for this project should have been continued.

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APPENDIX A

About This Evaluation

1. Health Evaluation Series

This is the eleventh in a series of evaluations by Management Sciences for Health (MSH) of AID-supported, PVO PHC projects. Funded by AID/FVA, these evaluations are designed to "provide information that should lead to improvements in the impact of PVO health and nutrition activities and that will document PVO capabilities and experience in these sectors."

2. Evaluation Methodology

As requested by AID/FVA and PCI, the emphasis in this report is on recent lessons learned about PHC in The Gambia from the PCI project, and includes suggestions for possible, future village level PHC activities. We have avoided a detailed analysis of the history of PCI's activities in The Gambia for several reasons. First, PCI's MG in The Gambia is not being renewed because the USAID Mission is phasing out all health sector assistance except food aid, and believes that PCI's mission has been completed (a view the evaluators do not support). Second, the PHC program and PCI's part in creating it, have been considered to be generally successful by both USAID/Gambia and AID/Washington, and therefore not in need of mid-course corrections. Third, Gambia's overall PHC activities have already been analyzed, and the respected British-supported Medical Research Council (MRC) will soon publish its own report on the program's effectiveness in lowering morbidity

APPENDIX A (continued)

and mortality. Fourth, the PHC program was evaluated a year ago by a WHO-sponsored team.

The resulting report, "The Gambia National Primary Health Care Review, 1985," concentrated primarily on issues affecting the central and regional levels. It did not examine in-depth the lessons, learned about effective programming at the community level where services are delivered. Research under way at the MRC, on the other hand, deals primarily with epidemiological measures of effectiveness. This is important to gauge impact but does not necessarily indicate lessons learned about socio-economic factors affecting health or program planning and management lessons which this report documents and which will be useful for AID and the wider international health community. Many observers of PHC activities in The Gambia see the country as a valuable testing ground for health strategies which might be adapted to other, larger African nations. Yet many important lessons which might be learned from The Gambia experience are not well documented.

We have attempted to discuss some of these lessons in this report, and we have received the fullest support from both PCI and the GOTG in the process. For about two years PCI patiently promoted this evaluation and was prepared to do its own internal evaluation with or without AID support. PCI's Director for Program Planning and Evaluation sees evaluation as the means to strengthen PCI's program design and was both fully supportive and instrumental in its planning. PCI's own purposes in encouraging this study were:

APPENDIX A (continued)

- to identify more clearly the factors that have contributed to successful achievement of program objectives and targets;
- to learn how problems were solved; and
- to identify areas that need strengthening, and develop possible mechanisms for doing so.

PCI management, responsible officials at AID, and the members of our evaluation team were in agreement that analysis of the results of the PHC Program in the village -- and PCI's role in achieving those results -- would be the major focus of this evaluation. Many other issues at the regional and central level obviously limit the effectiveness of PHC at the village level. These include the effectiveness of the Regional Health Teams (RHT), the quality of clinical care in the MOH facilities, the MOH information system, overall health ministry policy, and sociocultural, economic and environmental questions. But these and other important factors cannot be covered in the scope of this report. Moreover, we are convinced, now that the overall PHC system is in place and functioning, that the dynamics within The Gambian village should be of greater concern to Gambian health planners from now on.

This study grew out of a village questionnaire which the evaluation team, including four senior PCI staff members, used to guide discussions with health workers and village leaders in a random sample of Gambian villages in the central and western regions, north and south banks, during October 1985. Our questionnaire grew, in turn, out of a variety of reports and discussions

APPENDIX A (continued)

about previous research and findings. First, we reviewed a generic questionnaire developed by WHO and UNICEF to assess PHC program effectiveness worldwide, adapting many questions to The Gambian context. Next we revised the draft in light of the 1985 PHC Review findings, the objectives of this evaluation, and the needs of PCI and the MOH. During an initial field visit to several villages the team pretested and revised the questionnaire, using an individual scoring system to clarify the priority concerns of each team member.

During the rest of our two week, field work period, we divided into two groups with alternating members, ensuring local language capabilities, the presence of both MSH and PCI staff at all times (except when a confidential interview by an MSH evaluator was appropriate), and different technical skills. Separate in-depth interviews were held in eight villages in the Central Region with eight VHWS, six TBAs, seven CHNs who supervised the health workers from key villages, and over 100 members of VDCs. An additional site visit was held in the Western region. All PHC villages were in the North Bank and Lower River Divisions. Most interviews took place in Jarra East, Jarra West, Kiang East, and Upper Baddidu Districts. Key villages serving these PHC areas included: Bara Kunda, Dongoroba, Genieri, Jainaiba, Kachang, Konteh Kunda, and Toniataba. Additional meetings were held with the RHT Officials in Mansakonko, Central Region Headquarters, and with officials of the CHNs, and Medical and Health Department of the MOH in Banjul.

APPENDIX A (continued)

3. MSH/PCI Evaluation Team

There were seven major participants who shared in this evaluation effort. The two evaluators from MSH are the primary writers of this report (and are solely responsible for its contents): Nicholas Danforth, Ed.M., M.I.A., the Manager of the PVO Health and Nutrition Project, has designed and led six previous evaluations of PHC projects; his specialty is design and evaluation of primary health education and training programs, particularly in Africa. Don Chauls, Ed.D., the MSH Chief of Party for a primary health workers training program in Yemen, is a specialist in community participation and training of community health workers.

