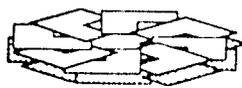
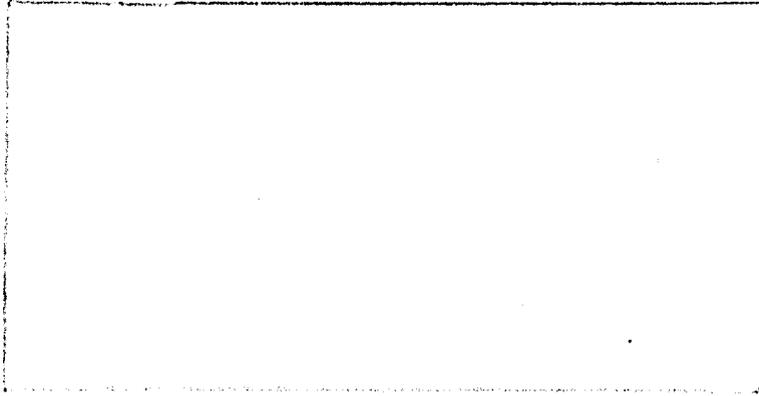


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ATLANTIC RESOURCES CORPORATION

**SUSTAINABILITY ASSESSMENT OF THE  
AFRICA CHILD SURVIVAL INITIATIVE  
(ACSI) - COMBATting CHILDHOOD  
COMMUNICABLE DISEASES (CCCD)  
PROJECT  
LESOTHO, 1993**

**Prepared For:**

**AFR/ONI/TPPI  
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**Contract # AOT-0421-C-00-2163-00**

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## GLOSSARY OF TERMS

ACSI-CCCD	Africa Child Survival Initiative -- Combatting Childhood Communicable Diseases
A.I.D.	Agency for International Development
ARI	Acute Respiratory Infections
CDD	Control of Diarrheal Diseases
CHW	Community Health Worker
DG	Director General
DMI	The District Management Improvement Project
EPI	Expanded Programme on Immunization
ESAP	Enhanced Structural Adjustment Program
FSD	Family Health Division
GDP	Gross Domestic Product
GNP	Gross National Product
GOL	Government of Lesotho
HEALTHCOM	Health Communications Project, (USAID-Funded)
HED	Health Education Division
HIS	Health Information Systems
HSA	Health Service Areas
IMF	International Monetary Fund
KAP	Knowledge, Attitudes, and Practices
LOP	Life of Project
LPC	Lesotho Pharmaceutical Corporation
MALOTI	Local currency, 1M = US \$.33
MCH/FP	Maternal Child Health/Family Planning
MOH	Ministry of Health
OPD	Out Patient Department
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
PHAL	Private Health Association of Lesotho
PHC	Primary Health Care

<b>PID</b>	<b>Project Identification Document</b>
<b>PP</b>	<b>Project Paper</b>
<b>QE II</b>	<b>Queen Elizabeth II Hospital</b>
<b>SAP</b>	<b>Structural Adjustment Program</b>
<b>SSS</b>	<b>Sugar Salt Solution</b>
<b>UNICEF</b>	<b>United Nations Children's Fund</b>
<b>WHO</b>	<b>World Health Organization</b>

## EXECUTIVE SUMMARY

Almost two years after the Africa Child Survival Initiative -- Combatting Childhood Communicable Diseases (ACSI-CCCD) Project ended in Lesotho, a team of three public health professionals returned to conduct a sustainability assessment of the project. In collaboration with the Ministry of Health, the Private Health Association of Lesotho, the World Health Organization (WHO), and UNICEF, the team completed a two-week assessment to determine the degree to which ACSI-CCCD Project activities and benefits were continuing, following the June 1991 project assistance completion date (PACT).

The ACSI-CCCD Project in Lesotho sought in selected ways to improve the performance of the Ministry of Health's (MOH) primary health care service delivery system, namely, the MOH's Expanded Programme on Immunization (EPI), Control of Diarrheal Diseases (CDD) Program, and Acute Respiratory Infection (ARI) Control Program. Consequently, it is not feasible to separate an assessment of the ACSI-CCCD Project in terms of sustainability from a sustainability assessment of these Ministry of Health programs which provided the institutional context in which the ACSI-CCCD Project operated.

The ACSI-CCCD Project worked in close association with two additional USAID health projects, HEALTHCOM and MEDEX. The three related projects had an overall budget of about US \$5.3 million. In addition, there were activities in each of the ACSI-CCCD Project technical intervention and support strategy components that were funded by other donors including UNICEF, WHO, and the World Bank. All of this simultaneous activity complicates the task of independently assessing the net impact and sustainability of the ACSI-CCCD Project itself.

### **Key Findings**

1. The public sector health economy in Lesotho has been in decline in the years since the completion of the ACSI-CCCD Project. In terms of real per capita expenditures for health care, the public sector has lost considerable ground during this period. Part of the decline has resulted from a Structural Adjustment Program sponsored by the IMF and started by the Government of Lesotho in 1988, followed by a three-year Enhanced Structural Adjustment Program in 1991. In assessing the prospects for sustainability of Lesotho's health projects, from the standpoint of resources availability, it is unlikely that substantial increases will take place in the Government of Lesotho's (GOL) rate of real recurrent expenditure per capita for health in the years immediately ahead.
2. In 1988, foreign aid per capita for Lesotho was the third highest among the low-income countries of the world, and this high rate of development assistance has continued in subsequent years. The health-services sector has been no exception to this generous inflow of external resources. Virtually all capital expenditures in health are donor financed. A recent study found that as of 1989, 52 percent of the operating costs of the EPI and 56 percent of the operating costs of the CDD program were met by donors. With so many substantial donors

coming and going, during and after the ACSI-CCCD Life of Project (LOP), it is difficult to identify, and subsequently assess, the sustainability of strictly ACSI-CCCD supported activities and benefits.

3. The GOL/MOH have for decades implemented a system of charges for services provided by government facilities. Revenue from these fees has provided a fluctuating but modest share of financing for recurrent health expenditures. At present, revenue from user charges to government facilities represents about 11 percent of total operating expenditure for the MOH system. Substantial increases in the rate of cost recovery by the MOH's long-standing user-charge scheme could seriously strengthen the prospects for sustainability of health project activities and benefits.
4. The question of affordability is central to an analysis of the sustainability of health project activities and benefits in Lesotho. With respect to the ACSI-CCCD Project, the question is whether the government can afford to support child survival activities at the same scale and in the same configuration as the ACSI-CCCD Project undertook during its life. Nonetheless, numbers can provide some perspective. For example, for a representative recent year, the cost of the EPI, assuming 100 percent coverage, would be about 7.5 percent of total public-sector recurrent expenditures for health. The cost of such a program would represent about 66 percent of the resources available for primary health care programs and activities.
5. In recent years, skilled health (and other) workers have been leaving Lesotho in large numbers for better paying positions elsewhere, especially in South Africa. Virtually every MOH official the team met emphasized the extreme negative impact that this loss of skilled workers is having on health programs and facilities, including the continuation of ACSI-CCCD Project activities and benefits.
6. The ARI control program, initiated in Lesotho with ACSI-CCCD Project support, reflects considerable planning and effort; the training manuals are well developed with competency-based learning objectives and an emphasis on participatory learning strategies. Phase I of the ARI program was completed successfully and reflected careful planning at all levels. The ARI program focused on training nurses in the management of respiratory diseases, including diagnosing the differences between minor respiratory infections and pneumonia. Teaching mothers to bring their children for treatment in a timely manner is an important component of training as well. Thus far, little attention has been given to including community health workers and traditional healers in the ARI program activities; however, the potential for expanding services at this level is recognized and can be developed.
7. Major project achievements have included increased immunization coverage rates, expanded oral rehydration therapy services, and the design and implementation of an acute respiratory infection control program. Key to the sustainability of the programmatic achievements is adequate support for training and health education. Health education is viewed as a very important element in primary health care. Many of the program successes were attributable to increased awareness among health personnel as well as consumers. Increased immunization coverage and an increase in the use of ORS contributed measurably to a decrease in

morbidity and mortality. Despite the considerable input and assistance of HEALTHCOM, health education at the community level is limited in scope. The Health Education Division (HED) should develop a comprehensive long-term plan for health education in order to maintain demand and program achievements.

8. Maintaining adequate training of personnel at all levels remains a major challenge in the EPI, CDD, and ARI programs. While very good training materials have been developed for these programs, there is a need to continuously review and update all training curricula. The ACSI-CCCD Project strongly supported MOH training, and the absence of ACSI-CCCD is cited consistently by MOH officials as having created a serious gap in personnel training. This gap has not been filled to date.
9. Continuing education is a critical component of sustainable service delivery programs, and efforts are under way to strengthen the in-service training for personnel at all levels. While a decentralized training plan was designed to support programmatic interventions, there have been serious impediments to implementing continuing education at all levels. The attrition rate as well as limitations in supervision and transportation have created some serious voids in the continuing education program. In addition, the series of in-service training for HSA level trainers that was a key element in ACSI-CCCD Project supported activities has not been maintained as planned.
10. The ACSI-CCCD Project recognized the importance of health education related to EPI, CDD, and ARI for the primary schools and developed and distributed teaching models in EPI and ORT through the Ministry of Education. There has only been limited follow-up, and as yet there is no plan to educate the primary school teachers in the basic concepts related to primary health care.
11. The Community Health Worker program is key to the delivery of primary health care services throughout Lesotho. Community Health Workers are trained in very basic health education at the village level, and their activities vary from one health service area to another. The training and follow-up of CHWs is the responsibility of the HSA personnel; however, due to high attrition and shortage of personnel, training and continuing education efforts directed at CHWs are sporadic and not systematically executed.

## **Key Recommendations**

1. As the ARI program expands, pre-service training should be a priority. Curricula should be developed for the nursing schools and the National Health Training Center. Technical assistance should be provided for the development of curricula for this level of nursing education.
2. The ARI program training materials are well developed and can serve as a prototype for other countries. Particularly noteworthy is the utilization of competency-based learning activities and careful follow-up and supervision. Training should combine both didactic and participatory methodologies with clearly defined evaluation measures to assess skill building components. Continuous review and revision of training models should be considered an integral part of the program.
3. The ARI program has had problems in supervising clinics and hospital staff largely due to lack of sufficient transportation and personnel. Supervisory visits for monitoring and continuing education should be considered a vital and integral part of the program. Emphasis should continue with the training and supervision of first level health care workers (nurse clinicians and nurse assistants in health centers and nursing sisters in hospitals) who will, in turn, train other levels including Community Health Workers.
4. Intensive technical assistance in teaching learning methodology should be offered on an on going basis to the national ARI manager. Attention should be given to case studies, patient education (education of mothers), and continuous skill building for further assessment. The ARI Manager is highly skilled and is responsible for moving the program forward, and would be receptive to technical assistance designed to strengthen the essential core training program.
5. Technical assistance should be sought to integrate health education into primary school curricula. Additionally, in-Service education should be provided to teachers to cover basic information relevant to ARI, EPI, and CDD in the nation's schools.
6. Assessments should be conducted of the efficacy and utilization of the training and other materials developed through the ACSI-CCCD Project.
7. The Ministry of Health should attempt to increase the demand for and use of program-related data by national and HSA-level managers. National and HSA-level meetings among managers may be useful in assisting managers to identify their routine information needs and in developing mechanisms to ensure that data are available as needed.

## Additional Recommendations Specific to Sustainability Strategy

8. The ACSI-CCCD sustainability strategy should be amended by the explicit inclusion of an affordability objective stated as follows:

### Objective 1A: Perceived Affordability

If project activities and benefits are perceived as affordable by government officials in the Ministries of Health and Finance, for instance, then it is more likely that these activities and benefits will be continued when donor funding stops.

The question of affordability is central to the issue of sustainability, and it makes sense to explicitly recognize it. (See Appendix F for further discussion on affordability.)

9. The international health-services community (including USAID components) should consider abandoning the term "sustainability" in favor of terminology which more clearly identifies what is at issue.

In the team's opinion, the concept of sustainability has become, through use, a confusing hybrid of two related but rather different elements:

- a) A project success criterion which derives from cost-benefit considerations, with the intention that the value of the future time stream of benefits yielded by the project be large enough to justify the allocation of resources to the project.
- b) An expression of the intention that the project will fundamentally alter the way in which health program and facilities in host countries perform over the long run.

Where a) is the issue, the policy should be more precisely articulated: projects should not be implemented unless there is appropriate evidence that the value of project benefits provides an acceptable rate of return to the project's resources. Where b) is the issue, the parties should abandon the term "sustainability" in favor of a term which would more explicitly identify what is at issue. The use of the term "sustainability" as an oblique way to represent an interest that involves such fundamental change tends to deflect attention from what is really at issue and contributes to a lack of realism. Given the formidable problems necessarily encountered by any such intention to fundamentally alter the way in which host-country institutions perform (in most cases, the prospect for success within the scope of the normal LOP is remote), evidence that sustainability in this sense will be achieved should certainly not be required as a condition for implementing projects. (See Appendix G for further discussion.)

## I. INTRODUCTION

tion of sustainability has been an important issue for USAID health projects for at least a half. In the early years, projects addressed the question of sustainability in little way. By the mid 1980s, however, A.I.D. sustainability policy was being developed in a way, including the proviso that health (and other) projects should not be implemented unless the prospects that they would be sustained were good. These developments still left open, however, the question as how much of what kinds of information were required to make a credible case that the prospects for sustainability were good.

Beginning in 1988, the ACSI-CCCD Project put major emphasis on sustainability as a project objective and, pursuant to this, developed a Sustainability Strategy which sought to answer such questions as the information requirements to assess sustainability.<sup>1</sup> This study, an assessment of the sustainability of the ACSI-CCCD Project in Lesotho (one of four such country studies currently being carried out), has undertaken to determine the extent to which CCCD<sup>2</sup> Project activities and benefits have been sustained in Lesotho some 20 months after the termination of the project. The findings from this and the other country studies are intended to evaluate the usefulness of the conceptual framework presented in the Sustainability Strategy.

The ACSI-CCCD Sustainability Strategy provides a starting point for developing a conceptual framework. The Strategy is mainly intended to assist project managers to plan and design projects whose activities and benefits will be more sustainable. The Strategy presents five criteria that were associated with an increased level of sustainability during a review of 50 previous A.I.D.- funded projects. The review specifically showed that projects which have the properties represented by the Strategy's five objectives (and their associated activities and indicators) were sustained to a greater extent following the life of the project than were projects which did not have these characteristics.

Therefore the assessment team undertook to:

- (1) Identify the activities and benefits of the CCCD Project in Lesotho which are to be sustained.
- (2) Characterize the project in terms of the Sustainability Strategy's objectives (and their associated activities and indicators):
  - (a) Perceived Effectiveness
  - (b) Integration and Institution Strengthening
  - (c) Local Financing, Community Participation, and Private Sector Provision of Services.
  - (d) Strong Training Component
  - (e) Constituency Building Through a Process of Mutually Respectful Negotiations.

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<sup>1</sup>Sustainability Strategy," ACSI-CCCD Project No. 698-0421 and University Research Corporation, December 1990.

<sup>2</sup>CCCD refers to ACSI-CCCD, unless otherwise indicated.

- (3) Determine the extent to which the project's activities and benefits had been sustained following the termination of project activities and funding.
- (4) Discuss the findings with respect to sustainability in light of the findings with respect to the project's degree of compliance with the Sustainability Strategy's objectives and relevant non-project factors.

There are problems, however, in applying this analytical format to an assessment of the ACSI-CCCD Project in Lesotho. The project itself did not represent a delivery system for immunization, diarrheal disease control, or pneumonia control service. Rather, this project sought in selected ways to improve the performance of the existing delivery system, the Ministry of Health's (MOH's) EPI, CDD, and ARI programs. The resources deployed by this project were but a small part of the total resources necessary to operate these three programs. This project cannot by itself take credit for or be held accountable for the performance of the MOH programs. Nevertheless, it is difficult to separate the evaluation of the ACSI-CCCD Project in terms of sustainability from a sustainability evaluation of the MOH's programs which provide the institutional context in which the ACSI-CCCD Project operates. The question of whether the MOH's programs are sustainable has consequences for evaluating the sustainability of and, more generally, the benefit yield to the ACSI-CCCD Project. If the MOH's programs are not sustainable or are otherwise not viable, then the benefits of the ACSI-CCCD Project, which sought to improve the performance of the MOH's programs, would likewise not be sustainable (at least in the institutional context for which they were intended). Even if these events were beyond the control of the ACSI-CCCD Project, the project might nevertheless be faulted for having made an error in selecting MOH programs with which to associate. There are additional dimensions of interdependence between the ACSI-CCCD Project and the MOH's programs. For example, one relevant criterion for measuring the success of the ACSI-CCCD Project is the extent to which its outputs have contributed to the sustainability of the MOH's programs.

For the reasons set out, the team will address the question of the sustainability of the Ministry of Health's child survival projects. The team will also provide some analysis of the sustainability of the ACSI-CCCD Project components *per se*. Whether or not the Ministry of Health's child survival programs are sustainable in the conventional sense of operating without external assistance, as long as it is operating one can ask two questions: 1) Have ACSI-CCCD Project activities and outputs in the domains of health education, training, and MIS/HIS development continued to yield benefits in the period following the LOP? 2) How long may these project components be expected to yield benefits?

## DEFINITION OF SUSTAINABILITY

To evaluate the sustainability of the ACSI-CCCD Project, a definition of sustainability is required. The Sustainability Strategy provides what appears to have become the conventional definition in this context, i.e., the continuation of activities and benefits achieved during the life of the project for at least three years after project funding stops. This definition is silent on the matter of whether such continuation of activities/benefits is dependent on provision of the country's own internal resources or whether continuation is dependent on provision of donor-provided resources. Conventionally, the former configuration has been deemed sustainability in most contexts. In the Lesotho case, donor resources continue to flow into the country's EPI, CDD, and ARI programs such that the continuation of some ACSI-CCCD benefits is owing to deployment of these external resources. In our view, this does not preclude the possibility of useful sustainability analysis. The prospect for institutionalization and

continuation of project activities and benefits depends not only on the amount of resources available but also on the configuration of the technical and other assistance that is provided and the degree to which the MOH is setting priorities which the ACSI-CCCD Project was able to influence.

In interpreting the Strategy statement's definition of sustainability, the team assumed that sustainability is not to be regarded as a binary, all-or-none situation. Rather, what is at issue is the extent to which project activities and benefits have been continued. Furthermore, the team would suggest that the three-year time horizon may not be the most useful way to look at this dimension of sustainability. One important interest in the sustainability issue is basically a cost-benefit consideration that is concerned with whether the investment of resources in a project was worth it in terms of the future time stream of benefits that were gained. Different projects will generate different time streams of benefits, both during the LOP and in the years after the project funding stops. (See Appendix G for further discussion of the concept of sustainability.)

## II. THE ACSI-CCCD PROJECT IN LESOTHO: OVERVIEW OF BUDGET, ACTIVITIES, AND BENEFITS

This chapter provides an overview of Lesotho's health budget as well as identifying the ACSI-CCCD Project's activities and benefits that were to be sustained. Table 1 exhibits by major project component funding amounts and sources for the period of May 1984 to May 1991 (the total Life of Project [LOP]). The total budget exceeded US \$3 million. The emphasis in this project was on Training and Health Education. If, as is reasonable, one-half of the outlay for long-term technical assistance is included in these categories, together they accounted for about 40 percent of the project budget. Commodities claimed about 34 percent of the budget (about 27 percent net of the GOL's commodity inputs).

Under the 1988 amendment to the umbrella ACSI-CCCD Project, health financing was to have greater emphasis:

*"Under the new amendment, assistance to ACSI-CCCD Project countries in health financing will be emphasized to a greater extent simply because of the obvious role health financing plays in sustaining project activities."<sup>3</sup>*

It does not appear, however, that the greater emphasis on health financing called for by the amendment resulted in project components addressed to health-financing issues being included in the Lesotho-ACSI-CCCD menu of activities.

Other USAID projects cooperated closely with the ACSI-CCCD Project. A HEALTHCOM Project was approved in August 1986 and placed under the ACSI-CCCD Project to support the health education objectives of the ACSI-CCCD. This HEALTHCOM Project had a LOP of three years. In addition, MEDEX was contractor on the District Level Management Improvement (DMI) Project which began in June 1988 and terminated in December 1991 with LOP funding of US \$1,877,000.<sup>4</sup> The goal of this project was to strengthen MOH capacity to implement and sustain health programs in Lesotho through improved management support for Primary Health Care.

These projects served substantially to increase the emphasis on training and health education of USAID's package of related projects (ACSI-CCCD, HEALTHCOM, MEDEX), which together had an overall budget of about US \$5.3 million. In addition, there was project activity during the LOP of the ACSI-CCCD Project in each of the domains represented by the ACSI-CCCD Project components funded by such donors as UNICEF, WHO, and the World Bank. All of this project activity, USAID and other, going on simultaneously in the ACSI-CCCD Project domains complicates the task of assessing the impact of the ACSI-CCCD Project. Which benefits or effects one might observe in the field are to be attributed to the ACSI-CCCD Project's efforts and which to other project activity going on simultaneously in these domains?

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<sup>3</sup>ACSI-CCCD Amendment Six (No. 698-0421), p. 45.

<sup>4</sup>"Unit Cost Study of the Expanded Program on Immunization and the Control of Diarrheal Diseases in Lesotho," Sara Benet Health Planning Unit, MOH, June 1989, p. 45.

**TABLE I**  
**ACSI-CCCD PROJECT LESOTHO 1984 - 1991**  
(Includes original grant agreement and amendment)

Program Component	Funding Amounts (\$) and Sources				
	Bi-lateral	Regional	GOL	Total	%
1. Training Support	253,000	10,000	63,500	326,500	10.0
2. EPI					
2a. Training		22,000		22,000	1.0
2b. Commodities	169,100	212,300		381,400	12.0
3. CDD/ORT					
3a. Training		36,000		36,000	1.0
3b. Commodities	36,000		211,100	247,100	8.0
4. Health Education	43,000	400,000	57,000	500,000	16.0
5. HIS					
5a. Training		26,500	5,000	31,500	1.0
5b. Commodities	434,000			434,000	14.0
6. Operational Research	80,000	25,000		105,000	3.0
7. Long-term T.A.		695,000 <sup>5</sup>		695,000	22.0
8. Other	191,400	150,000	89,500	430,900	13.0
<b>TOTALS:</b>	<b>1,206,500</b>	<b>1,576,800</b>	<b>426,100</b>	<b>3,209,400</b>	<b>100.0<sup>6</sup></b>

Source: Grant Project Agreement, Combatting Childhood Communicable Diseases in Lesotho, Proj. No. 698-0421-.32, May 24, 1984. ACSI-CCCD Amendment Six (no. 698-0421).

### COMMODITY INPUTS

As Table I indicates, program components 2 and 3 provided commodities for the operation of the EPI/CDD delivery systems, at a very modest average annual rate during the seven-year LOP. Presumably, sustaining these components means continuing to supply these commodities at this rate for the post-ACSI-CCCD years. The constraint is the availability of resources, but the requirements are modest. The annual

<sup>5</sup>1988-91 est. as pro rata 1984-88.

<sup>6</sup>These percents total over 100 because of rounding.

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average rate of expenditure for these commodities during the LOP represented only about 0.74 percent of the MOH's 1990/91 (end of project year) budget for health and only about five percent of the budget for PHC in that year. Sustaining these components would entail a very small claim on MOH resources, and it would seem fair to conclude that sustainability for these components is not a significant problem, provided the MOH continues support.

Project component 5 provides commodities for the HIS. As the HIS system serves the entire health-services system, its costs should be considered against the total recurrent budget and not just the PHC budget. In these terms it would be very small. If, as intimated, the GOL/MOH share with the donor the priorities on which the project was predicated, then sustainability for component 5b should not pose a significant problem.

### EXPANDED PROGRAMME ON IMMUNIZATION ACTIVITIES

The Expanded Programme on Immunization (EPI) started in Lesotho in 1979. During the ACSI-CCCD Project, EPI activities focused on training clinic level staff in all 19 HSAs. Additionally, the project provided technical assistance to complete and analyze data from numerous national and HSA level coverage surveys.

Nationwide coverage and KAP surveys were completed in conjunction with the 1984, 1986, 1988, and 1990 nationwide surveys. An analysis of the 1988 KAP survey was reviewed, and it demonstrated the Basothos' high motivation for immunization.

ACSI-CCCD also provided assistance in implementing accelerated immunization activities, and provided the Lesotho EPI with cold chain equipment and other immunization supplies.

The project also assisted the Lesotho EPI with several operations research activities designed to identify and implement improved strategies to control measles. These included a measles seroprevalence study and numerous measles outbreak investigations. These studies provided data that were used to develop options for improving measles control and resulted in Lesotho modifying its immunization schedule to include a second dose at 18 months of age.

During 1989, the project supported a survey to measure the incidence of neonatal tetanus and lameness due to polio in Lesotho. Though results demonstrated that both diseases occurred at relatively low incidence in Lesotho, the survey prompted changes in Lesotho's EPI policy to include Tetanus Toxoid immunization for women of childbearing age and the immunization of infants at birth with oral polio vaccine.

The EPI manager also stated that the EPI policy dictates that immunizations be offered daily at all clinics to children who come in contact with a health facility, including to children who may visit a health facility for a reason other than to be immunized. Interviews at the one government hospital visited by the team revealed that the policy was being implemented in that facility.

## **EPI BENEFITS TO BE SUSTAINED**

### **IMMUNIZATION COVERAGE**

During the years 1984 - 1990, immunization coverage for measles, as measured by survey, increased from 62 percent to 85 percent among children 12 - 23 months of age. As measured from routine reports, measles coverage among infants 0 - 11 months of age increased from 54 percent to 60 percent. Survey data showed a steady increase in measles coverage over the period, while measles coverage from routine reports was highest in 1988 and 1989, peaking at 69 percent.

Drop-out rates, among the lowest in Africa, remain low, ranging from one percent in 1988 to two percent for the first six months of 1992.

### **MEASLES INCIDENCE**

During the ACSI-CCCD Project, measles incidence was closely monitored as an indicator of immunization program impact. During the years 1985 - 1990, the number of reported measles cases declined sharply from 7,362 to 2,199, reaching a low of 1,378 in 1989. During the first six months of 1992, 670 cases were reported.

### **CONTROL OF DIARRHEAL DISEASES ACTIVITIES**

The Control of Diarrheal Diseases (CDD) program started in Lesotho in 1985, with technical assistance from the ACSI-CCCD Project. Initial activities included a study of hospital-based diarrhea mortality in children under five years of age. The study resulted in the development of Lesotho's first policy statement with respect to treating diarrhea with oral rehydration therapy, a five-year plan for the CDD program, and the establishment of the first ORT corner at Queen Elizabeth II (QE II) Hospital.

The plan included the establishment of ORT units in major hospitals, ORT corners in health centers, the distribution of ORT packets by Community Health Workers (CHWs), the commercial distribution of ORT packets, and a major effort to educate caretakers about home-based diarrhea treatment.

During the years 1985 - 1991, the ACSI-CCCD Project assisted the CDD program in identifying program indicators, implementing an information system to assist the CDD program in managing program data and in monitoring the impact and effectiveness of CDD program activities. Key impact indicators included the number of diarrhea cases admitted to hospitals, the case fatality rate among admitted cases, and the proportion of diarrhea cases presenting to ORT units with mild, moderate, and severe dehydration.

During the ACSI-CCCD Project, a supervisory checklist to assess health worker performance with respect to managing diarrhea cases presenting at clinics was developed and supervisors were trained in its use. The checklist was modified last in 1990.

### **CONTROL OF DIARRHEAL DISEASES BENEFITS TO BE SUSTAINED**

During the ACSI-CCCD Project, ORT unit reporting was most complete for between six and eight hospitals. Data from these institutions were used over the period of the project to monitor program impact. In 1984, 340 cases were admitted to QE II Hospital and the case fatality rate among children

younger than five was 12 percent. By 1990, admissions for diarrhea at QE II Hospital had fallen 75 percent to 80 cases and the case fatality rate had declined 94 percent to 2.3 percent. The proportion of diarrhea cases presenting with either moderate or severe dehydration at six major hospitals declined from 37 percent in 1987 to 22 percent in 1990.

Between 1985 and 1990, the project assisted the Lesotho CDD program in training hospital and health center staff to establish ORT units and corners and in equipping these facilities with necessary supplies. In addition, the ORT unit at QEII Hospital in Maseru served also as a diarrheal training unit where health facility staff from around the country came to be trained in diarrhea case management.

By June 1991, most HSA hospitals and health centers in Lesotho had an ORT unit or corner, but the quality of diarrhea case management being provided was highly variable among the health facilities.

The project also assisted the CDD program in implementing a pilot program to train CHWs to assess diarrhea cases and distribute ORT packets as necessary, and in establishing a mechanism for the commercial distribution of ORT packets by the Lesotho Pharmaceutical Corporation (LPC). At the project's end, the CHW program was still being piloted and the LPC was experiencing financial problems that prevented them from producing and distributing ORT packets on a large scale.

A 1990 HEALTHCOM study evaluated the impact of community-based education efforts by CHWs and health center staff. Results showed a significant increase in the use of ORS and SSS at home and in health facilities. Overall, ORS or SSS use at home for last reported diarrhea cases increased to 56 percent, up from 37 percent in 1987. Mothers' knowledge of SSS preparation and use was found to have changed little since 1987, with 75 percent of mothers stating that they knew how to mix SSS and 16 percent stating the correct recipe.

Results of a 1990 assessment of health worker performance at six major ORT units showed that nurses generally assessed and treated children well, but failed to give caretakers adequate health education about preventing diarrhea and dehydration at home. The 1990 ACSI-CCCD Project report noted that these data resulted in an increase in CDD supervisory visits by MOH staff during the following diarrheal disease season.

## **ACUTE RESPIRATORY INFECTIONS PROGRAM ACTIVITIES**

The Lesotho Acute Respiratory Infections (ARI) program began in 1988 with technical assistance from the ACSI-CCCD Project. Initial program activities included three operations research studies that were used to formulate strategies and a plan for a comprehensive ARI control program.

Lesotho's ARI program conducted a series of three operations research studies with technical assistance from the ACSI-CCCD Project in 1989. One study, an anthropological assessment of community-level ARI knowledge, identified existing knowledge, attitudes, and practices with regard to home treatment and care-seeking behavior for pneumonia. The study found that Basothos differentiate between mild and moderate or severe ARI and that most caretakers sought health care for children with these illnesses at health centers and hospitals. Traditional sources of health care were also noted. Other studies were conducted to identify clinical signs predictive of pneumonia and existing clinical practices in pneumonia case management.

As with CDD, these ACSI-CCCD Project-supported research activities were instrumental in the development of Lesotho's policy with respect to ARI control and its first five-year implementation plan. Results of these studies were used during a 1989 ARI Control Program design workshop attended by central and facility level MOH staff to produce an ARI program strategy and policy statement that emphasized early and effective pneumonia case management. Although not explicitly stated in the sustainability criteria, WHO guidelines were used as the basis for developing Lesotho's ARI policy. The 1989 workshop provided an opportunity for Lesotho MOH staff to review WHO policies and adapt them to the Lesotho situation.

The program began as a pilot in three HSAs during 1989. Training and health education materials were produced with technical assistance from the ACSI-CCCD Project and training, implementation, monitoring, and evaluation were conducted in the three HSAs during 1990.

The ACSI-CCCD Project also assisted the ARI program in modifying disease surveillance reporting forms to permit collection of program impact data.

### **ACUTE RESPIRATORY INFECTIONS BENEFITS TO BE SUSTAINED**

In 1991, an assessment of the first phase of ARI program implementation in three HSAs was conducted and a draft five-year plan for a national ARI program was completed. A supervisory checklist, developed with support from the ACSI-CCCD Project, was used to determine health worker performance with respect to pneumonia case management. The assessment showed that over 90 percent of the children presenting with pneumonia were correctly assessed for danger signs, were correctly classified, and were correctly treated. Patient education was found to be weakest, with only 30 to 40 percent of mothers receiving adequate education on three important topics. At the end of 1991, 37 (71 percent) of the nurses in 20 (100 percent) health facilities in three HSAs had been trained in standard ARI case management. Approximately 37,000 Basotho children under five (15 percent) had access to standard ARI case management.

### **HEALTH INFORMATION SYSTEM ACTIVITIES**

Lesotho's Health Information System (HIS) is used to manage and analyze various data related to program interventions, including those supported by the ACSI-CCCD Project. Health facilities report immunization data monthly to the HSA and central level on an MCH/FP report form. In addition to immunization data, this form reports well-baby clinic data, ante-natal clinic activity, and family planning data. The HIS unit enters these data monthly by health facility and prepares health facility, HSA, and national level summaries separately from each program's data.

Morbidity and mortality data are managed through the weekly outpatient morbidity report form, the notifiable diseases reporting form, and the inpatient register. The outpatient morbidity report contains data on the number of cases of 51 different diseases seen in outpatient clinics. Cases are reported by three age categories; 0 - 4 years, 5 - 14 years, and 15 years and over. Data are reported weekly by health facilities to the HSA level, even though reports are often received at the national level in a series of four reports for a given month.

The notifiable diseases reporting form collects individual case data for 11 notifiable diseases and all vaccine preventable diseases. The form contains basic case demographic data, laboratory data, and

vaccination status data. Forms are to be completed and sent at the time of diagnosis, and are entered individually by the HIS unit.

The inpatient register is a line listing of inpatient cases and includes admission and discharge data, age and sex data, and outcome. Individual case data are also entered from the line listing by the HIS unit.

The ACSI-CCCD Project provided continual technical assistance to Lesotho's Health Information System during the life of the project. In 1985, the project began its assistance by first working with the unit to produce annual reports for the previous years 1981 through 1985. It also assisted the unit in conducting an assessment of the nationwide HIS, and in 1988 supported the unit's request for additional staff and provided the unit with necessary computer equipment.

The project was actively involved in revising and printing new forms for outpatient and notifiable disease reporting and outbreak notification. Revisions to the outpatient form specific to ACSI-CCCD Project interventions included the addition of the disease categories diarrhea and diarrhea with dehydration and pneumonia and severe pneumonia/serious disease. These changes were designed to permit the CDD and ARI program managers to monitor indicators of program impact. The ACSI-CCCD Project also assisted the HIS unit in designing and computerizing the management of ORT unit monthly reporting sheets and inpatient reporting registers.

Additionally the project assisted the HIS unit in developing and producing various quarterly and annual feedback reports and newsletters, including reports that summarized data on the project's main interventions and target diseases. Lastly, the project supported the development of workplans for the unit and provided training for HIS staff.

Individual programs maintain separate information systems to monitor their logistics and personnel data. The team reviewed the system used by the EPI to manage vaccine and vaccine equipment information. Forms used include a record of the amount and recipient of vaccine distributed by antigen; a record of the amount of vaccine requested and distributed, and the stock balance by HSA/hospital; a record of the stock balance in the central vaccine store by antigen, lot number, and expiration date; a record of vaccine receipts at the central store, and a record of the amount of vaccine distributed by month. The EPI logistics officer also maintains records of the stock balance of other EPI equipment, including syringes, needles, sterilizers, and thermometers. EPI cold chain supervisors maintain separate records of cold chain equipment and spare parts.

## **HEALTH INFORMATION SYSTEM BENEFITS TO BE SUSTAINED**

The team was not able to assess the timeliness and completeness of reporting MCH and morbidity data achieved by the HIS during the ACSI-CCCD Project. Annual project reports indicate that the project assisted the unit in producing regular and timely EPI quarterly reports during 1986, a quarterly Epidemiologic Bulletin in 1987, three Epidemiologic Bulletins in 1989, a short newsletter and quarterly Epidemiologic Bulletins in 1990. Finally, the project assisted the CDD program and HIS unit to design and implement an information system to manage data reported monthly from hospital and health facility ORT units.