Two members of PCI headquarters staff, the American Field Project Director, Anthony Nathe, MPH, and The Gambian Director of the PHC Training Program, Musa Maremah, assisted in all aspects of the evaluation. Mr. Nathe made major contributions to this report, both in writing extensive background papers for the evaluators in the field and in making substantial recommendations for improvements in the initial draft. Representing PCI Headquarters during The Gambia field visit were Paul Dean, MD, MPH, Medical Advisor to PCI, and W. Frederick Shaw, Dr.PH, PCI's Regional Director for Africa, Asia, and the Pacific, as well as for domestic programs.

APPENDIX B

Summary of PCI-Related Findings in National PHC Review, Banjul, 1985

<u>Deficiencies</u>	<u>Recommendations</u>
1. <u>PHC Policy and Implementation</u>	
- poor understanding and use of the "at-risk strategy" in MCH	- give priority attention to at-risk categories and priority health problems
- poor understanding and use of basic service indicators	- development of standard management protocols for major problems
- weak referral chain	- strengthen referral, particularly at intermediate level
- inadequate health information system	- identify means for emergency evacuations from villages
	- revise health information system to highlight usable information in day to day PHC management
2. <u>Community Participation</u>	
- need to strengthen VDC capabilities	- combination of anthropological and sociological research, local operational research, and VDC workshops
- need to raise funds in village to support program	- develop "official" system of tax gathering or village insurance scheme
3. <u>Management and Supervision</u>	
- weak knowledge and use of health statistics in program management	- develop useful management indices and share such information routinely with all members of Regional Health Team (RHT)

APPENDIX B (continued)

<u>Deficiencies</u>	<u>Recommendations</u>
- problems in interaction between RHT and central MOH affecting communication, administration, finance, and logistics at village and regional levels	- various recommendations
- mid-level health manpower shortages, due to poor working conditions	- none
- weak management of VDCs by CHNs, RHTs	- management training for VDCs and CHWs
- RHTs establish new PHC systems but do not fine tune them once established	- various
- weak supervision of CHNs by Health Center Staff	- various activities to strengthen support at intermediate level
- inadequate community diagnosis and use of health data by CHNs	- various
- various problems in CHN-RHT relations	- various
- transport problems of CHNs	- various
4. <u>Information Systems</u>	
- poor use of information at all levels for planning or management	- RHTs should receive information feedback from MOH Statistics Unit, and RHT should use information "as a management tool to give direction to the efforts of the health workers."
5. <u>Health Training and Manpower</u>	
- growth of PHC system and changes in job descriptions have outpaced growth of manpower and revised training curricula	- increase PHC manpower, update training and job descriptions (Shipp Report, 1982)

APPENDIX B (continued)

<u>Deficiencies</u>	<u>Recommendations</u>
	<ul style="list-style-type: none">- increase output of PHC training (fully funded posts are unfilled)
6. <u>Health Financing</u>	
<ul style="list-style-type: none">- difficulty in defining and analyzing costs of PHC for planning and management purposes- fees for service do not go directly into health sector	<ul style="list-style-type: none">- survey needed of health sector finance- none
7. <u>Village Health Services</u>	
<ul style="list-style-type: none">- few checks on quality of service- shortages of drugs possible- no integration of traditional healers	<ul style="list-style-type: none">- survey patients to match complaint and treatment to diagnosis- RHTs should check; improve drug procurement and distribution- none
8. <u>Basic Health Services</u>	
<ul style="list-style-type: none">- Health Centers, dispensaries, and subdispensaries staff lack understanding of VDC- no job descriptions available except for CHNs- no nutrition improvements evident, especially in women and children, despite growth monitoring- failure of "at-risk" strategy for MCH- EPI not integrated with VDCs- family planning acceptance low- water/sanitation/latrines inadequate.	<ul style="list-style-type: none">- seminars, workshops for mid-level staff- develop appropriate job descriptions- improve education and follow-up in nutrition surveillance/intervention activities- strengthen MCH "at-risk" strategy; link MCH workers to VDCs- integrate EPI with VDC; improve immunization education- improve family planning services and education- improve training in well and latrine construction, sanitation education.

APPENDIX C

Summary of Gambia Project Expenses

By Quarter 1979 - 1985

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	1979				1983			
Supplies				\$ 231	\$ 2,436	\$ 2,294	\$ 910	\$ 1,974
Salaries				3,169	4,812	5,776	5,641	6,392
Travel				590	5,005	5,659	4,059	7,115
Space				-	1,157	-	800	93
Support Services				1,689	8,294	-	8,738	8,189
Total				\$ 5,679	\$ 21,704	\$ 25,256	\$ 20,348	\$ 23,763

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	1980				1984			
Supplies	\$ 197	\$ 202	\$ 758	\$ 3,821	\$ 382	\$ 1,953	\$ 7,361	\$ 94
Salaries	3,299	3,223	3,195	3,236	5,811	5,906	7,107	8,063
Travel	1,079	349	1,672	-	2,389	2,306	590	2,888
Space	709	506	1,091	-	960	-	1,600	-
Support Services	5,878	8,131	3,278	16,501	5,924	10,030	5,147	16,988
Total	\$ 11,159	\$ 12,411	\$ 9,994	\$ 23,558	\$ 15,466	\$ 20,246	\$ 21,805	\$ 28,031