Data on the completeness of reporting were available for 1990 and 1991. Completeness of reporting MCH/FP data is generally higher than that in outpatient morbidity data.

Data on timeliness of reporting were not available. The HIS manager indicated that there was a two to three month lag in receiving HSA reports at the national level. Weekly OPD morbidity reports and reports of notifiable diseases are generally sent together with the monthly MCH/FP reports.

### OPERATIONS RESEARCH

The ACSI-CCCD Project assisted the MOH in conducting operations research projects to identify solutions to problems noted in the delivery of services for all three priority programs: EPI, CDD, and ARI.

- MOH staff, including EPI staff, were fully involved in all national and HSA-level coverage surveys conducted during the ACSI-CCCD Project, including the 1990 coverage survey which had a specific knowledge, attitudes, and practices survey to identify important differences between users and non-users of immunization services.
- MOH staff from the CDD program participated in a 1989 study to identify locally available fluids that can and are being given by mothers to their children with diarrhea and to measure the quantity of ORS mothers give at home. Results of the study convinced MOH staff to increase the number of hours that hospital ORT units were staffed and provided ORT services to children presenting with diarrhea.
- Two Basothos served as co-principal investigators on the 1989 community assessment of current ARI beliefs and practices among persons who care for young children.

### OPERATIONS RESEARCH BENEFITS TO BE SUSTAINED

The benefits of ACSI-CCCD Project inputs into operations research could be viewed in terms of a continuation of research activities designed to develop solutions to operational problems. While the number of studies is dependent on the number of problems encountered requiring a solution, it is reasonable to expect that operations research projects might continue at a level of one to two per year.

### HEALTH EDUCATION

HEALTHCOM project activities were closely linked to the ACSI-CCCD Project. The overall goal was to assist the MOH in applying a communication strategy using mass media and face-to-face interaction for the diffusion of health messages. The project sought to increase the use of oral rehydration therapy for dehydration due to diarrhea and increase immunization coverage as well as improve the capacity of the MOH to conduct effective health education in general. From the outset, health education and training plans were designed to reach the village level populations through a "cascade" from national to regional to community health personnel.

In general, health education activities had two major objectives: improving the MOH's capacity to conduct effective health education and effecting behavioral change among the population.

## **IMPROVING CAPACITY**

Improving the MOH's capacity to conduct effective health education involved technical assistance to develop capabilities for long-term planning and implementation of health education activities. This included increasing the number of HED staff, improving the organization and management of the HED, and training HED staff in instructional materials development and in EPI and CDD/ORT interventions.

The importance of planning was emphasized by the development of short and long-term workplans as well as overall implementation strategies that focused on institutionalization and sustainability of the methodology.

Overall the health education methodology utilized in Lesotho featured six specific elements. Major project-supported activities can be grouped under these elements:

### **Identifying Problems Through Situational Analysis**

Development of official MOH policies on ORT and EPI promotion.

### **Developing Education Materials**

Provision of technical assistance for the development and diffusion of health education messages through the mass media.

Development of print material for the training of health care workers in the promotion of ORT and EPI and for treating diarrhea and administering immunizations.

Development and distribution by HED and the Ministry of Education of teaching modules on ORT and EPI for primary schools.

Incorporation of EPI and CDD messages into the child health card.

Development of EPI posters for clinics and mothers.

### **Pre-testing Materials**

### **Revising Materials**

### **Producing and Diffusing Materials**

### **Evaluating Health Education Materials**

The HED and CDD staff assessed the use of ORT health education materials by health facility staff.

## EFFECTING BEHAVIOR CHANGE AMONG THE POPULATION

The HEALTHCOM Project also assisted the HED and CDD programs to monitor utilization of health education materials. The HED completed a summative evaluation of community knowledge and practices related to immunizations and diarrheal diseases.

## **HEALTH EDUCATION BENEFITS TO BE SUSTAINED**

### LONG-TERM PLANNING

The ability of the HED to identify priority health education activities and to plan and implement health education strategies, using the methodology outlined above, represents a major benefit of the health education inputs.

Furthermore, the MOH and PHAL completed the schedule of all ARI training and supervision of nurses. They finalized the ARI program health education component after the HED assigned a health educator to assist the program in early 1991. CHW training, health education materials, and revision of the national drug formulary and the clinic reference manual remain to be completed.

### EFFECTING BEHAVIOR CHANGE

The ability of the HED to effect key behavior changes among target audiences also represents a major ACSI-CCCD Project benefit to be sustained. Changing and maintaining appropriate behaviors with respect to seeking immunizations and managing diarrhea and pneumonia cases at home represented the focus of project health education efforts.

Shortly before the completion of HEALTHCOM, the HED and HEALTHCOM jointly conducted a summative evaluation assessing community knowledge and practices related to diarrheal diseases in children. This survey involved nearly 1,000 women in 40 enumeration areas, similar to the baseline study conducted in 1987. A separate survey assessed 114 CHWs' knowledge and use of ORS and SSS at home and in health facilities. The overall percentage of last reported diarrhea cases which received ORS rose from 42 percent in 1987 to 69 percent in 1990, while ORS or SSS use at home increased from 37 percent to 56 percent in the same period.

The need by HED to continually evaluate community-level health knowledge and practices remained after the ACSI-CCCD Project terminated. The ability of HED staff to complete this evaluation represents a major project benefit to be sustained.

### TRAINING

A training strategy for strengthening primary health care was developed for each of the program components. Training manuals with clearly defined competency-based objectives, teaching and learning methods, and evaluation strategies were developed and implemented in the EPI, CDD, and ARI programs. Key personnel from the MOH program areas participated in basic nursing education curriculum reviews in order to ensure relevancy of pre-service instruction.

## **TRAINING BENEFITS TO BE SUSTAINED**

The most noteworthy training activities during the LOP can be summarized under six broad headings. These six categories also represent major training-related benefits of the ACSI-CCCD Project to be sustained.

### **CLINIC LEVEL TRAINING**

The ACSI-CCCD Project, in conjunction with the MOH and PHAL, strongly supported training in ACSI-CCCD Project-related activities for health professionals, community health workers, and leaders at HSA clinics. For example, the MOH completed the initial phase of its ARI control program by offering training to nurse clinicians, nursing sisters, nurse assistants, and nurse aides in the ARI problem in Lesotho, Lesotho's ARI policies, case assessments and classification, drug therapy and home care, education for caretakers, and record keeping. Prior to this, the project strongly supported training of the clinic level staff in establishing and operating ORT units.

The following number of health professionals and CHWs were trained with project support:

1986	2,000 clinic level workers
1987	2,800 clinic level workers
1988	303 clinic level workers
1989	241 clinic level workers and 1,055 CHWs
1990	167 clinic level workers and 250 CHWs

While clinic level training needs may be expected to be greater at the start of a project, it is likely that some degree of clinic level in-service training for health professionals and community health workers will be required in the future. The ability of the MOH to provide such training must be sustained.

### **SUPERVISION**

The project strongly supported the development of supervisory checklists and routine supervisory visits to clinics.

For example, the Family Health Division (FHD) completed and pilot tested ARI and CDD supervisory checklists for health center visits. The ARI checklist helped supervisors to assess health workers' case assessment, classification, and treatment skills and to correct errors and strengthen patient education skills. During field testing, problems in recording the new ARI classifications and specific danger signs were noted along with the need for strengthening health education skills for all participants.

Routine clinic level supervisory visits capable of identifying performance problems and training needs continue to be critical for program sustainability.

### **TRAINING OF TRAINERS**

The MOH conducted training seminars for central level core trainers, focusing on teaching skills and supervision. Furthermore, on an annual basis, the MOH conducted between one and three national and up to six regional continuing education workshops for HSA trainers, addressing continuing education,

evaluation, and supervision needs. It is expected that the need for routine in-service training of trainers will remain at a level similar to that which existed during the project.

#### TRAINING MATERIALS DEVELOPMENT

The ACSI-CCCD Project assisted the FHD in completing an ARI clinical training manual. In the future, the need to continually evaluate and revise training materials, if not to develop entirely new ones, will remain.

#### CENTRAL LEVEL TRAINING

The ACSI-CCCD Project supported training for central level HIS unit staff.

#### EVALUATION OF TRAINING

The MOH and PHAL completed a management analysis of training and a procedures manual for the decentralized training program. The procedures manual outlines methods for assessing training needs and evaluating the impact of training. The MOH's increased ability to continually assess staff training requirements and the impact of training programs represents an important project benefit to be sustained.

### III. RESOURCE CONSTRAINTS AND THE QUESTION OF AFFORDABILITY

#### ECONOMIC CONSIDERATIONS

The Kingdom of Lesotho is a small (11,716 sq. mi.), mountainous country completely surrounded by South Africa.<sup>7</sup> The population of about 1.8 million is increasing at an annual rate of about 2.7 percent. About half of the male labor force works in South Africa, principally in the mining sector. Nearly half of Lesotho's Gross National Product comes from wage remittances. The agriculture sector contributes the next largest share. Receipts from the Southern African Customs Union (which provides for pooling of customs and excise duties for sharing among members) in recent years have constituted more than 50 percent of total Government of Lesotho (GOL) revenue, excluding grants. Lesotho's per capita GNP of US \$530 in 1990 is one of the highest among the group of low-income countries.<sup>8</sup> As this figure would suggest, Lesotho has enjoyed an impressive rate of increase in real per capita GNP over the past two decades.

However, Lesotho's GNP growth has been achieved at the cost of increased budget and balance of payments deficits. In other words, the country has been living beyond its means with consumption exceeding real GDP. This gap has been financed by workers' remittances and other foreign transfers. In 1988, foreign aid per capita was the third highest among the low-income countries of the world, a high rate of development assistance that continues today.

An ominous development in recent years that has diminished Lesotho's prospects for robust, sustainable growth has been the rapid contraction of the mining sector in South Africa. The loss of many jobs has started a precipitous decline in the migration of Lesotho labor to South African mines. An additional development having adverse impact on Lesotho's economic performance has been the drought which has affected the country since 1990. Sharp declines in agricultural output overall have resulted, especially in crop production.

Responding to these economic problems, the GOL began implementing an IMF-sponsored three-year Structural Adjustment Program (SAP) in 1988/89, followed by a three-year Enhanced Structural Adjustment Program (ESAP) beginning in 1991/92. In addition to facilitating economic growth in various other ways, a central aim of both programs has been to reduce budget and external deficits.

From the point of view of the prospects for sustainability of health and other social programs, the economic developments in recent years, briefly recounted above, have important implications. Real social recurrent expenditure (e.g., for education, health) has virtually stagnated under adjustment. Although increases in real social spending have been planned under the ESAP, there is no reason to be sanguine on this score. In evaluating the prospects for sustainability of health projects insofar as this turns on resource availability, it would not be wise to count on a substantial increase in the GOL's rate of real recurrent expenditure per capita for health in the years immediately ahead.

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<sup>7</sup>Assessment of Program Impact, FY-1992, "USAID/Lesotho, October 1992. "Country Program Strategic Plan, FY 1992-FY 1996; USAID/Lesotho, November 1991.

<sup>8</sup>World Development Report 1992. World Bank.

## LESOTHO'S HEALTH ECONOMY

Lesotho's health-services sector is comprised of three components:

- The Ministry of Health (MOH) system, which makes all of the Government of Lesotho's recurrent expenditure on health and most of the capital expenditure.
- The Private Health Association of Lesotho (PHAL) system, which was formed in 1974 by missions from six churches to represent mission interest to the MOH, to facilitate external support, and to encourage coordination among the members and the MOH. Each member exercises control over its fees and operations. PHAL is responsible for half of the country's hospitals (about one-third of hospital beds) and 60 percent of the clinics. Together, the MOH system and the PHAL system comprise what may be thought of as the public sector.
- The private medical sector includes a variety of voluntary organizations, a number of independent physicians (40 plus currently), outlets for drugs, and the community of traditional medicine providers.

Table II shows the structure of the health-services sector for 1983-84,<sup>9</sup> the year in which the ACSI-CCCD Project began.

TABLE II

1983-84 Recurrent Expenditure for Health M1.0 equals US \$0.51		
Program	Expenditure (M millions)	Percent GNP
GOL/MOH	14.1	1.5
PHAL	3.8	0.5
Private Sector*	8.5-17.0	0.9-1.8

\* No direct data; estimated from household expenditure data subvention. Expenditures in the private sector are financed by out-of-pocket payments or payments from HSA health-insurance funds to which some residents of Lesotho subscribe.

Recurrent expenditures for health are highly relevant for this assessment. GOL/MOH expenditures on capital account (development expenditures) fluctuate widely over the years and nearly all are financed by foreign aid. Foreign assistance has also played a large role in financing recurrent MOH expenditures on health. PHAL has largely been financed by revenue from fees which are revised regularly to reflect increases in the cost of providing services and which, at the time the ACSI-CCCD Project was launched, were covering 60 percent to 80 percent of operating costs depending on the institution. Historically, the

<sup>9</sup>See "Staff Appraisal Report: Lesotho Health and Population Project," April 1, 1985, The World Bank, Report No. 5437-LSO., pp. 14 et seq.

COB has paid a modest subvention to the PHAL in the form of 50 percent of PHAL nurses' salaries. In recent years, there has been a sharp increase in the rate of this subvention. Expenditures in the private sector are financed by out-of-pocket payments or payments from RSA health insurance funds to which some residents of Lesotho subscribe.

As is true in many countries, the percentage of total government recurrent expenditure claimed by health each year has been very stable. As a percent of the overall GOL recurrent budget, MOH expenditures for health averaged 8.2 percent for the period 1974-1979 and again 8.2 percent for 1980-1985. For 1988-89 and the years following, this proportion has declined to an average of 7.3 percent, a reduction of about one percent -- which represents a loss (as compared with the prior proportion) of about M4.5 million in recent years.

The bulk of the MOH's resources for health goes to hospitals. In 1983-84, expenditures by hospitals accounted for about 70 percent of the MOH recurrent budget, with two-thirds going to the QE II Hospital. Primary Health Care (PHC) received about 14 percent of recurrent resources, or about M1.0 per capita for the population as a whole.

Table III shows recurrent expenditures for health in the public sector for the years following the implementation of the ACSI-CCCD Project. The public sector is here defined to include both the MOH system and subventions paid to the PHAL system. Data for the private sector have not been included in Table III, although, as in 1983-84, it continues to be a large part of the health economy.

As Table III shows, the public-sector health economy has been in a decline in the years following implementation of the ACSI-CCCD Project. There has been a substantial decrease in the percentage of GNP for public-sector health expenditures. Real (1980 prices) per capita public-sector health expenditures have also exhibited a substantial decline. The apparent improvement in this measure shown in the table for the most recent years is misleading. For one thing, the subvention paid by the MOH to PHAL has greatly increased in the last year or two. Historically, as already noted, this subvention covered one-half of the salary bill for the nurses in the PHAL system. However, from PHAL's point of view, the very survival of the PHAL program demanded increases in these subventions, and the MOH felt obliged to go along. According to MOH, the PHAL subvention was M3.8 million in 1990-91, rising to M8.0 million in 1991-92. Moreover, in 1991-92 there was a 42 percent increase in salaries and wages for MOH employees (in that year salaries claimed about 45 percent of the MOH budget), a cost-increasing factor probably not captured by the overall health-care deflator employed in Table III. It is reasonable to conclude that in terms of real per capita expenditures for health care, the public sector has lost considerable ground in the years following implementation of the ACSI-CCCD Project.

### THE QUESTION OF AFFORDABILITY

A necessary condition for project activities/benefits to be continued by allocating the country's own internal resources is that these activities/benefits be regarded as affordable by the national policy makers. (See Appendix E discussion of the concept of affordability.) In this section, the team considers the affordability of EPI (a program for which cost data are readily available) for the MOH in Lesotho. The same principles apply for affordability analyses of any health program.

As pointed out in the Introduction, the ACSI-CCCD Project was not itself a comprehensive delivery system. Rather, it sought in selected ways to improve the performance of such a program,

**TABLE III**  
**Recurrent Expenditures for Health: Public Sector**

Current Prices M (000,000)

YEAR	1983-84	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Gross National Product (GNP) <sup>1</sup>	804	1215	1459	1856	2215	2606	
GOL Recurrent Expenditure/Total				384	435.9	456.8	613.8 <sup>3</sup>
MOH Rec. Exp. Health plus PHAL Subvention <sup>2</sup>	17.9	21.3	21.8	25.4	32.0	36.4	45.0 <sup>3</sup>
Health as Percent of GNP	2.2	1.8	1.5	1.4	1.4	1.4	
Health as Percent GOL Total Recurrent Exp.	8.2			6.6	7.3	8	7.3
Per Capita MOH Rec. Exp. plus PHAL Subvention <sup>4</sup>	10.5	12.5	13.6	14.9	18.8	21.4	26.5
Deflator/Health 1980=100 <sup>5</sup>	112	157	160	206	224	227	267
Real Per Capita Health Exp./M	9.4	8.0	8.5	7.3	8.4	9.4	9.9

3-4

**Sources:**

- 1 Lesotho National Accounts 1980-1990, Bureau of Statistic, Lesotho, January 1992.
- 2 "Staff Appraisal Report: Lesotho Health and Population Project," April 1, 1985, The World Bank, Report No. 5437-LOS and Financial Controller, MOH, GOL.
- 3 *Estimates* (Published by the Government of Lesotho)
- 4 Based on population 1.8 million
- 5 Lesotho National Accounts 1980-1990, Bureau of Statistic, Lesotho, January 1992.

namely, the MOH's EPI/CI/D/ARI program. This means that, insofar as it depends upon the question of affordability, the important part of sustainability analysis for the ACSI-CCCD Project is that addressed to the sustainability of the main program. The ACSI-CCCD Project was assisting with the development of what was supposed to become a full-scale EPI program which would be capable, in the foreseeable future, of fully immunizing a target population of infants 0-12 months of age each year.

How large is this cohort? During the project period, Lesotho's population has been about 1.87 million. Live births each year may be estimated as 3.8 percent of the population.<sup>10</sup> The targeted beneficiaries are, therefore, about 64,600 infants less than one year of age. This is then the approximate size of the cohort to be immunized each year in the few years following termination of the project. Naturally the population, and with it this cohort, is increasing over time. What is the cost of fully immunizing? For EPI in Lesotho, a recent study put the cost per fully immunized child at US \$17.63 equivalent in 1988.<sup>11</sup> This is an average and, as in all such cost studies, the findings for various facilities exhibited substantial variance. This is also a full-cost figure, taking account of all inputs including that part of capital outlays for plant and equipment which should be charged to expense each year. In the short run, with plant and equipment already in place, the more relevant cost figure would be marginal cost, that is, the extra or additional cost that would be incurred by including EPI in the PHC program. This is very much less than full cost. For project-planning purposes, the full-cost figure is probably the appropriate one. Recent studies have put the average cost of EPI for a number of countries in Africa at about US \$15 per fully immunized child,<sup>12</sup> and this latter figure is adopted for purposes of this exercise. With a unit cost of \$15, the annual cost of a full-scale EPI program in Lesotho, assuming 100 percent coverage, would be equivalent to about US \$969,000 or about M3 million at the current exchange rate. This works out to about M1.8 per capita for the population as a whole.

Is this cost to be regarded as affordable? It certainly passes the less than one percent of GNP test (a test developed by the REACH project that EPI programs which cost more than one percent of GNP should be regarded as not affordable). In our view, however, this test needs further examination, as discussed in Appendix E.

To make an informed judgment about affordability, it would be more meaningful to compare the cost of the full-scale EPI program with the public-sector budget for health for 1989-90 for example, a year near the end of the LOP for the ACSI-CCCD Project and a year in which the budget on a real per capita basis is about average over the LOP. The cost of a full-scale EPI program comes to about 9.4 percent of the public-sector recurrent expenditures for health in that year. If it is assumed that in that year (as in 1983-84) 14 percent of the total recurrent expenditure for health is allocated to PHC programs, the cost of a full-scale EPI program would represent about 66 percent of the resources available for PHC in that year.

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<sup>10</sup>Kingdom of Lesotho, International Evaluation E.P.I., Family Health Division, October 1990.

<sup>11</sup>"Unit Cost Study of the Expanded Program on Immunization and the Control of Diarrheal Diseases in Lesotho," Sara Bene Health Planning Unit, MOH, June 1989, p.21.

<sup>12</sup>"The Immunization Sustainability Study," REACH, April 1990 (Health Care Financing Group of JSI for PPC/AID).

The question of affordability is, most importantly, a question of trade-offs. Whatever the size of the health budget (within realistic limits), resources for health programs will be scarce relative to the many demands health programs make upon them. Choices must be made: more resources for any one health program, such as EPI, means that much less for other health programs. The affordability question for the policy makers is whether, given their criteria, M3 million for EPI yields more benefit than would that M3 million allocated to some other health programs. If these policy makers answer in the affirmative, then, for these policy makers, EPI is affordable. Other policy makers might answer in the negative, for them EPI is not affordable. A problem for the design and implementation of health projects is that each of the parties to the project may bring different priorities to an evaluation of the trade-offs and hence reach different conclusions about affordability. (Management of this kind of conflict is discussed in Appendix F addressed to Sustainability Strategy Objective V -- Mutually Respectful Negotiations.)

### THE LABOR FORCE RESOURCE CONSTRAINT

This resource constraint continues to have a severe negative impact on the performance of Lesotho's health-services sector. Skilled workers in various health occupations leave Lesotho for better paying positions elsewhere, especially in South Africa. Virtually every MOH official with whom the team spoke emphasized the strongly negative impact this loss of skilled manpower was having on the performance of health programs and facilities. It would be difficult at best for MOH health programs to replace this skilled manpower since training programs cannot keep up with the very substantial out-migration taking place.

In addition, there is a special problem confronted by the MOH. Over the years during which total employment in the MOH system has been growing substantially, many of the jobs created were temporary jobs, i.e., not part of the Establishment (sanctioned permanent posts), so that the total labor force is much larger than the sanctioned Establishment posts. Even with the stringencies brought on by structural adjustment, when an incumbent leaves a sanctioned post the MOH can attempt to replace that worker. When an incumbent of a temporary post leaves, however, the MOH is not allowed to try to replace that worker. For this reason, the out-migration of workers has had an especially severe impact on the MOH programs, including the ACSI-CCCD-assisted child survival programs.

## **IV. FINDINGS ON OBJECTIVES, ACTIVITIES, AND INDICATORS**

The ASCI-CCCD Sustainability Strategy identifies five objectives that must be met in order to achieve project sustainability, as discussed in this section.

### **OBJECTIVE I: PERCEIVED EFFECTIVENESS**

The Sustainability Strategy states that if project activities are perceived by health officials as effective, then it is more likely that a constituency will develop which is committed to project goals and the continuation of project activities. The strategy provides four indicators for use in evaluating this criterion:

**1. The availability of national policy statements and workplans.**

**Indicator met.**

The team found that national policy statements were available at the national level for EPI and the CDD and ARI programs and that the ASCI-CCCD Project played an important role in developing or modifying each program's policy. The team was able to determine that the EPI policy was also available and understood at the HSA level. The Lesotho EPI policy is consistent with WHO recommendations, including the recommendations that infants receive a dose of oral polio at birth and that women of childbearing age receive five lifetime doses of Tetanus Toxoid.

The Lesotho Ministry of Health Policy with Respect to Oral Rehydration Therapy states that "successful prevention and treatment of dehydration from acute diarrhea requires a comprehensive program approach which includes efforts on three points. All Efforts will be directed at three levels: the household, the community health worker and health facilities." The policy then describes the efforts at the various levels.

Lesotho's national ARI policy aims to reduce pneumonia morbidity in children under five years of age by ensuring standard ARI case management in health facilities, standard ARI knowledge and practice by community health workers, and correct care of children with ARI at home. The policy guides facility-based case management of children with pneumonia, severe pneumonia, and coughs/colds, including the referral of severe pneumonia cases and antibiotic usage, and home-based case management.

**2. The project has implemented an HIS, MIS, or and/or special surveys to produce data on project impact in EPI, CDD, and ARI.**

**Indicator met.**

The team concluded that, in general, the ASCI-CCCD Project assisted the Lesotho EPI, CDD, and ARI programs in implementing components (a) and (b) of this indicator. Component (c) was not generally implemented.

a. The HIS produced relatively reliable epidemiologic data with timely reports presented in ways that officials can determine weak performance by health facility (and/or need for additional resources or activities by health facility).

(i) Budget line item for HIS.

The team concludes that the existence of a full-time HIS manager, two computer programmers, and seven data enterers indicates that a budget line item for HIS exists.

(ii) Disease surveillance system providing annual data on disease trends within three months of end of year.

The annual report for 1991 was available and presented to the team. During interviews, the HIS manager indicated that the 1992 annual report summarizing disease surveillance data would be completed by the end of March. She noted that completeness of reporting was good for the period January to October 1992 and that she was working to obtain outstanding reports for November and December.

(iii) Disease reporting system providing 80 percent of monthly reports from national reporting, or 95 percent reporting from sentinel sites.

As noted, nationwide completeness of reporting for outpatient data was less than 80 percent for 1991. The team was not able to assess nationwide completeness of reporting for 1992. There is no sentinel disease reporting system in Lesotho.

(iv) Annual report distributed within three months of end of reporting year.

The 1992 annual report summarizing outpatient disease surveillance data is expected to be complete by the end of March 1993. The HIS manager commented that the EPI Program Manager is the only MOH staff person who routinely requests and receives reports from HIS and the report summarizing immunization coverage is distributed. Interviews with an HSA medical officer confirmed that only reports on immunization coverage were received at that level on a routine basis. Other reports are provided upon request. Consequently, while an annual morbidity and mortality report may be complete and available for distribution within three months, it is not clear that one is actually distributed on a routine basis.

(v) Surveillance bulletins distributed quarterly with maximum lag time of three months.

The HIS manager does not routinely prepare quarterly reports summarizing disease surveillance data, given the lack of demand for these reports. Quarterly production within three months was, however, possible. She noted that the annual report provides an analysis of disease incidence by quarter, and that separate quarterly reports are on occasion requested and prepared.

The ARI Manager suggested that the HIS unit has failed to provide the quarterly reports on pneumonia morbidity and mortality that she has requested. The differing expectations of the ARI and HIS managers require clarification.

- (vi) Project HIS integrated into the MOH/HIS.

Integration of the ACSI-CCCD Project into the MOH in general is not an issue. Similarly, at no time did the project seek to establish an HIS independent of the MOH HIS. The project did assist the CDD and ARI programs in identifying their information needs and in developing appropriate manual systems to capture programmatic data, but these activities appear to have been completed in conjunction with the MOH HIS unit and its staff.

b. Technical Effectiveness

- (i) EPI

- (a) Results from KAP survey for EPI every three years.

The last KAP survey for EPI was completed in 1990, as part of the nationwide immunization coverage survey. The EPI plans to conduct a nationwide immunization coverage and KAP survey during 1993 rather than 1992 to allow sufficient time to pass before assessing TT coverage. TT immunization began in 1990.

- (b) EPI coverage by year (versus target).

Immunization coverage data are available for the years 1984 to 1991 and for the first six months of 1992. Additionally, the EPI has established annual targets for immunization coverage.

- (c) Measles incidence by year (versus target)

Similar to immunization coverage, measles incidence data are available for the years 1984 to 1991 and for the first six months of 1992. The EPI has adopted the WHO target of reducing measles incidence 90 percent from pre-vaccination levels by 1995.

- (d) NNT sentinel data (versus target)

Lesotho does not maintain a sentinel system for reporting disease incidence data. Neonatal tetanus cases are reported through the hospital inpatient reporting system and the notifiable diseases reporting system. No cases were reported during 1992 from among reports received to date. During 1991 one case was reported, and during 1987 two cases were reported.

- (ii) CDD

- (a) Results from KAP survey for CDD within three years.

The summary evaluation of the HEALTHCOM Project, completed in 1990, included KAP data for the CDD program. More recently, the MOH completed a nationwide detailed health-related survey from November 1991 to April 1992. The survey design was modeled after the DHS survey completed

n Lesotho in 1987. The DHS survey<sup>13</sup> completed in April 1992 should provide the CDD manager with recent data on community knowledge, attitudes, and practices with respect to diarrhea and dehydration. Analysis of these data is not complete.

Finally the medical officer also provided some insights into the community's perception about the effectiveness of ORT. She noted that since mothers often considered ORT as medicine, they frequently expected the ORT to stop the diarrhea. As this was not the effect, mothers were likely to turn to other treatments, including those available through traditional healers.

(b) Health facilities meeting standards.

Although the CDD manager noted that she continued to receive and analyze ORT unit reports from six major hospitals summarizing the impact of the CDD program (percent of diarrhea cases presenting with moderate or severe dehydration) during 1991 and 1992, she did not mention that routine HSA level supervision and assessment of health worker performance had continued during these same years. During 1992, she completed supervisory visits to two of the six hospitals with a functioning ORT unit.

The CDD manager cited the MOH's demographic and health survey conducted from November 1991 to April 1992, funding cuts or shortages for per diem and gas, and continuing transport constraints as contributing factors to the low level of supervisory visits. She noted that she intended to continue documenting the quality of case management and training and providing on-the-job training and would distribute checklists to HSA supervisors. The team concluded that the CDD manager was well aware of the methods she could use to measure and improve health worker performance, including the use of supervisory checklists, and understood the importance of these activities.

(c) Home treatment meeting standards.

Data on home treatment of diarrhea are often collected during community-based KAP surveys. As noted under (a), 1990 data were available to the team and more recent data should be provided by the DHS survey. The ORT unit monthly report and the outpatient weekly morbidity report also provide some indication of the effectiveness of home treatment as they capture data on the number of cases of diarrhea presenting with and without dehydration. These data were not available for 1991 or 1992.

(d) Cases of diarrhea treated with ORT in the home.

As with data on home treatment, data on the percent of diarrhea cases treated at home with ORT are often collected during community-based KAP surveys. Availability of these data is the same as noted under (a) and (c).

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<sup>13</sup>This was conducted by the government following the format established by the DHS Project which is supported by A.I.D.'s Offices of Health and Population.

(iii) ARI

(a) Results from KAP survey for ARI within three years.

No community-based KAP research has been completed since the original baseline study was conducted in 1989. The ARI program workplan indicates that during a planned program review in 1992, exit interviews with caretakers would be conducted to assess their comprehension of messages delivered at health centers. It is unclear whether this review took place. The next complete community assessment of caretakers' knowledge, attitudes, and practices is scheduled for 1995, during a planned household survey.

(b) Health facilities meeting standards.

Since 1991, ARI program implementation has expanded to eight HSAs. During 1992, the ARI program manager completed supervisory visits to health centers in the original three HSAs and used the ARI checklist to monitor and assess the level of appropriate case management. It appears that the data collected during these visits were not systematically analyzed and no comprehensive assessment of the current performance of health workers in managing pneumonia cases has been completed since the original evaluation in 1991. No supervisory visits to facilities in the five new HSAs that began ARI program implementation during 1992 were made, as the trainings were time consuming and occurred between July and November. During 1992 a registered nurse was deployed as a field supervisor to the ARI and CDD programs.

The team's impression is that the ARI program manager understands well the use of supervisory checklists to monitor facility health worker performance and the importance of this activity. The ARI program manager intends to begin supervisory visits in March 1993 to the five HSAs trained during 1992.

(c) Home treatment meeting standards.

Although 1991 evaluation results suggested that home treatment of pneumonia cases may not be optimal, given the inadequate level of education given to caretakers by health workers, no more recent data permitting an independent assessment were available. It is likely that when data collected during 1992 supervisory visits are analyzed, the results will indicate whether education of caretakers by health workers has improved.

In the absence of data summarizing clinic-based observations of health workers, an assessment of the adequacy of home-based treatment of pneumonia will have to wait until the community-based survey is completed in 1995.

c. MIS information system that is complementary to HIS and provides a) personnel data on location, skill levels, and training, b) logistics on drugs and transportation, and c) budgetary data by facility.

The team concluded that the criteria for this indicator were not met at the present time.

(i) Utilized and reliable MIS.

At present the MOH does not maintain an effective MIS that manages the above mentioned data. Different programs have individually implemented various components of an MIS for their own use. During interviews, the HIS manager indicated that the HIS unit plans to specify and design a MIS that will manage personnel data by facility, including their level of training.

(ii) Project MIS integrated into MOH MIS.

The ACSI-CCCD Project did not implement a project specific MIS nor did it assist the MOH in developing one.

(iii) Updated personnel data.

Although unavailable at present, an information system which allowed central level MOH staff to monitor personnel data, including training, by facility is a clear priority, given the high level of staff turnover. The project assisted the ARI program in establishing a manual system to manage data on the number of health staff per facility and HSA who have been trained in appropriate pneumonia case management and the number who require training in the future. The ARI program manager continues to maintain this manual system.

(iv) Logistics data.

In general, logistics data is maintained by the individual programs. The team had the opportunity to discuss EPI logistics with the EPI logistics officer. The team concluded that the EPI maintains an excellent manual information system to manage its logistics data.

**3. Completion of operations research and special studies to assess program quality and develop solutions.**

**Indicator not met.**

The ACSI-CCCD Project supported numerous operations research studies, providing both financial and technical assistance, within all three technical interventions. These studies have been described in different sections of the report. Basotho MOH staff were clearly involved in these research projects, often serving as principal or co-principal investigators.

Despite these numerous research activities, the process of conducting operations research in Lesotho is not firmly institutionalized. The project worked with the MOH to establish the Research Review Committee that met during the life of project on an ad hoc basis to clear research protocols and papers that summarize research results. However, this group did not actively identify operations research activities to address implementation problems identified by the various programs, and a similar gap in identifying necessary research activities remains today.

**a. Budget line item for operations research and/or special studies.**

The EPI Manager commented that a lack of funding is preventing her from completing two important operations research activities. The team concludes from this statement that it is unlikely that there is a budget line item for operations research.

**b. System for reviewing and approving operational research projects in place.**

The team did not find evidence that the MOH had established a system for either soliciting or for reviewing and approving operational research projects that may be identified by individual program managers.

**c. System has conducted at least one round of review and funding independently of ACSI-CCCD staff.**

In addition to the lack of a system, the team did not find evidence that the EPI, CDD, or ARI program managers had developed or conducted operational research projects within their own programs since the ACSI-CCCD Project ended. The EPI manager has, however, identified the most pressing operations research activities she hopes to complete in the future. These include identifying health workers' attitudes toward clients and clients' attitudes toward health workers which inhibit the achievement of full immunization coverage objectives and an evaluation of the two-dose immunization schedule for measles. The EPI manager also noted that many MOH staff who participated in previous OR studies retained the necessary expertise to complete future studies: for example, staff could conduct serologic surveys and complete the required laboratory tests.

**d. Country nationals have served as principal investigators (or co-principal investigators) on behavioral research projects used to develop or evaluate health interventions.**

Country national staff were directly involved in the operational research activities that were conducted during the ACSI-CCCD Project, including the community-based EPI, CDD, and ARI assessments.

**e. Country nationals have served as principal investigators (or co-principal investigators) on cost or cost-effectiveness studies used for program development or evaluation.**

During 1988, staff from the CDD program participated in a study to determine the unit cost of treating a child with diarrhea at a health facility ORT unit.

**4. Use of data for problem identification and solution development**

**Indicator met for EPI only.**

**a. National program managers present HIS/MIS data in appropriate (useable) format for director general (DG) and minister on a quarterly basis.**

During interviews, the team determined that data on programmatic success and failure were reported to senior MOH staff on a limited basis. It appears as though more frequently, the information

stops at the level where personnel are already convinced about the importance of the programs. If reports that staff within the MOH who set priorities do not have a public health background are correct, informing senior level staff about EPI and other priority child survival projects would seem to be a priority.