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	1981				1985			
Supplies	\$ 857	\$ 780	\$ 261	\$ 795	\$ 1,319	\$ 114		
Salaries	6,379	5,445	6,123	7,771	4,339	3,106		
Travel	351	3,445	5,104	6,805	3,009	3,789		
Space	-	-	-	2,728	-	-		
Support Services	23,194	8,848	6,871	18,665	6,793	2,757		
Total	\$ 30,781	\$ 18,518	\$ 18,359	\$ 36,764	\$ 15,455	\$ 9,766		

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	1982			
Supplies	\$ 3,509	\$ 1,113	\$ 1,898	\$ 2,672
Salaries	6,757	6,088	4,606	3,638
Travel	3,511	1,878	2,115	7,082
Space	-	-	-	-
Support Services	11,939	9,525	69,932	6,757
Total	\$ 25,716	\$ 18,604	\$ 78,551	\$ 20,249

APPENDIX D

Analysis and Recommendations for Improving VDC Effectiveness

1. Pre-Sensitization Diagnosis

A variety of steps can be taken to improve the functioning of the VDCs. Before future VDCs are organized, a thorough community diagnosis is needed. The RHT (or other entity responsible for sensitization) should analyze the social, cultural and political factors that are likely to influence VDC effectiveness, determine who should be on the VDC and how it should function. Decisions about the membership and functions of the VDC must be left to the people of the village, but outsiders who advise the village on such matters should be prepared to suggest which local groups or individuals ought to be represented, what roles the VDC and its individual members should consider playing, and which health activities are most appropriate for the needs of that particular village.

The in-depth village analysis, baseline studies, and involvement of outside experts in setting up and controlling the VDC -- such as that undertaken by Save the Children -- may not be appropriate or acceptable in some PHC villages, and is not likely to be affordable on a large scale in any case. Some compromise should be found between the current system, in which little pre-sensitization analysis takes place, and costly intensive diagnosis. Ideally this analysis by the RHT should be a continuous process, repeated every year or two, to ensure that the VDC is still representative, functions effectively, receives adequate outside

support, etc. If such regular reinforcement is not feasible in all villages, it should at least be provided in those which appear most in need.

2. Village Sensitization and VDC Selection

A process has evolved through which regional "sensitization teams" prepare villages for the PHC program. Sensitization teams comprise members of the RHT and the local CHN. Efforts have also been made -- in part successfully to include personnel from other sectors, such as school teachers, agricultural extension agents, and community development assistants. A sensitization team visits a village three times over a three-month period. Objectives and procedures for each of the three meetings have been developed. During these visits, meetings with the entire village are conducted. The concept of PHC, with its preventive emphasis, is explained. The basic village-level institutions of the PHC program the VDC, VHW, and TBA - are described. The village is asked if it wishes to participate in this program. After receiving the village's response (thus far, 100% have said yes) an oral contract is agreed upon, with specific commitments stated by each party. The team then suggests selection criteria for VDC members (and for VHWs and TBAs).

The actual selection process appears to vary considerably from village to village. In some, there is relatively little community discussion, with the alkalo (and/or the imam) deciding who shall be VDC members. In others the alkalo (and/or imam) may still play a major role but discussion incorporates opinions of others. Another model involves the kabilos -

family groupings into which most villages are divided; the head of each kabilo - with or without a discussion among other kabilo members - selects his kabilo's representatives on the VDC. Completely open selection without major input from the alkalo, imam, and/or kabilo heads is apparently very rare. We did not come across any instance of Western-style voting for competing candidates.

A World Bank-supported study of VDCs (field-work completed only a few days before our arrival; report not yet available) suggests that in some instances, poor VDC performance is due to poor selection of members, resulting in the VDC not being representative. As a result, the VDC tends to favor certain segments at the expense of others, resulting in factionalism rather than the unity which an effective, community-wide program requires. Initial findings of this study suggests that caste may be the single most important factor related to inadequate VDC performance.

A logical conclusion from this is that (1) a more substantial sensitization process, focusing more on trying to understand the potential divisions in each community, might prevent an unrepresented selection. A longer sensitization process would require anthropological skills in community observation and diagnosis, as well as an ability to assist competing groups to cooperate with each other. Such a process has been adopted for some of the VDCs promoted by the Department of Community Development. (2) Increased dialogue between the two departments and the development of a more flexible, longer and deeper process of community sensitization should be attempted on a trial basis.

3. VDC Membership

In virtually all instances (i.e., a minimum of 75% response rate on the NPHCR), the following individuals are included on the VDC (in addition to the VHW and TBA): alkalo, village elders, the imam, and representatives of youth and women's groups. Women are barely represented on all VDCs, ranging from a token member (the TBA) only to 50% of the membership. There are occasional instances wherein male and female committee members may meet separately for discussion and action on topics which are perceived to be of gender specific interest (e.g., an all-female meeting to discuss work on communal rice farm; an all-male meeting to discuss cleaning up a refuse area).