The Director of Primary Health Care noted that during quarterly meetings with the DG, immunization data is routinely reviewed. This information is always available and the DG has come to expect an update. Furthermore, immunization coverage is routinely quoted in political speeches. Currently the CDD manager prepares an annual report of program activities. She submits the report to the director of the Family Health Division, who in turn submits it to the Director of Primary Health Care. The team did not review an annual CDD program report and cannot comment on the nature or presentation of programmatic data included.

The Director of Primary Health Care stated that data on the reduction in long hospital stays for diarrhea that is attributed to a reduction in diarrhea cases presenting with severe dehydration is routinely monitored by the DG and other senior MOH staff as an indicator of program impact.

There is also apparently a high level of interest in the ARI program and in relevant programmatic information among senior MOH staff. According to the Director of Primary Health Care, this interest is spreading. She felt this keen interest was in part due to the attention given by Lesotho physicians to this very prevalent condition and to the curative aspects of its management.

- b. National program managers routinely present data from operations research and special studies in appropriate (useable) format to DG and Minister.

As noted, operations research activities and special studies have not been routinely conducted since the ACSI-CCCD Project ended.

- c. Reports of research activity are present in the files of decision makers and referred to routinely during program decision making.

Results from research activities conducted during the ACSI-CCCD Project provided key input into decisions made by program managers to modify the immunization schedule and to develop Lesotho's first CDD and ARI policies.

- d. National colleagues increasingly have provided leadership for ACSI-CCCD Project evaluations.

Following the 1986 external review of the ACSI-CCCD Project, there was a shift in the focus of project evaluation from an external to an internal one. MOH staff represented the majority of participants in the 1987 internal project evaluation and took the lead in organizing and conducting similar internal evaluations of the Family Health Division in 1988 and 1990.

- e. Use of data by program managers and by HSA-level supervisors to identify problems and to guide program implementation (additional indicator).

The team felt that it was also important to assess the use of data by program managers and HSA-level supervisors to identify problems and to guide program implementation.

## OBJECTIVE II: INTEGRATION AND INSTITUTION STRENGTHENING

The Sustainability Strategy states that projects which are well integrated into the administrative structures of a Minister of Health and do not create separate vertical hierarchies, have been found to be more sustainable in every country studied in the CDIE sustainability series. In addition, strong implementing institutions were found to be important for sustainability.

### 1. **Supervision.**

**Indicator not met.**

#### a. Supervisory system with checklists.

As noted, the ACSI-CCCD Project provided technical assistance in developing or modifying supervisory systems and checklists for the EPI, CDD, and ARI programs. The project also assisted the MOH to train staff to use checklists during supervision and to collate and analyze checklist observations to identify needs for continuing education. Finally, the project also assisted the MOH HIS unit to computerize the management of CDD checklist observation data.

#### b. Percentage of facilities visited in the last year.

The exact number of health facilities visited by central level supervisors was not available for either the EPI or CDD or ARI programs. The EPI manager stated that she and three additional EPI supervisors are responsible for central level supervision. The EPI has divided the country into three groups of six HSAs for supervisory purposes and has assigned one supervisor and one driver to each group of HSAs. In theory, each supervisor should visit every health facility in an HSA in two months, completing visits to all health facilities in their six HSAs once a year. There are also three central level cold chain supervisors who travel together with the EPI supervisors during clinic visits.

Both the ARI and CDD program managers noted that the DHS survey and concomitant vehicle shortage prevented them from conducting the planned number of supervisory visits during 1992. Furthermore, the managers noted that a general vehicle shortage at the central level curtails supervisory activities, particularly when one of the central programs conducts a special activity that requires additional transport, such as EPI acceleration activities. Lastly, the extensive training conducted by the CDD and ARI managers in 1992 limited the amount of supervision they could provide, although the 1992 ARI control program workplan listed supervisory visits to health facilities as a planned activity.

The ARI manager said that she would like to provide central level supervision to each clinic twice a year. Although supervision was not listed as an achievement in the 1992 ARI program annual report, the ARI manager said she was able to complete supervisory visits to some facilities in the three HSAs that first implemented the ARI program in 1990. Staff from 20 facilities were trained initially, and the exact number of facilities visited during 1992 was not assessed. The ARI Manager also noted that she expects HSA level supervisors to visit each of their clinics once a quarter to evaluate ARI program activities.

c. Was a checklist used during the visits?

The CDD program manager noted that she intended to continue using the supervisory checklist to document the quality of case management and training and to provide on-the-job training. She noted that she would distribute checklists to HSA supervisors.

The ARI program manager used the ARI supervisory checklist during her facility visits to assess the level of appropriate case management and to provide on-the-job training. She is currently modifying this checklist for decentralized use by HSA supervisors. Furthermore, she instructs HSA supervisors to use the written test completed by training participants at the end of each ARI workshop to identify topics for follow-up supervision.

d. Were results tabulated, fed down, and fed up?

The interviews suggested that the data collected on checklists completed during supervisory visits were not routinely processed, summarized, or distributed either to clinic staff or to more senior supervisors.

2. **Integration at delivery sites.**

**Indicator met.**

a. At what percentage of facilities are vaccination services and primary treatment for diarrhea, fever, and respiratory infection available?

In principal, vaccination services are available at all health facilities in Lesotho. The 1991 HIS Immunization by Facility report confirms that all but two facilities (one percent of total) in Lesotho delivered at least some immunizations during the year. The two facilities listed as giving no immunizations did submit monthly MCH/FP reports for the year (4 and 12 reports respectively). It is not clear if these facilities did not immunize or if they simply did not provide their immunization totals. Five other facilities submitted three or fewer reports for the year and reported giving very few immunizations. Again, it is unclear whether the low number of immunizations reflects a lack of immunization activity or a lack of reporting.

The EPI logistics officer noted that some clinics had closed during 1992. She noted that all facilities, including any newly opened clinics, were provided with cold chain equipment and vaccine and should be providing immunizations. The team could not assess the percent of facilities currently offering standard diarrhea case management. During the ACSI-CCCD Project, health staff from all facilities in Lesotho were trained to establish ORT units and corners and to provide standard diarrhea case management, and the ACSI-CCCD Project annual reports would suggest that many actually did.

As noted, there has been a decline in the number of facilities that operate an ORT unit. The team was not able to determine the extent to which staff transfers and turnover have also reduced the number of facilities with a trained staff person who could provide case management with ORT, regardless of whether the facility had an established ORT unit. Consequently the team could not determine the number of facilities either with an ORT unit or with staff capable of providing standard diarrhea case management. As noted under the ARI program summary, access to pneumonia case management has increased since

the ACSI-CCCD Project terminated. At the end of 1992, 51 (28 percent) of clinics had staff trained in standard pneumonia case management. During January 1993, staff from clinics in three additional HSAs have undergone training. Although the current total number of clinics with trained staff was not available, the team estimates that between 65 and 70 clinics (36 to 39 percent) can now provide standard pneumonia case management.

**b. Number of ACSI-CCCD interventions provided by most peripheral salaried health provider.**

Facility staff in Lesotho, primarily nurse clinicians and nursing sisters, are trained to provide all possible clinic services. In theory, all of the most peripheral salaried health providers should be able to deliver immunization services and standard diarrhea case management. Health workers in the 11 HSAs where standard ARI case management training has been provided to date can provide this service as well. Consequently, there is no inherent lack of integration in the provision of primary health care services. It should be noted, however, that the number of ACSI-CCCD interventions provided by the most peripheral salaried health worker in Lesotho can be limited by the high level of staff turnover and by the limited access new staff often have to training and supervision.

**3. Integration at national level.**

**Indicator met.**

**a. Project management activities are integrated into the existing Ministry of Health structure and are a part of the routine responsibilities of MOH personnel.**

A national EPI manager was in place at the time the ACSI-CCCD Project began. During the project, the MOH's Family Health Division created and filled established positions for the CDD and ARI program managers. The Director of Primary Health Care noted that the strong integration of CDD and ARI program activities and the excellent working relationship that exists between the CDD and ARI managers strengthened both programs.

The EPI and HIS managers also commented that the ACSI-CCCD Project was very helpful in coordinating routine meetings among MCH program managers within the Division of Family Health. The managers felt that these meetings promoted integration by providing staff with an opportunity to share program successes and problems and to learn from each other's experiences. These meetings are no longer held routinely.

**4. Support activities.**

**Indicator not met for EPI, CDD, and ARI. Indicator not applicable to support strategies.**

The Health Education Division (HED), which is responsible for the development and dissemination of health education materials, was strengthened and restructured with the assistance of HEALTHCOM during the LOP. The HED staff developed and monitored the use of health education materials for all levels of health providers and, in conjunction with the Ministry of Education, developed and distributed 6,500 teaching modules on EPI and OR'1' for primary schools. The HED continues to be operational at the national level; however, no long-term plans are in place for monitoring or assessing the utilization and/or efficacy of the materials.

Although the HED assisted in training health care providers at all levels in the utilization of the materials, no training has yet been offered to the primary school teachers for the primary school modules. Mechanisms were developed and successfully utilized (with the assistance of HEALTHCOM) to develop and distribute appropriate health education materials in all ACSI-CCCD intervention areas. No plans are in place for reviewing, evaluating, and revising the materials, nor is there a clear strategy for continuous distribution of materials.

Health education materials were developed to be utilized by all levels, including the community health workers (CHWs). CHWs also received training in the application of materials in their communities. The utilization of materials varies from community to community, and anecdotal reports indicate that the CHWs frequently use the materials; however, no studies have been done to assess the utilization of materials. No plans are in place to systematically update the CHWs with regard to the use of health education materials.

### OBJECTIVE III: LOCAL FINANCING, COMMUNITY PARTICIPATION, AND PRIVATE SECTOR PROVISION OF SERVICES

#### 1. Assumption of project costs by government.

Indicator not met.

In the Sustainability Strategy, discussion of this objective begins by stating the hypothesis that national governments which have included in their budgets successively larger portions of recurrent costs will be more likely to be able to allocate resources to project activities if and when external funding is terminated.

##### a. Phased Increase in Proportion of Government Funding

It is further observed that most projects include an agreement that the government will absorb increasing proportions of the project recurrent costs during the life of the project. The ACSI-CCCD Project in Lesotho included such a provision, at least for some of the operating costs (e.g., commodities, office space, and supplies) which were expected to continue after the project terminated. These costs, however, represented only a part of the operating costs of the project itself. It is the team's understanding that the GOL in fact complied with this agreement. Perhaps compliance with this arrangement would, as hypothesized, have been associated with increased support for continuing project activities/benefits financed by Lesotho's own internal resources. This could not be observed, however, because in the post-project period other donors, especially UNICEF, promptly stepped in to furnish much of the operating costs covered by the ACSI-CCCD Project during its life.

More generally, the sustainability analysis of the ACSI-CCCD Project in Lesotho is complicated by the fact that this project is one part of a larger enterprise, the MOH's EPI, CDD, and ARI programs, which are themselves heavily supported by several donors including WHO and the World Bank, in addition to UNICEF and others. For example, the unit cost study previously cited<sup>14</sup> found that as of

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<sup>14</sup>"Unit Cost Study of the Expanded Program on Immunization and the Control of Diarrheal Diseases in Lesotho," Sara Bennett Health Planning Unit, MOH, June 1989.

1989, and exclusive of expatriate assistance, 52 percent of the costs of the EPI program were met by donors and 56 percent of the costs of the ACSI-CCCD Project were met by donors.

With many substantial donors previously and currently active in Lesotho, an observation of the MOH's post-ACSI-CCCD Project performance does not allow for an easy assessment either of the sustainability of project activities and benefits or of the impact on sustainability of either meeting or not meeting the sustainability strategy criteria.

Whereas substantial donor support complicates assessing sustainability, external donor support may also provide an opportunity to make findings on some aspects of the institutionalization of project activities/benefits. Adequate funding for operating costs cannot ensure, for example, that HIS will continue to be properly implemented, or that continuing education will be effective. Institutionalization of project benefits, depends not just on the amount of donor assistance but also on the content style and format of that assistance.

## 2. Implementation of fee-for-service or cost recovery program.

**Indicator not met.**

As the discussion in Sustainability Strategy of Objective III notes, cost recovery through marketing government-provided health services is one way to provide additional resources for government health programs. Such a financing strategy is said to be gaining support throughout Africa. As noted above, under the 1988 amendment to the umbrella ACSI-CCCD Project, assistance in health financing was to receive greater emphasis. In Lesotho, the World Bank was designated as the lead donor in this area and the ACSI-CCCD Project undertook a supporting role. For example, together with UNICEF, the project supported cost studies of the EPI and CDD programs.

The GOL/MOH has been implementing a system of charges for services provided by government facilities for almost 20 years. Revenue from these fees has provided a modest and declining share of financing for recurrent expenditures. (See Table IV.)

There are a number of reasons for low rates of cost recovery by the MOH facilities.

Year	Percent of Recurrent Expenditure Recovered
1974-75	16.0
1979-80	8.0
1983-84	5.7

Source: "Staff Appraisal Report: Lesotho Health and Population Project," April 1, 1985, The World Bank, Report No. 5437-LSO.

The fees are set at levels to cover only a modest share of costs, even if collected. Collection rates are poor, and there is a failure to collect charges which according to the regulations are due from patients. And, as in all countries trying to implement user-charge schemes, there may be some diversion of funds to unauthorized uses.

There have been two recent upward revisions of the MOH fee schedule, one in 1988 and the most recent in September 1992, a part of which is attached as Appendix H to this report. There is an opinion in some quarters<sup>15</sup> that the increased fees have led to decreases in utilization rates for MOH facilities, even though people deemed unable to pay fees are supposed to be exempted.

At present, revenue from user charges by government facilities represents about 11 percent of total operating expenditure. The rate of collection by facility ranges from 6 to 30 percent; the target rate of cost recovery is 15 percent, a rate just below that prevailing in 1974-75.

Material consulted by the team indicated that ante-natal/post-natal/family planning consultations provided by the government are supposed to be free, as are EPI services. There are, however, charges for family planning supplies. As in many countries with user-charge schemes, there are higher charges for private patients who seek care at a source other than a public health facility (i.e. a private physician).

In Lesotho, as elsewhere, revenues from marketing services by government facilities revert to the General Fund (the Exchequer). This feature means that there is very little incentive for facilities to collect charges and to allocate the time and attention necessary to implement an effective user-charge system.

For effective implementation of user-charge schemes, the matter of incentives for collection of these fees is of central importance. One approach to improving these incentives, being tried in some countries, is to change the rules to permit revenue from user charges to be retained by the facility for its use according to certain guidelines.

It appears that efforts have been made in Lesotho to implement an alternative incentive scheme in the form of revenue recovery awards, under which the HSA with the best revenue collection record would receive a prize. This scheme was apparently tried with promising results in 1990 and is now being implemented, albeit without benefit of budget provision.

Under this scheme, a prize of M20,000 is given to the HSA with the best collection record. The prize is financed by a levy of M2,000 on each of the other HSAs, i.e., the "losers" in this competition.

Substantial increases in the rate of cost recovery by the MOH's long-standing user-charge schemes could make an important contribution to the prospects of sustainability of health projects. One project that seeks to improve the rate of cost recovery by the MOH system is the World Bank's First and Second Population, Health, and Nutrition Projects. As a bank memorandum takes note,<sup>16</sup> however, the 1991-92

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<sup>15</sup>Kingdom of Lesotho, International Evaluation E.P.I., Family Health Division, October 1990, p.13.

<sup>16</sup>Lesotho: First and Second Population, Health and Nutrition Projects, Project Implementation Review Mission, October 21-November 1, 1991, AIDE MEMOIRE," World Bank, p.12.

cuts in funds allocated to the MOH for non-personnel operating costs works against increases in the quality of services and thus puts enhanced cost recovery at risk.

Activities have been under way in several quarters exploring the implementation of a Bamako Initiative Revolving Drug Fund approach to cost recovery for drugs. In an attempt to assess the prospects of this approach, a study was carried out in 1991 by MOH/WHO/UNICEF, followed by a National Workshop to clarify the concept.<sup>17</sup>

UNICEF has been trying to help fill in the gap left by the ACSI-CCCD Project by planning support in areas previously covered by ACSI-CCCD components. In particular, UNICEF intends to support training of certain categories of workers and the provision of certain commodities. Post- LOP donor support does not have to be of this literal substitution kind, however, to preclude the possibility of the usual tests of hypotheses on sustainability. Whatever the categories of operating costs, where donors are funding costs that otherwise would have been funded by the MOH, the funds thus saved can be transferred to cover other costs such as those that would have been covered by the ACSI-CCCD Project during its LOP. It is debatable, however, whether such a case represents genuine sustainability, even though ex-ACSI-CCCD Projects costs are now covered by the country's own internal resources. The MOH is able to cover these costs from its own resources only because donors are paying for other costs that the MOH would have otherwise covered.

### **3. Private provision of project services.**

**Indicator not met.**

The Private Health Association of Lesotho (PHAL) is comprised of a group of health facilities and hospitals in Lesotho affiliated with six different churches. The association is responsible for about half of the country's hospitals and about 60 percent of its clinics, and receives a substantial subvention each year from the MOH to support the salaries of its health workers. In this sense, PHAL may be considered as more of an extension of the public sector than of a private sector provider of health services.

In addition to PHAL, those MOH staff interviewed by the team reported that there may be only up to 30 truly private physicians in Lesotho. The team concluded that this group clearly cannot provide a measurable amount of primary health care service delivery.

## **OBJECTIVE IV: STRONG TRAINING COMPONENT**

### **1. Training strategy developed and implemented.**

**Indicator met for interventions and health information systems, not met for health education or training support strategies.**

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<sup>17</sup>The Bamako Initiative Strategy was to be accepted as an important step in the revitalization of health services and systems within the community and at the periphery. Among other things, this would entail having Village Health Committees revived and made functional. The UNICEF National Health Program 1992-96 budget provides funding in the amount of US \$543,000 to support the development of the Bamako Initiative program.

The Strategy states that a strong training component develops the human resources required for successful project implementation and builds a constituency for the continuation of project activities.

A training strategy for strengthening primary health care was developed and approved for each of the program components, and training manuals with clearly defined competency-based objectives, teaching/learning methods, as well as evaluation strategies for the EPI, CDD, and ARI programs were produced. Pre-service training (through the Schools of Nursing and the National Health Training Centre) include content in these programmatic areas in their respective curricula. Attempts are made to coordinate pre-service training with the actual programmatic needs. Key personnel from the MOH participate in basic nursing education curriculum review in order to ensure relevancy of pre-service instruction.

## **2. Continuing health education policy developed and implemented.**

**Indicator not met for interventions or for health education.**

A strategy was developed for continuing education, complete with training needs assessments (based on self-assessment as well as supervisor evaluation of need) for all categories of health care providers. Training needs assessments were conducted during the LOP which defined the scope and content of training. At present, however, the continuing education component is not well defined; critical areas of training have not been prioritized, nor is there a comprehensive plan for continuing education in place. There is also a high attrition rate among health personnel (particularly nurses), making it very difficult to ensure that a cadre of front line providers is appropriately trained and prepared to offer quality service in the key program areas.

## **3. Implementation of a supervisory system.**

**Indicator not met for interventions or for health education and health information systems support strategy. Indicator met for training support strategy.**

Supervision and training are interrelated, and efforts are made to address on-the-job training needs through the use of supervisory checklists and responding to "teachable moments" during the supervisor's visits. However, lack of transportation and logistical support were cited as reasons for less than optimal supervision.

Facility Needs Assessments for Training were conducted, and during the LOP, the ACSI-CCCD Project collaborated with MOH, PHAL, and the District Management Improvement Project implemented by MEDEX, a consulting group, to conduct a management analysis of the health training system and to create and implement a training system procedures manual. The manual includes job descriptions for trainers, annual training plan forms with clearly defined instructions, training announcement and evaluation procedures, as well as guidelines for needs assessment and course follow-up. The manual was designed to institutionalize the decentralized training and continuing education system that ACSI-CCCD helped to strengthen.

The training system was designed to strengthen reporting of training activities; however, since the completion of the DMI Project by MEDEX, there has only been limited attention given to reporting and tracking continuing education/training needs. There is not a comprehensive strategy for updating workers

at all levels, and tracking of training needs is sporadic. No systematic facility assessments for training have been carried out during the past year.

All trainers have received instruction in teaching/learning methodology, and they know how to utilize the objective-based curricula that have been developed in each of the program areas. However, there is a great need to continually update the trainers in teaching/learning techniques as well as assess their skills and competencies. There is interest in and acknowledgment of the need to continually update trainers' skills; however, no plan is in place to do so.

**OBJECTIVE V: CONSTITUENCY BUILDING THROUGH A PROCESS OF MUTUALLY RESPECTFUL NEGOTIATION**

The CDIE studies found that projects which had been designed with national participation were more likely to be sustained. A mutually respectful negotiating process results in a project which is more likely to be responsive to nationally defined needs, objectives, and capabilities. This type of process also develops local leadership, a broader consensus, and a wider constituency with a commitment to project objectives.

The indicators provided by the Sustainability Strategy for this objective focus on the extent to which nationals are included in the deliberations at various stages of project development, such as the initial concept development state, preparation of the PID and the PP, and any subsequent amendments to the project. The team was unable to gather any information on the extent to which the ACSI-CCCD Project development process included nationals in the various deliberations. Presumably, the indicators set out for this objective are intended to characterize a project development process that takes into account host country preferences. By whatever means, this result appears to have been achieved by the ACSI-CCCD Project in Lesotho. All of the MOH officials the team talked with indicated that they valued the project activities, and it seemed clear that the project activities were very much in line with their own preferences for such activity. (See the discussion in Appendix F for additional points relating to this objective.)

Table V, Probability of Sustainability, summarizes the factors favoring sustainability and those mitigating against sustainability for each of the ACSI-CCCD Project components.

**Table V: Probability of Sustainability**

Program	Factors Favoring Sustainability	Factors Mitigating Against Sustainability
<p><b>Expanded Program on Immunization (EPI)</b></p>	<p><b>Project Related</b>                      Demonstrated program effectiveness (increasing coverage and decreasing measles incidence).</p> <p>Strong education/training program (receiving UNICEF support).</p> <p>Good use of relevant programmatic information by project management.</p> <p><b>Contextual Factors</b>                      Assurance of other donor collaboration and support, primarily UNICEF.</p> <p>Continuous and strong program management.</p>	<p><b>Contextual Factors</b>                      High attrition rate of health personnel, particularly among nurses at hospitals and facilities.</p> <p>Limited transportation and logistics support.</p> <p>Low staff morale and potential loss of motivation among community members.</p>
<p><b>CDD</b></p>	<p><b>Project Related</b>                      Well integrated</p> <p>Demonstrated effectiveness based on reports from some facilities.</p> <p>Good health education materials available.</p> <p>Good knowledge, attitudes, and practices with respect to ORT and diarrhea case management among health facility staff and community.</p>	<p><b>Project Related</b>                      Limited supervision</p> <p>Weak program of continuing education</p> <p><b>Contextual Factors</b>                      Limited transportation and logistics support given by MOH to CDD manager to carry out supervisory responsibilities</p> <p>High attrition rate of health personnel, particularly among nurses at hospitals and facilities.</p>

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Program	Factors Favoring Sustainability	Factors Mitigating Against Sustainability
ARI	<p><b>Project Related</b>            Strong perceived need and perceived effectiveness, resulting in strong commitment to program.</p> <p>Strong training materials and training plan.</p> <p><b>Contextual Factors</b>            Strong program manager</p>	<p><b>Project Related</b>            Limited supervision and follow-up of newly trained staff.</p>
Health Information Systems	<p><b>Contextual Factors</b>            Strong program manager, with good data management capabilities.</p>	<p><b>Project Related</b>            Limited institutionalized demand for or use of programmatic data.</p> <p>Limited feedback of programmatic data to HSA or facility level.</p> <p><b>Contextual Factors</b>            No clear responsibility for supervision of HIS.</p>
Operations Research	<p><b>Project Related</b>            Ministry of Health staff were trained and participated in operations research studies.</p> <p>Interest in and understanding of how operations research activities can be used to solve operational problems.</p>	<p><b>Project Related</b>            MOH Research and Review Committee not active in identifying operational problems that require further research.</p>
Training	<p><b>Project Related</b>            Technically sound methodologies, emphasizing competency-based teaching.</p> <p>Responsibility for training decentralized to HSA trainers.</p> <p>Documented ability of training to improve health worker performance.</p> <p><b>Contextual Factors</b>            Assurance of continued financial support from UNICEF</p>	<p><b>Project Related</b>            Limited focus on systematic continuing education.</p> <p>Limited on-going training of trainers or motivation of trainers.</p> <p>Limited follow-up of training courses.</p>

Program	Factors Favoring Sustainability	Factors Mitigating Against Sustainability
Health Education	<p><b>Project Related</b>            Perceived need and good understanding of importance of community-based education.</p> <p>Appropriate education materials developed.</p> <p><b>Contextual Factors</b>            Strong UNICEF commitment to community health education.</p>	<p><b>Project Related</b>            Unit limited in vision, with no clear long-term plan for community health education.</p>

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## V. EXTENT TO WHICH ACSI-CCCD PROJECT ACTIVITIES/BENEFITS HAVE BEEN SUSTAINED

### A. EPI

The next immunization coverage survey will be conducted during 1993, allowing an assessment of the trend in coverage during the period immediately following termination of the ACSI-CCCD Project. Coverage as measured from routine reports was 64 percent in 1991 and 60 percent based on data for the first six months of 1992. These data suggest that measles coverage may slowly be declining in Lesotho. DPT3 coverage as measured from routine reports followed a similar trend, peaking in 1988 at 84 percent and declining to 58 percent in 1991 and 57 percent for the first six months of 1992. Coverage figures from routine data must be interpreted in conjunction with reporting rates which also declined during 1991. Furthermore, the peak in coverage during 1989 may well be associated with UNICEF efforts.

With respect to measles incidence, 2,351 cases were reported in 1991, and the completeness of reporting was lower than during 1990 in all 19 HSAs.

The above data on measles coverage and the number of cases reported derived from routine reports are difficult to interpret, given less than complete reporting. However, with respect to immunization coverage, it appears that the levels of coverage achieved in 1989 have not been sustained. It was also the EPI manager's impression that immunization coverage has declined during the past two years.

The team concludes that, despite the probability that measles coverage has declined over the past two years, the EPI continues to function at a relatively high level and that a majority of the ACSI-CCCD Project's benefits are being sustained. The program is being managed by a highly competent and dedicated national manager. Coverage trends should be closely monitored and if coverage is declining, specific causes should be identified.

The EPI manager felt that the most difficult aspect of increasing immunization coverage in low coverage HSAs was motivating parents to have their children immunized. She felt that in some parts of the country parents, like health workers, were no longer motivated and did not even have the time to organize outreach clinics when the central level or health facility had arranged to send a vaccination team.

Given the program's high level of past success, high level of perceived effectiveness, and demonstrated ability to control disease incidence, measles and polio in particular, efforts to sustain immunization activities at the maximum possible level should be accorded the highest priority.

### B. CDD

In terms of access to diarrhea case management, it is clear from the team's interviews that the number of hospitals and health facilities with established and functioning ORT units has declined. Although the total number of facilities that ever operated a unit is unknown, those interviewed, including the CDD program manager and an HSA medical officer and public health nurse, reported that, at present, fewer facilities, clinics in particular, are operating ORT units than in the past. An HSA medical officer

noted that while clinic staff may still treat diarrhea cases with ORT, the closure of ORT units has resulted in caretakers being sent home with ORT packets, rather than having them stay in the clinic, at the ORT corner, and rehydrate their infants first before returning home.

Interviews revealed that the CDD program was currently attempting to re-establish ORT corners in many clinics. The CDD manager is currently conducting refresher training on diarrhea case management in conjunction with the training on pneumonia case management being conducted by the ARI manager. These joint trainings would seem to be an efficient method of conducting in-service education as well as providing an opportunity to discuss effectively the overlapping clinical and logistical issues faced by both programs.

During 1992, staff from five hospitals were re-trained. Some have reopened their units and started to report. Other hospitals are expected to open ORT units and begin reporting during 1993. The CDD manager hopes to complete re-training activities in all remaining hospitals during 1993 and is also supplying facilities with the equipment they need to operate an ORT unit. Lack of equipment was noted as a constraint that had prevented many clinics from ever establishing functioning ORT units.

Two constraints, lack of personnel and lack of security at clinics, particularly during the afternoon and evening hours, were cited as reasons why clinics in one HSA may no longer operate ORT corners. It is not clear if other HSAs are experiencing these same constraints.

Interviews revealed that the longstanding plan to commercialize the distribution of ORT packets by the LPC was still not fully operational. The LPC had faced financial problems that prevented implementation. When commercial production finally started, it was quickly stopped due to the drought. Currently, the LPC is again working to produce an adequate supply of ORT packets before re-commencing distribution.

With respect to the present distribution of ORT packets by CHWs, one HSA medical officer noted that CHWs were no longer distributing ORT packets to mothers in the community. Consequently, access to ORT packets is limited to the health facilities and private pharmacies. The CDD manager indicated that this activity was still being piloted, and it is possible that CHWs in one HSA visited were not involved in the pilot scheme.

The CDD manager has not been able to analyze ORT unit reports from 1992, although reporting from the six major hospitals was said to be fairly complete for the period January to October 1992. The CDD manager is attempting to collect reports that have not been submitted and will calculate the indicators by hand. Consequently, it is difficult to assess the extent to which ACSI-CCCD Project benefits with respect to reducing the number of cases of diarrhea presenting with dehydration or requiring hospitalization have been sustained.

A cursory review of the January 1993 report from QE II hospital showed that of 184 cases treated at the unit, 80 (43 percent) were moderately dehydrated and two (one percent) were severely dehydrated.

Information collected on Leribe HSA during a meeting with the Leribe public health nurse and medical officer indicates that Leribe hospital continues to routinely use the diarrhea assessment form to classify and treat diarrhea cases and to routinely submit monthly ORT unit reports to the HSA and central

level. However, HSA clinics do not routinely use the assessment form and only a few submit monthly ORT unit reports, and then only infrequently.

The team concludes that the absence of a CDD program manager for a time prior to 1991, in conjunction with the MOH's overall lack of support to the program in terms of providing adequate funds for supervision, may have contributed to a faltering CDD program and a decline in access to diarrhea case management from the maximum level achieved during the ACSI-CCCD Project. In this sense project-related CDD activities have not been sustained. However, the CDD manager is working very hard to improve program access and quality, and progress is being made. There is evidence that hospital ORT units that have continued to function are adequately managing diarrhea cases. Efforts to re-establish ORT units and re-train staff will require active logistical and supervisory support.

### C. ARI

During 1992, the ARI program began implementation in five new HSAs. From the period July to November 1992, 41 (21 percent) nurses in 31 (86 percent) health facilities in these five new HSAs were trained in standard ARI case management. By year's end approximately 100,000 Basotho children under five nationwide (40 percent) had access to standard ARI case management. Hospitals in the eight HSAs implementing an ARI program were supplied with an oxygen concentrator.

During the first two months of 1993, health workers in three additional HSAs received training in standard ARI case management. The 1993 workplan indicates that training in additional HSAs will occur. No data on the quality of pneumonia case management similar to those provided by the 1991 ARI program evaluation were available for 1991 or 1992.

The ARI manager suggested that the HIS unit has failed to provide the quarterly reports on pneumonia morbidity and mortality that she has requested. The differing expectations of the ARI and HIS managers require clarification.

On the basis of the primarily process-based data presented above, the team concludes that ARI program activities in Lesotho designed to increase access to standard pneumonia case management are being sustained. The team notes that this conclusion should be viewed in light of the ARI manager's comment that UNICEF has taken over responsibility for financially supporting ARI program activities during the period 1992-96 and the team's observations regarding the need to strengthen the supervision and follow-up of staff who receive training in pneumonia case management.

### D. HIS

In 1991, nationwide completeness of reporting MCH/FP data was 75 percent, with 17 of 19 HSAs submitting more than 80 percent of expected reports. The HIS manager attributes this relatively high level of completeness of reporting to good supervision by the managers of the programs whose data is provided on the MCH/FP form.

During 1991, completeness of reporting OPD data declined in 18 of 19 HSAs; only one of 19 HSAs submitted more than 80 percent of expected reports. The HIS manager noted that the lack of one staff member with clear responsibility for supervising the collection and analysis of outpatient morbidity reports contributes to the relatively poor level of reporting.

The team also noted that the system established in 1988 to manage ORT unit monthly reports was no longer being used.

The team concludes that, with the exception of reporting MCH/FP data, it appears that the HIS unit has not sustained the level of productivity and performance achieved during the ACSI-CCCD Project. Declining performance may be attributed to a lack of interest by managers in using the information, as it is likely that ACSI-CCCD Project activities may have generated more demand for HIS outputs. The team notes that the ability of the HIS unit to provide relevant programmatic data remains high, and the HIS unit manager is highly qualified and motivated. Sustaining HIS unit performance seems more an issue of sustaining the interest in and demand for programmatic information by MOH staff, rather than an issue of sustaining the day-to-day functioning of the HIS. Reinforcing a commitment to the routine use of information in managing primary health care programs in Lesotho should be considered.

## **E. OPERATIONS RESEARCH**

As noted above, the team did not find evidence to suggest that the Lesotho MOH had conducted any operations research activities since the ACSI-CCCD Project ended. The team noted that the EPI has identified its priority operational problems requiring research and solutions but has been unable to secure the funds required to implement the study.

The Ministry's Research and Review Committee, established with ACSI-CCCD Project assistance, still exists but does not appear to be actively developing or implementing operations research protocols at this time.

Based on these findings, the team concludes that the project's operations research activities and benefits have not been sustained.

## **F. HEALTH EDUCATION**

Health education is viewed as a very important element in primary health care. Many successes of the EPI, CDD, and ARI programs were attributable to increased awareness among health personnel as well as consumers.

In its final year, HEALTHCOM assisted the MOH and LPC to complete the design of the ORS commercial promotion program. Materials designed and pre-tested included such items as a new ORS packet cover, a CDD program logo, posters, stationery and window stickers, a shipping/display box, a new ORT instruction pamphlet for mothers, and looseleaf binders to hold ORT fact sheets for health workers. The MOH and LPC print the materials for distribution to health facilities and to wholesale and retail outlets. While these materials have been distributed, there are no plans in place for monitoring or assessing their utilization and/or efficacy.

Despite the considerable input and assistance of HEALTHCOM, however, health education at the community level is currently limited in scope. Additionally, the HED would benefit from the development of a comprehensive long-term plan for health education in order to maintain demand and program achievements.

Based on these findings, the team concludes that the project's health education activities and benefits have not been sustained at the same level that existed during the years in which the ACSI-CCCD and HEALTHCOM projects were providing technical assistance. However, health education is still viewed as a very important component of the Ministry's activities, and many successes of the EPI, CDD, and ARI programs are viewed as attributable to an increased awareness among health personnel as well as consumers. Consequently, the team believes that some project benefits have been sustained and that there exists the potential for a rapid and substantial improvement in the benefits being provided by the Ministry's HED.