In many instances, the kabilo is used as the basis for representation on the VDC. It is not clear how frequently this is done or whether this increases or decreases the representativeness of the VDC with respect to other criteria. In a World Bank study, the lack of representation of certain castes was noted as the major cause of VDC weakness.

In a number of instances, changes occur within the VDC membership. In some of the villages we visited, these changes were large-scale, resulting in a major shift from one type of membership to another. The two major reasons cited for these changes were both laudable - to replace elders with younger, more active people and to replace people who liked to direct others with people who were willing to do the work themselves. It is not clear how common this practice has been, or whether it has resulted in any substantial interpersonal difficulties which may

have a detrimental effect on the program.

4. VDC Members' Roles

To strengthen the effectiveness of the VDCs, selected members should be encouraged to accomplish specific tasks. Some VDC members currently do specialize in particular functions such as keeping financial records, collecting and holding funds, and chairing meetings (usually the job of the alkholi), so this concept is not new, but needs to be expanded. Other administrative roles could include keeping minutes of meetings and lists of tasks to be performed, maintaining charts of health and other development indicators, and assisting health workers with record-keeping. Hands-on activities by VDC members, such as building water supplies and latrines are doubly valuable, both in themselves and by setting an example.

VDC members can play a very helpful role in health education by calling and participating in public meetings, talking with families and individuals, and helping health workers convince skeptical villagers to accept new ideas and try new practices. All VDC members, even those unwilling or unable to become more actively involved, can at least set a good example to others by maintaining a safe water supply and a clean latrine, practicing proper hygiene, nutrition, and child spacing, and knowing about immunization and ORT.

Checklists of these and other VDC member activities would be useful for the RHT to discuss with potential VDC members and other villagers during the sensitization process; they should also be kept by the VDC as reminders of what members can do.

5. VDC Meetings

VDCs seem to meet regularly. In the NPHCR, 79% of VDC member respondents (excluding unclear answers) reported that their VDC met at least once a month or more frequently. Our impression from discussions with other VDCs confirmed this.

We attempted to assess the extent to which the VDC meeting process is democratic versus authoritarian. In most instances there appears to be considerable discussion of issues at the meetings; one member even emphasized that the major criterion for VDC success is membership by people who are open-minded, willing to listen to others, and willing to change one's view. Nevertheless, our impression was that there still are some VDCs which are essentially one-man operations; correlation between the extent of interaction during VDC meetings and VDC success was not possible to assess. Regarding the actual decision-making, in only one instance was voting mentioned; consensus and autocratic decision-making by the alkalo were much more common. The extent of each and any correlation between this factor and VDC success would be useful to assess, but was not possible during our brief investigation.

In most instances, there is no clear system which VHWs and TBAs use in reporting to their VDCs. Written minutes of VDC meetings were kept in less than half of the villages we surveyed. There are no goals or targets which VDCs might use to assess achievements. Development of such an approach, with each worker expected to present a periodic report to the VDC describing progress towards the achievement of agreed upon objectives, would

be an extremely helpful means of clarifying the focus of the VHW and TBA, improving the VDC's understanding of the program, and increasing the VDC's ownership of the program.

VDC decisions are reported to the rest of the village through a variety of mechanisms. Some villages use the traditional system of griots who loudly announce messages in front of each compound. In other instances, geographical or kabilo representatives are responsible for conveying messages back to the people they represent. One village reported that a drum is used to call announcements. It is not clear how effective these and other methods are at ensuring that everyone in the village is aware of and understands VDC discussions and decisions.

Several instances were mentioned of communication from the villagers to the VDC. Usually these were in the form of complaints concerning such matters as the lack of availability of drugs.

6. VDC Health Education

Some VDCs appear to have health talks presented by the CHN whenever he/she attends their meetings, as well as from their VHW. TBAs almost never speak at meetings, apparently viewing the VDC as a forum for men only. Although its quality and frequency are not clear, our impression is that this relationship with the CHN could be one of the most important strengths of The Gambian program, and needs to be focussed on in the future. In no instances did VDC members report attending formal education or training sessions outside their village.

Circuit level meetings are being held by the CHN with all VHWs and TBAs; the CHN then reports those meetings monthly to the

RHT. There are also plans to provide training in specific management topics for relevant VDC members (e.g., auditing of accounts). Both of these appear to be excellent ideas. To implement them effectively, however, it is recommended that any VDC education or training be preceded by a process of preparing clear objectives, development of curriculum (even for half-day training programs) and development of visual aids (especially important for non- or neo-literate people).

7. VDC Responsibilities

a. Selection of VHW and TBA

The VDC's first responsibility, after agreeing to undertake a PHC program, is usually the selection of the VHW and TBA. Criteria for selection have been presented to them by the sensitization team; at the time of selection, these criteria are still fresh in mind. Most VDCs have followed these criteria reasonably well in selecting their workers. At the beginning of the program, many VDCs, knowing that VHWs are not being paid by the government, selected lower status people for this role. The attention showered upon the VHWs, and the equipment and drugs given to them, proved to be surprising to these VDCs and considerably improved the status of the VHW's position among all villagers.