## **G. TRAINING**

### **1. General Findings on Components of Training Activities**

#### **a. Clinic Level Training**

Maintaining adequate training of personnel at all levels remains a major challenge in the EPI, CDD, and ARI programs. As described in the overview of each of the programmatic areas, training was given considerable attention during the LOP, and substantial achievements were noted in training at all levels. Each of the program managers defines training of personnel as a critical element in program success. There are good training materials for all levels; however, overall there is a need for increasing health education skills among health personnel. Training plans are in place, but transportation limitations as well as high nursing staff attrition have created serious difficulties in implementing systematic training at all levels. Comprehensive training plans with competency-based objectives and evaluation methodologies for each of the program areas were completed, and implementation continues in progress. There are serious limitations in continuing education in that there is a high attrition rate among health personnel, making it difficult to ensure that a cadre of front line workers is appropriately trained and supervised in the key program areas. The ACSI-CCCD Project strongly supported MOH training, and the absence of ACSI-CCCD is cited consistently by MOH officials as having created a serious gap in training of personnel. This gap has not been completely filled.

Training needs assessments conducted during the LOP defined the scope and content of training. At present, the continuing education component is less well defined; critical areas of training have not been prioritized, nor is there a comprehensive plan for continuing education in place. HSAs reported training fewer health workers than in past years.

During the LOP, the ACSI-CCCD Project collaborated with MOH, PHAL, and the District Management Improvement Project to conduct a management analysis of the health training system and to develop a training system procedures manual for HSAs. The manual was designed to institutionalize the decentralized training and continuing education system which ACSI-CCCD helped strengthen and was intended to address the needs identified in the decentralized training system evaluation. These needs included: job description for the HSA trainers; annual training plan forms with instructions; training announcement; evaluation procedures; guidelines for needs assessments and course follow-up, and improved reporting of training activities. The MOH and PHAL introduced the manual in a series of HSA workshops, and monitored its use. However, since the completion of MEDEX activities, there has been limited attention given to reporting and tracking training needs.

## b. Supervision

Supervision and training are closely linked, and efforts are made by the EPI, CDD, and ARI program managers to evaluate on-the-job training needs through the use of supervisory checklists. Individual program plans call for regular and systematic supervisory visits in all program areas. However, the team noted that a lack of transportation and logistical support frequently limits each program's ability to provide supervision. For example, the ARI program has had problems in supervising clinics and hospital staff largely due to the lack of sufficient transportation and personnel.

Supervisory visits for monitoring and continuing education should be considered a vital and integral part of the program. Emphasis should continue with the training and supervision of first-level health care workers (nurse clinicians and nurse assistants in health centers and nursing sisters in hospitals) who will, in turn, train other levels, including community health workers.

## c. Training of Trainers

MOH trainers received instruction in teaching and learning methodologies and in how to utilize the objective-based training curricula that have been developed for the different programs. However, there is a great need to continually update the trainers on the use of participatory learning techniques as well as on appropriate assessments of participant skills and competencies.

During the ACSI-CDCD Project, the MOH and PHAL began a system of three regional continuing education workshops twice yearly for the HSA trainers. Prior to this, training of trainers had been conducted at the national level. The smaller groups facilitated technical presentations and allowed on-the-job training sessions in clinical and supervisory techniques. HSA trainers reported attending fewer national or regional level trainings during the past year. One HSA trainer noted it had been over a year since she last attended an in-service training program.

## d. Training Materials Development

While very good training materials have been developed in the areas of ARI, EPI, and CDD, there is a need to continuously review and update all training curricula.

## 2. Specific Observations About Training Activities Within the Individual Programs

### a. EPI

The training component for EPI remains strong and, with coordination and support from UNICEF, is being given considerable attention at all levels. The EPI manager has been with the program for over a decade and has a very good understanding of the overall training and health education needs at the community level. The high rate of attrition among health personnel, along with low morale, are cited as major program limitations.

### b. CDD

Although there are good training materials for all levels, overall there is a need for increasing health education skills among health personnel. Training plans are in place, but transportation limitations

as well as high nursing staff attrition have created serious difficulties in implementing systematic training and continuing education activities.

c.      ARI

The ARI manager is utilizing all the training materials developed under the project and continues to pursue means of realistically expanding training to all health workers in Lesotho. She is seriously limited by a lack of transportation and logistical support and, in addition, needs assistance in re-evaluating and revising training strategies on an ongoing basis, particularly in the use of participatory training techniques.

The ARI program training materials are well developed and the program could serve as a prototype for other countries. Particularly noteworthy is the utilization of competency-based learning activities and careful follow-up and supervision. Training should combine both didactic and participatory methodologies with clearly defined evaluation measures to assess the skill- building components. Continuous review and revision of training modules should be considered an integral part of the program. Intensive technical assistance in teaching learning methodology should be offered on an on-going basis to the national ARI manager. She is highly skilled and is responsible for moving the program forward and would be receptive to technical assistance designed to strengthen the essential core training program.

As the ARI program expands, the need for a pre-service training curriculum for pneumonia case management should be addressed. Curricula should be developed for the nursing schools and the National Health Training Center. Technical assistance should be provided for the development of curricula for this level of nursing education.

Based on these findings, the team concludes that training-related activities and benefits of the ACSI-CCCD Project have been sustained to some degree. However, similar to the Health Education component, training activities have not continued at the same level that existed during the LOP. The team notes that clinic level ARI training activities have continued and that clinic level CDD training is improving. Declines in the activities and benefits of the supervision, training of trainers, and training materials development components were observed. It should be noted that the continuing high level of staff turnover poses an inordinate challenge to the MOH's efforts to provide an adequate number of trained staff and requires that a disproportionately high share of funds be allocated to training activities.

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## VI. EXPLAINING THE SUSTAINABILITY TRACK RECORD

The purpose of this assessment has been to document the sustainability of ACSI-CCCD Project activities and benefits and to describe the extent to which the project's implementation or lack of implementation of project-related sustainability strategy criteria can explain these findings. The format of the report reflects this purpose:

- Chapter II. This chapter describes the project and identifies the activities and benefits to be sustained.
- Chapter IV. This chapter characterizes the project in terms of the sustainability strategy criteria and indicators that were met and unmet by the project in Lesotho.
- Chapter V. This chapter attempts to describe the extent to which project activities and benefits are continuing and consequently can be considered as sustained.

Table VI, Sustainability Table, on page 6-4, presents the strategy's criteria and indicators together with the team's assessment of whether each indicator was met (+) or unmet (-). The table shows:

Of 21 total indicators,	11 pluses, 9 minuses, and 1 NA for EPI;
	10 pluses, 10 minuses, and 1 NA for CDD;
	10 pluses, 10 minuses, and 1 NA for ARI;
	12 pluses, 7 minuses, and 2 NA for Training;
	7 pluses, 12 minuses, and 2 NA for Health Ed;
	7 pluses, 12 minuses, and 2 NA for HMIS, and
	1 pluses, 5 minuses, and 15 NA for OR.

The components with more indicators that were met than unmet include training and EPI. For the CDD and ARI programs, an equal number of indicators were met and unmet. For the remaining support strategies, health education, health information systems, and operations research, more indicators were unmet than were met.

In terms of the format above, the over-arching issue of affordability -- the availability of financial resources for sustainability -- is relevant to all of the program component activities and benefits. Thus, a necessary condition for the success of the EPI, CDD, and ARI programs and the support strategies is the availability of resources to operate them. This dimension of program performance is covered by Objectives III and V of the Sustainability Strategy. Objective V, mutually respectful negotiations, addresses part of this issue. Through such negotiations, the parties are expected to come up with a project that leads to a successor program within the country's own priorities and resources.

The project's performance with respect to Objective V is not clear in terms of such issues as the frequency of meetings with nationals during project design. However, none of the respondents with whom the team discussed these matters indicated that the MOH's own priorities and resources were not accorded appropriate attention in the design of the ACSI-CCCD Project.

For Objective III, the situation is a bit clearer. The country's own internal resources, those represented by the MOH budget, are rather modest compared to the operating cost of the project's successor programs. This finding does not, by itself, settle the question of affordability. Beyond this, and leaving donor funding aside, there is little effective activity to attract additional resources for health services. To undertake to explain the affordability issue by, for example, trying to explain why the MOH sets the budget at the levels it does would entail an analysis of aspects of the overall political economy of Lesotho, an exercise beyond the intended scope of a report of this kind. To explain why the rate of cost recovery in government facilities is so modest may have been within the scope of this assessment, but it is a complicated matter that would require more time than was available to the assessment team.

In any event, one factor dominates affordability analysis in the case of Lesotho: the past, present, and continuing large-scale inflow of donor funds to the health-services sector. This phenomenon has created a setting in which it is not possible to make findings on sustainability from the standpoint of available financial resources where such resources to continue the project's activities and benefits are the country's own.

The following is a sentence summary of the team's findings on each of the major program components:

- EPI: Coverage is below the high point reached in 1989, but it is fair to say that these activities have been largely sustained.
- ORT: Its track record is not good; many ORT units in facilities are no longer functional, CHWs no longer distribute ORS to households, and the like.
- ARI: This relatively recent component continues to operate in a satisfactory way.
- HIS: This activity has not continued at the ACSI-CCCD level; its capacity appears to be still in place, but mostly it is not being put to good use.

In our view, the explanation for this track record does not turn in any definite way on the extent to which the ACSI-CCCD Project did or did not comply with the activities pursuant to the objectives. In fact, the ACSI-CCCD Project did largely conform to the Sustainability Strategy criteria of perceived effectiveness, integration, and so on. The explanation for this outcome lies elsewhere.

One likely explanation involves the labor force constraint which dominates virtually all aspects of program performance. Crucial staff shortages exist throughout the MOH system.

Beyond this, various ad hoc explanations for program performance are offered. In the case of EPI, the presence of an excellent program director accounts for much of EPI's success. This factor is not directly related to the configuration of the project. The same may be said for poor performance in the ORT program, only in this case the problem was the prolonged absence of the program manager.

More generally, what emerged in the team's discussion with the various parties to the program was that the reality of the ACSI-CCCD Project itself -- its presence and activities -- seemed to provide during its LOP considerable motivation to get things done and to sustain interest and momentum. When the project terminated, this source of drive for project activities naturally ended as well. Though

somewhat impressionistic, the team found several indications illustrating this. In HIS, for example, this activity appears to still have the capacity to collect, organize, and report information, but staff note there is little demand or interest in this information by those higher up in the system. Also, the EPI program manager cited little apparent motivation by parents to get their children immunized and a lack of motivation in health staff to conduct a vigorous program.

The sustainability strategy should address this aspect of sustainability in some way. Project activities themselves may provide considerable motivation, interest, and drive to keep project activities performing at a high level. But what can a project do during its term to help ensure that when the LOP is over, these essential elements for program performance do not get pulled out along with project funding? Answers to this and other related questions will serve to reinforce the strategy's credibility and increase its utility for future projects in the health field.

# Table VI: Sustainability Table

## CCCD/LESOTHO

### PROJECT RELATED CRITERIA AFFECTING SUSTAINABILITY AND THEIR INDICATORS

- 6-4
1. **Perceived Effectiveness**
    - A. Development of workplans and policy statements at national, district, and local levels.
    - B. Implementation of HMIS or special surveys to measure project impact.
    - C. Completion of operations research and special studies to assess program quality and develop solutions.
    - D. Use of data to make decisions, identify problems, develop solutions & to confirm project's importance at health sector community meetings.
    - E. Adequate staffing and resources at the service delivery level.
  2. **Integration and Institution Strengthening**
    - A. Effective supervisory system (using checklists) which decentralizes technical and managerial responsibility to the peripheral level.
    - B. Integration of service delivery at delivery sites.
    - C. Integration at national level into existing MOH structures
    - D. Support activities operational and integrated at national level
  3. **Local Financing, Community Participation and Private Sector Provision of Services**
    - A. Assumption of project costs by government.
    - B. Implementation of fee-for-service/cost recovery.
    - C. Private provision of project services.
  4. **Strong Training Component**
    - A. Training Strategy developed and implemented.
    - B. Continuing health education policy developed and implemented.
    - C. Implementation of supervisory system.
    - D. Completion of facility training needs assessments.
    - E. Trainers trained in how to train.
    - F. Project training activities integrated into existing MOH training structures.
  5. **Constituency Building Through a Process of Mutually Respectful Negotiation**
    - A. Nationals participate in country assessment, project development, and project modification and clearly view the project as a priority.
    - B. Partners participate in project workshops.
    - C. MOH procedures facilitate the inclusion of local concerns and decisions within national level plans.

Criteria	EPI	CDD	ARI	Training	H. ED	HMIS	Cp. Res.
<b>1</b>							
A	+	+	+	+	+	+	-
B	+	+	+	-	-	NA	NA
C	-	-	-	-	-	-	NA
D	+	-	-	-	-	-	NA
E	-	-	-	-	-	-	NA
<b>2</b>							
A	-	-	-	-	-	-	NA
B	+	+	+	+	+	+	NA
C	+	+	+	+	+	+	NA
D	-	-	-	NA	NA	NA	NA
<b>3</b>							
A	-	-	-	-	-	-	-
B	-	-	-	-	-	-	-
C	-	-	-	-	-	-	-
<b>4</b>							
A	+	+	+	+	-	+	-
B	-	-	-	NA	-	NA	NA
C	-	-	-	+	-	-	NA
D	-	-	-	+	-	-	NA
E	+	+	+	+	-	?	-
F	NA	NA	NA	+	NA	NA	NA
<b>5</b>							
A	+	+	+	+	+	+	NA
B	+	+	+	+	+	+	NA
C	+	+	+	+	+	+	NA

Favorable (+), un-favorable (-), or not applicable (NA) status of indicators for sustainability of project services and support systems.

**APPENDIX A**

**LIST OF PERSONS  
INTERVIEWED**

## LIST OF PERSONS INTERVIEWED

### Lesotho Ministry of Health

Letapata S. Makhaola	Principle Secretary
Mrs. Anna M. Ntholi	Deputy Principle Secretary
Dr. Thabelo Ramatlapeng	Director, Primary Health Care
Dr. Shayo	Director, Family Health Division
Dr. J. A. Olowolagba	PHC, Medical Officer
Mrs. Gertrude Thinyane	ARI Program Manager
Mrs. Nkwebe	EPI Manager
Mrs. Mathi	CDD Program Manager
Mrs. Matji	HIS Manager
Mrs. Nkauseng Monaheng	Acting Chief, Health Education
Mrs. Malikeleli Monnapula	Health Education
Mrs. Fiora Makotoko	Senior District Public Health Nurse, Leribe
Mrs. M. Mokhesi	Matron and HSA Trainer, Leribe HSA
Mrs. T. Chobokoane	Nursing Sister and HSA Trainer, Leribe HSA
Dr. Shakila Ahmed	Medical Officer, Leribe HSA
Mrs. Seipobi	Training Coordinator
Anivah Makhoathi	Masianmokeng Health Center
Theresa Sakoang	SOA Health Center
Ernestina Tsosane	Domicilliary Clinic
Matsepo Moletsane	Public Health Nurse, QE II HSA

### UNICEF

Dr. Ivan Camanor

### WHO

Dr. Rojas

### Private Health Association of Lesotho

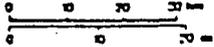
Kathy Manning	Professional Nurse
Grace Nchee	Community Health Nurse

**APPENDIX B**

**MAP OF LESOTHO**

# LESOTHO

- District boundary
- National capital
- District capital
- Town, village
- ==== Railway
- ==== Road
- ✚ Airfield



SOUTH AFRICA

BUTHA-BUTHE

LERIBE

MOKHOTLONG

TEYATEYANENG

MASERU

MASERU

THABA TSEKA

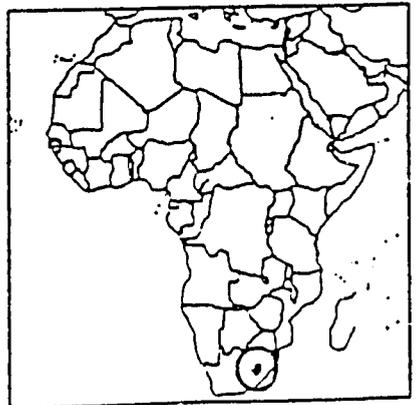
MAFETENG

GACHA'SHEK

MOHALE'S HOEK

QUTHING

SOUTH AFRICA



The boundaries and names shown on this map do not imply any official endorsement or approval by the United Nations.

**APPENDIX C**

**REFERENCES AND  
ADDITIONAL DOCUMENTS  
REVIEWED**

## REFERENCES AND ADDITIONAL DOCUMENTS REVIEWED

### REFERENCES

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15. "Country Program Strategic Plan, FY 1992 - FY 1996," USAID/Lesotho, November 1991.
16. World Development Report 1992, World Bank.

#### ADDITIONAL DOCUMENTS REVIEWED

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18. ACSI-CCCD Project Annual Report 1985.
19. CCCD Project First Year Program Review 1985.
20. CCCD Project Evaluation Report 1986.
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23. "Review of Phase I of the Acute Respiratory Infections Control Program," Kingdom of Lesotho, 1991.
24. "Diarrhoeal Disease Control Programme: Cost-Effectiveness Analysis of Oral Rehydration Therapy," Weekly Epidemiological Review, WHO, No. 36, Sept. 7, 1990.
25. "Options for Measles Control in Lesotho," Stanley Foster, 1988.
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29. ACSI-CCCD Core External Evaluation (Sustainability and Conclusions and Recommendations Sections), 1991.

30. "Can They Get Along Without Us? Sustainability of Donor-Supported Health Projects in Central America and Africa" Thomas Bossert, 1990.
31. "Factors Influencing the Sustainability of US Foreign Assistance in Health 1942-1989: A Six Country Synthesis", 1990.
32. WHO Assessment of Measles Control Strategy, 1992.

**APPENDIX D**

**SCOPE OF WORK**

## SCOPE OF WORK

### OBJECTIVE OF THE CONTRACT

(1) Using the ACSI-CCCD Sustainability Strategy ( which is incorporated into this contract in Attachment I ), the contractor shall execute a series of sustainability assessments in former ACSI-CCCD countries, including Guinea, Lesotho, Malawi, Nigeria and Rwanda. The objectives of the assessment series are to:

- a) Assess the sustainability of child survival activities and benefits since the completion of the ACSI-CCCD project in four countries.
- b) Assess the progress made towards sustainability in one country where ACSI-CCCD project is ongoing.
- c) Identify the contributing factors and/or constraints to sustainability.
- d) Identify lessons learned about sustainability within and across the countries that may have application to similar development efforts.