In some instances this resulted in a conflict between the VHW and the VDC, with at least some VDC members presumably wishing that they had selected someone else a higher caste person -
- for this position. However, there do not appear to be any such

cases where low-caste people have been forced out of the position in order to replace them with someone of higher status. There are 14 instances where a VHW has been removed from his job, usually for "mismanagement" of funds. In two other cases, VHWs have died, moved away, or left the job for other reasons.

Selection of TBAs differs from that of VHWs since the initial population from which they can be chosen is more limited. Our impression is that in some instances the VDC may have wished to "honor" a highly experienced existing TBA, and in doing so selected a person too old or too infirm to serve actively. To partially compensate for this problem, it was decided by the PHC program that each village select an Assistant TBA to be trained by the TBA herself. Thus, in most villages the TBA or the VDC has selected an Assistant who is perceived by the TBA - probably rightly so - as a threat to her position; cooperation in such cases, understandably, is not optimal.

b. Health Activities

During the VDC sensitization process it is emphasized that VDCs have responsibility to promote general development in their community and, in particular, the improvement of the health status of members of the community. They are supposed to take a leadership role, assisted by their VHWs and by external resources such as the CHN and RHT, rather than simply follow or support initiatives of the health sector personnel.

Implicit in this approach is that VDC members must physically perform health promotion activities, in part because

they are the people designated by the village to do so and in part to set appropriate models for the rest of the village to follow. This concept does seem to be understood by most VDCs. In several instances during our survey, we were told by VDC members that some previous members had been replaced due to their practice of giving orders to others rather than doing the work themselves.

Two categories of health promotion work performed by the VDCs can be categorized as "direct" and "indirect" health tasks. The former includes any activities closely related to the substance of health improvements, such as explaining to a neighbor how to prepare ORS, motivating someone to immunize children, protecting a well, or cleaning a refuse area. Indirect health activities are best exemplified by collecting, handling, and disbursing money and by constructing a building; these are also important aspects of community involvement, but are only "indirectly" related to health. Most VDCs have clearly been involved in both direct and indirect health activities.

Some of the direct health activities mentioned by the VDCs are clearly more important than others. Yet little has been done to help the VDCs understand the relative differences. Our impression is that there is considerable potential still to be tapped for VDC members performing important health tasks, but that this would require assisting them to understand the relative value of each type of activity.

An educational effort aimed at helping VDC members, VHWS, TBAs, and PHC trainers to redirect their own and their village's

health efforts away from less productive topics (such as cutting grass) towards more productive topics (such as understanding and encouraging immunization, ORS use, and improved nutrition for malnourished children) could produce greater impact without significantly increasing the time they devote to health tasks.

c. Supervising the VHW and TBA

In addition to their financial oversight, VDCs usually claimed that they "supervise" the VHW and TBA. However, when asked what this meant, they tended to refer only to attendance -- making sure that the VHW is at the health post when required and that the TBA actually visits pregnant women. Other aspects of supervision were not mentioned. VDCs look upon VHWs and CHNs as government (not community) agents, and do not feel involved in overseeing health workers.

Reports on activities are presented to VDC meetings by some VHWs and TBAs. However, in no instances are these reports structured so as to assist the VDC to assess the progress the community is making toward achievement of any goals; the concept of goals or targets is not well understood. It would be desirable to develop, test and improve a simple procedure through which VDCs could develop appropriate village targets (such as number of latrines constructed, number of babies delivered by the trained TBA), coupled by a simple reporting mechanism to enable the VHWs and TBAs to describe to the VDC the progress towards achievement of these targets. If this were done, VDCs_ would be much better able to supervise their VHWs.

d. Liaison with CHN

In the villages we visited the VDC's relationship with the CHN appeared to be extensive. When he or she visits a village (2 to 4 times per month), the CHN usually includes a visit with one or more VDC members. Some of these CHNs also attend VDC meetings, giving talks on health topics. We were told, however, that this extensive contact between VDC and CHN may not really be representative. A similar relationship exists between RHT members and the VDC, although on a much less frequent basis. Although fairly extensive and probably helpful, this relationship between the VDC and the health system personnel is not as well organized as it might be. It would be desirable to develop an approach through which improvement in VDC skills could more systematically be taught by the CHN and RHT.

In addition to educating, the CHN also serves as an additional auditor of VDC finances. In areas where funds are being "mis-managed" this may be an awkward situation. Our impression is that a more substantial training of VDC members in accounting and auditing techniques would simplify the CHN's auditing responsibility.

8. Continuing Education for VDC Members

CHNs, VHWs, and TBAs currently provide some continuing education to VDC members at their regular meetings. We recommend that this process be continued and that an additional, organized, focussed, and large-scale effort be initiated to provide continuing education for VDC members as well as VHWs and TBAs. The following is one model for such a program and might serve as a starting point for discussions to develop an appropriate approach.

- a. Assign at least some of the Training staff to work full-time with the RHTs. Provide them with supplies needed for development of simple teaching aids.
- b. Taking into consideration seasonal health problems, develop a schedule of topics on which to focus educational efforts for VDC members. There should be precisely one topic per month. These should include both health topics (e.g., nutrition, malaria, family planning) and management topics (e.g., accounting for/auditing funds, supervising a worker).

Phase I: RNT Trains CHNs

- c. For the first topic on this list, the Trainers at the RHT develop a first draft of objectives, curriculum, and training aids for a half-day training course for VDC members. It is important to remember in developing these materials that:
 - most VDC members are intelligent but not literate;
 - lecturing is boring; participatory teaching methodologies are usually better; and

- the final focus of the course should be for the VDC members to return to their village and do something with respect to the health or management problem; knowledge is only a means to this end.
- d. When CHNs go to the RHT for their monthly meeting, they meet with the Training staff to review the training materials very carefully and suggest improvements. This cannot be a perfunctory review, since each CHN will have to live with the results of the training.
- e. During the month, the Training staff go to each of the key villages to conduct the training; the CHN assists the Trainer during this first phase. Trainees for this course should include the VHWs, TBAs, and selected VDC members from the CHN's circuit. VDC members can be selected so that different individuals attend each month (creating, de facto, a situation in which each VDC member is an 'expert' on a different topic and can thus become responsible for that topic). It is probably best to retain a degree of flexibility concerning the number of members per VDC who attend each training, as well as whether both the VHW and TBA should attend; such decisions might vary from month to month.
- f. As part of the half-day training course, the VDC members (assisted by their VHWs and/or TBAs) prepare simple, oral 'workplans' for one or more specific activities

(course topics) they will undertake during the next month. Each individual presents his or her plan as a commitment to the group. During the next month, the CHN focusses heavily on supervising this activity, assisting the villagers in developing and performing it adequately.

Phase II: CHNs Involved

- g. The following month, repeat step c. for the second topic on the list, the Training staff preparing the first drafts of objectives, curriculum, and training aids.
- h. When the CHNs gather for their monthly meeting at the RHT, discuss the previous training course and elicit their recommendations for future improvements. Inform them that it is the intent of the program to gradually phase the Training staff out and phase the CHNs in as the trainers for the circuit-level training.
- i. Repeat step d. for the second item on the list, with the CHNs playing a more active role in the development of training aids.
- j. Repeat step e., with the Trainer and the CHN sharing in the conduct of the training.
- k. Repeat step f., the village workplans and followup by the CHN.
- l. In future months, repeat this entire process for other topics, with CHNs gradually taking over more and more of the training responsibilities - including the development

of some training materials. The Trainer should make a monthly assessment of each CHN's training abilities and provide assistance in overcoming weaknesses. It would also be useful to bring CHNs together at some time for a formal (two-week?) training-of-trainers course.

Phase III: CHNs Take Over

- m. Repeat steps g. through l., with the CHN conducting the training alone. The shift from Phase II to Phase III should vary from one CHN to another: those who are 'natural' trainers may be able to take over the training completely by the third or fourth month; others may require a year or more to obtain the requisite skill. The decision on when an individual is capable of moving from Phase II to Phase III should rest with the Training staff.

9. A Village-Focussed Information System

A simple, picture-based form is currently used by the VHW to collect selected data. Another similar form is used by TBAs. With only rare exceptions, what they collect is not used by them in any way; it is simply passed onto higher levels (via the CHN).

A different problem, noted in Section IV, is that the VDCs have only a vague understanding of how to supervise their VHWs and TBAs; where it does exist, this focusses largely on attendance rather than achievements. There is no goal- or target-setting and no systematic reporting of technical accomplishments and problems.

To address both of these issues, the following approach is suggested (to be tried out initially on a small scale):

Develop and Illustrate Targets

- a. Develop, test, and improve a simple graph for VDC members to use to set a target and periodically record progress toward its achievement. This might be in the form of a blank bar graph on which the CHN, VHW, or TBA could mark appropriate quantities for each topic. There should be space for only one topic per graph.
- b. Have the CHN attend a VDC meeting and assist the VDC to the village. Initially, targets should only be established for a very small number of topics (say, at most three per village). These targets should be very simple; they could include such things as: number of latrines to be constructed, number of children to receive complete immunization, number of wells to be covered, or other unambiguous, clearly-countable items.
- c. Have the CHN mark the target and the appropriate scale on each graph. Place it on the wall of the health post or another conspicuous place. Teach the worker to fill in each achievement.
- d. Each month the worker presents these graphs at the VDC meeting, noting whether the target is or is not likely to be achieved at the current rate. (Initially, assis-

tance might be needed from the CHN to help the worker and the VDC make this interim assessment). Where the target appears difficult to attain, the VDC should discuss what action is required to achieve it, or whether a reduced target is acceptable.

Illustrate and Report Achievements

- e. Review the current VHW and TBA forms to: a) ensure that pictures are correctly understood (UNICEF has conducted studies of intelligibility of different types of pictures by different types of audiences and might be called upon to provide assistance in this assessment) and b) ensure that information on each of the items on each form is really needed at the village level (it would be highly desirable if the quantity of items on which the VHW and TBA collect data could be reduced to about half the current amount).
- f. Develop, test, and improve a set of simple graphs which can be recorded monthly for a one-year period to summarize the data collected on the VHW and TBA forms. For example, for the TBA one graph might portray the number of babies she delivered, a second the number of pregnant women she saw, etc.; it is important that these graphs be as simple as possible, with only one topic per graph.

- g. On a pilot scale, introduce these graphs in a few villages. Initially, the CHN, on his monthly visit, can fill out each graph, then discuss it with the worker. Their initial 'analysis' of the information should be very simple, using questions such as: 'Is this higher or lower than last month?' Only at a later stage, after the workers clearly understand the basic meaning of the graph, might more sophisticated questions be introduced; e.g., 'Is this too high or too low?', 'Compared with last month, is this better or worse?' At first, it might not be possible to answer these questions adequately but, as several months of information accumulates, trends and problems should begin to appear. Supervision by the RHT could also focus on assisting the CHN to assist the workers with this analysis.
- h. These graphs can be placed on the walls of the village health post, or some other conspicuous place. After about six months or so, when the workers are able to mark the graphs and do a simple analysis themselves, they can begin using the graphs to report on their work at monthly VDC meetings. For the first few meetings, CHN assistance might be needed to help ensure VDC members' understanding. Thereafter, this can become a routine aspect of the VHW and TBA reporting to the VDC, focussing both on the achievements and on any problems which the analysis suggests.

- i. Expand this approach nation-wide.

Summarize and Compare

- j. As VHWs and TBAs become proficient at understanding and using these graphs, the CHN should prepare summary graphs which show the same information, using the same scale, for all of the workers in the circuit. Each individual or village should be clearly labelled, perhaps with a different color.
- k. When supervising in each village, the CHN can show these summary graphs to the workers, assisting them to understand where they are performing better or worse than their peers in nearby villages. Additional use of this tool, such as to stimulate competition among peers, or to report poor accomplishments to a VDC, could also evolve.

10. Job Description Revision and Use

Job descriptions of VHWs and TBAs are not well used in the PHC program. It would be desirable to: a) revise them, then b) use them for a slight improvement in the workers' training, and c) use them for a major improvement in their supervision.

1. Job Description Revisions

- a. There are many different styles of job descriptions and of development processes to produce or revise job descriptions. As long as the process adequately incorporates the views of all relevant personnel (including villagers) and as long as the product is

clear and comprehensive, any approach will do. Our only suggestion in this area concerns a step to be taken prior to formally revising job descriptions.

- b. The most important aspect of the VHW's job concerns his work with respect to a series of health interventions which have been identified by the Medical and Health Department as necessary to solve the major health problems of The Gambia. These include: nutrition, immunization, oral rehydration, family planning, malaria. The TBA is also expected to play a role with respect to some, but not all, of these. There are also appropriate village-level roles for the CHN and, in some instances, for the VDC and for other village groups (women's and youth groups seem to exist in most places). We suggest that a first step in revising job descriptions is to address each of these interventions separately. First, decide what needs to be done at all levels with respect to the intervention, and then determine which worker or village group is most appropriate to perform each of the tasks needed.

For some interventions, this two-step process may be a simple matter, requiring only a meeting of appropriate high-level personnel. For other interventions, however, especially where new roles by non-employees are to be encouraged, a lengthier process including a field trial

would be preferable. We understand that the MRC is currently exploring innovative approaches to malaria reduction which could have significant implications for the types of tasks required of each worker and of the community. Close collaboration with the MCH Unit, the Nutrition Unit, and other relevant sections of the Medical and Health Department is also essential to ensure that the latest information is included in making decisions on workers' responsibilities. Technical assistance may be helpful for some of these technologies.

- c. After clear, specific tasks have been identified for each of these interventions for each worker, combine these with their other tasks into complete job descriptions. Frequently, in many PHC programs, those with the least training are assigned the largest number of tasks; at this stage, it might be beneficial to assess how realistic the total job description is, and perhaps reduce or eliminate some tasks.
- d. Since most VHWS and TBAs are not fully literate, prepare pictorial versions of the job descriptions.

Using Job Descriptions for Training

- e. Our impressions of the training curricula were generally very positive, with the single exception that they are not adequately linked to the workers' jobs. After revising the job descriptions, the Training staff should

make a parallel revision of the curricula. Each trainee should learn precisely what tasks are expected of him or her with respect to each of the key interventions. He or she should also learn about the major related tasks expected of the other village worker, of other villagers, and of other health sector personnel.

- f. Evaluation of trainees at the end on their training program should be based primarily of the tasks they are expected to perform rather than the knowledge they have learned. It would be highly desirable to test each trainee through a series of exercises designed to simulate the real work situation. For example, if a VHW's job includes demonstrating to villages the appropriate method of mixing ORS, his final exam could require him to actually mix the solution in front of a trainer who is role-playing as a villager; or, if his job requires him to give health education talks to villagers, his final exam could require him to give such a talk to the training staff or to other students. Similar evaluation on a smaller scale performed periodically during the training program could help assess interim progress as well.

Using Job Descriptions for Supervision

- g. Supervision by the CHN (and by the RHT) of the VHW and TBA can make use of job descriptions in the following ways:

- as a guide in developing supervision checklists;
- as a document to which the CHN periodically refers in discussing their work with the VHW and TBA; and
- as a reference for the workers themselves and for their VDC (using pictorial versions of the job descriptions). Job descriptions will only be meaningful if the workers are constantly reminded of them through these and similar means. This is especially important for supervisors to emphasize, as they have a continuing relationship with the VHW and TBA. Unless job descriptions are used in this way, there is a natural tendency to conveniently 'forget' the less desirable aspects of the job.

11. VDC Allegiance and Recognition

Village Development Committees, as the name implies, are concerned with other topics in addition to health. It would appear logical that the impetus for such an institution should come from a unit of the government with broader responsibilities than the Department of Medical and Health. The Department of Community Development, in the Ministry of Local Government and Lands, has promoted the establishment of VDCs. Although these VDCs may focus their activity more on the tasks promoted by their local Community Development Assistants, this can include health in non-PHC villages and definitely includes health in the PHC villages. Where the Department of Community Development has

helped set up a VDC prior to initiation of PHC activities, the health personnel are instructed to use the existing VDC. (And vice-versa: The Department of Community Development is supposed to accept and use a Medical and Health VDC.) This usually works well, although there are instances where separate VDCs have been established.

The PHC Program has taken an initiative to encourage the evolution at the Regional level of multi-sectoral sensitization teams, to reduce the appearance of the VDC being a health institution. Due to difficulties of coordination undoubtedly related to the lower priority which other sectors accord to VDC development - this has not been very successful.

There has never been any type of formal acceptance of VDCs by higher levels of the GOTG. Their legal status is currently unclear. Concern exists that their selection process may be politicized or that their continuation may be threatened unless they are formally approved as an integral part of village-level development. An NGO body, TANGO, has recommended that the Ministry of Economic Planning coordinate an effort to discuss the future of VDCs and to formalize their integration into the national governmental structure. Cabinet-level intervention and support is needed to formally agree to VDCs, establish their legal existence, determine their relationship to each Ministry and Department, and encourage inter-sectoral collaboration at all levels.

APPENDIX E

Recommended Options for Community Financing of PHC

The following options for improving PHC cost recovery in the villages are presented as alternative approaches which the GOTG may wish to consider:

Option 1 - Do nothing. This is not intended as a facetious suggestion: since attrition rates are very low and the program continues to function reasonably well, one plausible approach is to consider VHWs' complaints about inadequate compensation either as normal grumbling about low pay or as a normal reaction to outsiders' questions, since they probably perceive the outsiders as a potential source of funding.

Option 2 - Establish a required or 'strongly encouraged' system for community compensation to VHWs and TBAs. Such a system would have to include some mechanism by which the Department (presumably in the person of the CHN or RHT) can apply pressure on the VDC. Examples of such mechanisms include: verbal reprimands by higher-level health personnel or by other government officials; holding back the D120 annual grant; and not allowing the VHW to purchase drugs for sale to the community. Other culturally appropriate restrictions or punishments can probably be devised by persons more familiar with Gambian culture.

An alternative (or complementary) approach might be a reward system in which communities which demonstrate that they

APPENDIX E (continued)

have provided adequate compensation for VHWS and TBAs receive some type of reward, such as selected, development-oriented commodities.

Currently, the most plausible system for requiring community compensation for their workers - since funds are already being collected by this mechanism - is through drug sale profits. For such an approach to work, however, the current 'leakage' of funds would have to be significantly reduced. This is only likely to occur if the VDC assumes a more active and responsible role in monitoring funds from drug sales. How best to achieve this goal is not quite clear. One possibility is that training two or three FCD members in accounting and auditing procedures would significantly enhance their ability to perform such a monitoring role. A few additional educational efforts aimed at VDC members, selected from those outlined in Option 3, would also help improve the climate for VDC monitoring of drug sales.

Whether such steps would be sufficient, however, is not at all clear. A small-scale, carefully-observed trial would be a useful means of assessing its effectiveness and of identifying additional means of encouraging compliance.

Option 3 - Develop a substantial educational program for VDC members. Such a program could include a series of brief (2-3 hour) 'courses' for VDC members on each of the following topics:

- the various preventive/promotive activities which the VHW and TBA are expected to perform;
- the basic structure of the drug sales system (including

APPENDIX E (continued)

- the expected profit);
- simple accounting and auditing skills;
- examples of the many different ways a community could raise funds; and
- encouragement to adequately compensate their workers.

With this approach, the present voluntary system would be retained, although with encouragement for each VDC to develop and implement an approach for worker compensation. Of these three options, the third is clearly the most ambitious. The team feels that it is also the most likely to achieve the long-term objective of a sustained program, with a satisfied team of workers, adequately supported by their community.

APPENDIX F

Topics Covered in Pre-Training for VHWs and TBAs in The Gambia

1. Qualities of a good VHW
2. Relationship between VHWs and TBAs in the PHC program.
3. Role of the Community Health Nurse (CHN) in relation to PCH workers (VHWs and TBAs).
4. Health service structure to the level of Divisional Health and the VHW/TBA position in this structure.
5. Advantages of and basic requirements for good health.
6. Motivating families and community members to improve the health conditions in their families and the community.
7. Role of VHWs/TBAs as health educators.
8. Germ theory; protection against germs.
9. Relationship between mental, social, and physical well being.
10. Composition and functions of the Village Development Committee.
11. With the CHN, the VHW will learn to carry out the following tasks:
 - Population survey;
 - Animal separation;
 - Environmental sanitation (well protection, digging refuse pits and pit latrines); and
 - Compound sanitation (overcrowding, ventilation).