### BACKGROUND

The ACSI-CCCD Project is the Agency's primary child survival project for Africa. The goal of the project is to strengthen the ability of African countries to prevent and control major causes of childhood mortality and morbidity in Africa. Technical interventions include immunization and the control of malaria and diarrheal diseases. In Lesotho, the project also focused on the control of acute respiratory infections. Support strategies developed through the project include training and supervision, health information systems, health education and operations research.

Sustainability has been an increasing concern of project managers and implementors since the mid-1980's. With the 1988 amendment to the ACSI-CCCD project, the development of sustainable systems became formalized as a critical project objective. With expert technical assistance, an ACSI-CCCD sustainability strategy was developed and revised and is now ready for use as an assessment tool for country projects. This strategy identifies five key elements of sustainability and provides an array of indicators to be used in assessing the sustainability of ACSI-CCCD projects (see Attachment 1).

ACSI-CCCD projects have been implemented in 13 countries since 1981. Malawi and Rwanda closed out their ACSI-CCCD projects in 1988. During 1991, Guinea and Lesotho closed out their

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ACSI-CCCD projects. Nigeria's ACSI-CCCD project is ongoing. As defined in the sustainability strategy, sustainability is the continuation of activities and benefits achieved during the life of a project, at least three years after project funding stops. According to this definition, sustainability of the ACSI-CCCD project can be assessed in Malawi and Rwanda. In Guinea and Lesotho, the potential for and early evidence of project sustainability will be sought. In Nigeria progress towards sustainability will be measured.

#### STATEMENT OF WORK

This is a completion type contract and the end product of this contract will be a sustainability report series. The series will include five country reports and one summary report on sustainability of child survival activities and benefits resulting from the ACSI-CCCD project. The individual country reports will be based on project sustainability assessments undertaken in Nigeria, Malawi, Rwanda, Lesotho and Guinea. The summary report will synthesize the findings and conclusions of the five country studies, extracting major lessons learned. To accomplish these tasks, the contractor shall provide or recruit and manage one project manager and three three-member assessment teams as described below.

The Project Manager:

The contractor shall provide or recruit and manage one Project Manager to oversee the five country sustainability assessments and prepare the overall summary report. The project manager will:

- 1) Assist in the selection of the assessment team members,
- 2) Prepare for and participate in all assessment team briefings and debriefings,
- 3) Guide the teams in the development of specific country workplans
- 4) Oversee the coordination of all assessment team logistics,
- 5) Edit and finalize each country report,
- 6) Prepare a summary report synthesizing key lessons learned and providing guidance to African governments, USAIDs and other collaborating agencies on project sustainability.
- 7) Provide a debriefing session for AFR and other A.I.D. offices on the sustainability series and summary report.

#### Assessment Teams

The contractor shall recruit and manage three teams to conduct the five country-level sustainability assessments. One team will visit the Francophone countries, Guinea and Rwanda. A second team will visit the Anglophone countries, Lesotho and Malawi. A third team will visit Nigeria.

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For each country assessment, the team will:

- 1) Review the project agreement, previous evaluation reports and other pertinent project documents,
- 2) Review the ACSI-CCCD sustainability strategy, the A.I.D./CDIE study entitled "Factors Influencing the sustainability of U.S. Foreign Assistance in Health 1942-1989: A Six Country Synthesis", Dec. 1990 and other related journal articles.
- 3) From the ACSI-CCCD sustainability strategy, select the specific indicators to be used for each country and define measurement strategies for each of the indicators selected,
- 4) Develop a workplan for activities to be conducted in-country, including information collection at the national level and visits to at least one district outside of the capital city,
- 5) Interview central level Ministry of Health (MOH) and collaborating officials, health workers at various levels of the system, observe health facilities and health worker performance and interview project beneficiaries,
- 6) Using the selected indicators from the ACSI-CCCD sustainability strategy and available data, assess and describe the extent to which project activities and achievements have been sustained. This includes technical effects as well as institutional effects. Findings can be summarized in table form using Attachment 1, Annex C as a guide.
- 7) Based on document review and country visit, address the following questions:
  - a) Did the project meet the five criteria identified in the ACSI-CCCD sustainability strategy as listed below?
    - Perceived technical effectiveness
    - Integration into the Ministry of Health at all levels
    - Budget levels born by local entities (e.g., MOH, communities)
    - Strong training program
    - Project negotiations conducted in an atmosphere of mutual respect

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- b) How did these factors contribute to project sustainability?
  - c) Are there other important project-related criteria necessary to achieve sustainability of project activities and benefits?
  - d) Are there contextual factors (i.e., factors beyond project control) that have facilitated or constrained sustainability? If so, what are they and how have they influenced sustainability?
  - e) Is sustainability of donor projects in these countries a realistic goal? Why or why not?
- 8) Identify and document lessons learned about sustainability that may have relevance for other projects/countries, and
  - 9) After the country visits, provide a debriefing session for AFR/ONI and AFR/ARTS in Washington.

#### METHODS AND PROCEDURES

A preliminary outline of the Contractor and assessment team's procedures and estimated level of effort for the assessments is set forth below. Within twenty working days from the effective date of this contract, the Contractor and project manager will develop in collaboration with A.I.D. a definitive work plan for approval by the AFR/ONI/TPPI Project Officer and AFR/ARTS/HHR. The approved workplan will include a detailed schedule of the Contractor's activities, assessment dates and dates for delivery of final reports.

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## Timing for the Sustainability Assessments

Two teams will visit two countries and one team will visit one country. In country, the team will spend time in the capital city meeting and interviewing key officials. The team will also work in the districts visiting facilities and interviewing health workers in preparation for composing the draft report.

Current planning calls for the first team to visit Nigeria in the fall of 1992, the second team to visit Rwanda and Guinea in early 1993 and the third team to visit Lesotho and Malawi in Spring 1993. The final report will be completed by May 31, 1993.

## TEAM COMPOSITION

Three-person assessment teams will be required to incorporate the necessary professional skills in (a) management and health finance, (b) epidemiology, (c) childhood communicable diseases, (d) health education and training, (e) health information systems and (f) team leadership.

French fluency will be required of the team visiting Guinea and Rwanda.

The project manager will be a senior public health official with broad experience in health policy and program development, working familiarity with the sustainability literature, excellent writing skills and fluency in spoken and written French and English.

## REPORTING REQUIREMENTS

The assessment teams will provide one copy of the draft report to the USAID mission in each country two days prior to departure for review and discussion. The draft report shall include an executive summary.

The project manager with technical assistance from team members will edit and produce the final draft of the five country reports. The contractor will have 12 working days (unless otherwise authorized by AFR/ONI) following the return of each assessment team to produce final edited draft of the country reports for AFR/ONI and ARTS approval. Three copies of each report will be submitted to AFR/ONI. AFR/ONI and ARTS will review, make final editing and substantive recommendations and return the approved drafts to the Contractor within 10 working days. Upon re-editing, the Contractor will have five working days (unless otherwise authorized by AFR/ONI) to submit 10 copies of each final country report to AFR/ONI.

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TaskLocation

Home Office: Technical and operational guidelines agreed to and work plan finalized with the contractor; assessment teams recruited; communication with missions and the Africa Bureau preparation for the team planning meeting; logistics planning; preparation and finalization of the country and summary reports and translations if required.	Washington
Assessment Team: Review project documents, participate in team planning meetings	Washington
Attend briefings by and interview regional-level project implementors at the Centers for Disease Control	Atlanta
Interview national, USAID and other donor officials, visit field sites, review available data, prepare draft report and debrief the USAIDs	Countries
Debrief AID/Washington	Washington

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The suggested format for the country reports is as follows:

- Executive Summary
- Table of Contents
- Body of the report - this should incorporate elements of the scope of work, including:
  - \* purpose of assessment
  - \* methodology
  - \* findings with respect to sustainability of project activities and benefits,
  - \* discussion of the sustainability questions posed earlier in the SCW
  - \* broad lessons learned
- Appendices

The body of the country reports should be no longer than 40 pages. Detailed discussions of methodological or technical issues should be placed in appendices. The lessons learned should incorporate guidance for similar development efforts.

Drawing from the country reports, the project manager will prepare the draft summary report within 45 working days (unless otherwise authorized by AFR/ONI) of the approval of the last country report. The contractor will provide three copies of the draft report to AFR/ONI. AFR/ONI and ARTS will review, make final editing and substantive recommendations and return the approved draft to the Contractor within 10 working days. Upon re-editing, the Contractor will have 5 working days (unless otherwise authorized by AFR/ONI) to submit 20 copies of the final summary report to AFR/ONI.

The suggested format for the summary report is as follows:

- Executive Summary
- Table of Contents
- Body of the Report - including purpose of the assessment series, major lessons learned and overall guidance for similar development efforts
- Appendices

The body of the summary report should be no longer than 20 pages. Guidance for similar development efforts should be directed to African governments (policy makers and program managers), USAIDs and other donor colleagues. This document should be less technically oriented than the country reports with a focus on policy and programming issues.

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**APPENDIX E**

**THE CONCEPT OF THE  
AFFORDABILITY OF HEALTH  
PROGRAMS**

## **THE CONCEPT OF THE AFFORDABILITY OF HEALTH PROGRAMS**

Analyses of sustainability sometimes partition factors affecting sustainability into two mutually exclusive categories (1) Project Related Factors (any of various project activities) which are regarded as under the control of project management, and (2) Non-Project Related (Contextual) Factors which are regarded as beyond the control of project management. Economic factors, such as the size of the government budget for health, are frequently assigned to this second category.

It is true, of course, that some factors are more under the control of the project than are others. But generally speaking, to make a sharp, binary distinction between project-related and contextual factors in this way is not analytically useful. For one thing, virtually no factor is completely under project control (most are subject to socio-cultural constraints of various kinds). On the other hand, some of the factors that frequently identified as contextual are subject to influence by the project, such as economic factors.

Economic factors such as the size of the government budget for health are important for sustainability because they are a major determinant of the perceived affordability of project activities, i.e., these factors present through their impact on perceptions of affordability.

The question of affordability is obviously central to analysis of the prospect that health program activities and benefits can be sustained when donor funding stops. Consequently, one must wonder why the Sustainability Strategy statement omits direct reference to this factor when developing its list of objectives. We recommend that an affordability objective be added explicitly to the list of objectives, which might be stated as follows:

## **OBJECTIVE IA: PERCEIVED AFFORDABILITY**

If project activities and benefits are perceived by the government, especially the Ministry of Health and the Ministry of Finance, as affordable, then it is more likely that these activities and benefits will be sustained when donor funding stops.

Virtually all child-survival programs and projects whether in Lesotho or elsewhere are "affordable" in the sense that there are sufficient resources in the government budget for health to operate them, if the government decides to allocate the necessary resources. But, this is not a useful concept of "affordability." The perception of affordability is, as explained below, a function not only of budget constraints but also of the government's priorities among the health programs to be financed by the health budget.

It is important to understand that although the underlying health-budget constraint may be (i.e., this is not necessarily the case) beyond the influence of the project, the perception of the affordability of project activities and benefits is subject to influence by the project. This is so because the question of affordability turns also on the priorities of the officials among the various health programs which will be making claims on the government budget for health. The project may change the officials' relative priorities among health programs by, for example, changing their perceptions of the relative effectiveness of project activities and benefits as compared with other programs.

### **A Conceptual Framework for Affordability Analysis**

Various efforts have been made to engage the issue of affordability as it relates to the sustainability of health projects. For example, REACH's 1990 sustainability study<sup>1</sup> addressed to the sustainability of EPI. This study reached its conclusions on sustainability on the basis of findings which assessed the "affordability" of EPI in terms of the resource commitment necessary to reach EPI targets (80% /2000) expressed as a percentage of GDP. A resource commitment of more than 0.1% of GDP was regarded as not affordable. This analysis is best regarded as giving a general picture of the economic burden implied by EPI targets and is a useful global

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<sup>1</sup>See "Measles Control in Lesotho," Stanley Foster, 1992.

overview. However, a different conceptual framework is required to engage the question of affordability. Indeed, as this study itself remarked, assessing the affordability of EPI in terms of GDP contribution required is "inevitably arbitrary". And the same can be said for assessment in terms of any selected percentage of total expenditures for health.

To inform their strategic planning with respect to resource commitments to EPI/ARI, the parties to these programs will require an analytically more meaningful definition of the concept "affordable", one that turns on the opportunity costs necessarily incurred for EPI. Resources committed to EPI might alternatively be committed to some other health or non-health activity. The cost of EPI is the potential output of the best of these alternative activities which were foregone, i.e., which could have been produced had the resources been used for that activity instead. In principle, the opportunity costs of EPI can be represented by foregone outputs anywhere in the economy. However, the realities of public finance in LDCs are such that tradeoffs within the total health budget are the realistic representations of opportunity cost. A given rate of public expenditure for EPI in a given country can be said to be affordable if, on the margin, these expenditures are regarded as costworthy in terms of the opportunity costs they entail, i.e., produce health-program output regarded (by the relevant country decision makers) as worth at least as much as the health-program output that could have been secured by the best alternative deployment of these resources. These tradeoffs will be different from country to country owing in part to differences in health-services production functions and the tradeoffs will be differently evaluated from country to country owing in part to different criteria that the relevant decision makers will bring to making choices among health programs. Consequently, costworthy rates of expenditure for EPI are almost certainly going to represent different percentages of the total health budget from country to country and the optimum scale of EPI/ARI effort will no doubt be different from country to country. Therefore, the EPI movement should abandon the notion of some target rate of "coverage" (80%, 90%, etc.) to apply to all countries.

## **APPENDIX F**

**OBJECTIVE V: A PROCESS OF MUTUALLY  
RESPECTFUL NEGOTIATIONS: SOME  
IMPLICATIONS OF THE CONCEPT OF  
AFFORDABILITY FOR INDICATORS IN  
THIS DOMAIN**

## **OBJECTIVE V: A PROCESS OF MUTUALLY RESPECTFUL NEGOTIATION: SOME IMPLICATIONS OF THE CONCEPT OF AFFORDABILITY FOR INDICATORS IN THIS DOMAIN**

A process of mutually respectful negotiation, the Sustainability Strategy states, will result in a project ". . . which is more likely to be responsive to nationally defined needs, objectives and capabilities." Clearly, the question of affordability is a key consideration for such negotiations. A project which, when it terminates, will leave behind a program which is not regarded as affordable by the nation's policy makers cannot be regarded as responsive to "nationally defined needs, objectives and capabilities." It is reasonable to suppose that such a project would have a poor prognosis for sustainability. Thus, the question of affordability must be a key topic for mutually respectful negotiations. It is far easier to make this clear however, than it is to suggest just how, in practice, the negotiators will be able to reach a realistic agreement at the time of project design. The discussion below offers some suggestions, as well as identifies some appropriate indicators in this domain.

As the indicators now stand, the number of nationals to be included in the project design and development process to participate in developing the country assessment, the PID, the PP, as well as the convening of workshops to deal with project design and implementation issues, as specified. It is true that if the parties are to negotiate in good faith, they must meet at agreed times and places prepared to listen to each other. But what is crucial is what the parties do during these negotiations, what strategies they employ pursuant to accommodating their frequently different priorities.

It should be clear from the discussion in the prior text and in Appendix E, that it does not make sense to try to develop a general, one-size fits all criterion of affordability, e.g., some percentage of GNP, the health budget, etc. The issue is really a matter of the tradeoffs. There is always a budget constraint, more for any one health program means less for some other program. (Of course, while the donor is picking up the tab, this may not be literally the case.

But what is important is the longer run picture when, pursuant to sustainability, the country is picking up the tab and the budget constraint and necessity to make choices is all too real). In the case of our example for Lesotho, the tradeoff question for a full-scale EPI is what M2.4 million would yield in service terms if the M2.4 million were deployed in other health programs, e.g. hospital services, nutrition, etc. To inform their good faith negotiations on affordability, the parties should calculate the tradeoffs in service units. Usually, this will not be regarded as an all-or-none choice. In most health programs, as the total rate of resource commitment increases, the yield in terms of program outputs/impacts diminishes on the margin, i.e., each additional unit of resources yields less output. In the case of EPI, the resources required to move the coverage rate from, say, 50% to 60% may be less than the additional resources required to move the coverage rate from, say, 80% to 90%. Thus, the tradeoffs will be evaluated on the margin, what are the service output and impact implications of moving some resources from each program to any of the others, or from the prospective project program to others and vice-versa. This is a very important first step to inform the good faith negotiations and it should be an indicator, viz:

Have the parties, in order to inform their good faith negotiations on affordability, systematically calculated and agreed to what the tradeoffs on the margin are of transferring resources from the project program under discussion and other relevant health programs?

Once the parties have agreed to measures of the tradeoffs among health programs (so that differences explicit or implicit on this score are no longer a confounding factor in their deliberation) they are ready to get down to the serious part of the negotiations such as making choices among the programs in light of their priorities. At this point, the parties are apt to find that they have at least somewhat different priorities. In our Lesotho example, perhaps for the donor, for an EPI program of scale M2.4m, the resource commitment to EPI on the margin is clearly costworthy, will clearly yield more desired output/impact than would moving some resources on the margin from EPI to other health programs. The country may not see it this way. Perhaps the country will feel that by reducing the scale of the EPI program by moving, say, M1.0 million to other health programs, the yield on the margin to outputs in the other programs will be greater than the loss owing to reduced resources for EPI.

At this point, the parties may want to negotiate out a compromise, perhaps agreeing to a rather different scale or configuration of EPI than the donor would prefer. This might be another indicator, viz:

Has the donor agreed to a compromise with the national negotiators, i.e., agreed to a program of different scale or configuration than he initially sought and still would prefer at the time of signing off on the PROAG?

Of course, in any given situation, taking into account the tradeoffs and the perhaps differing priorities of the parties, they may fail to reach agreement on a program both can endorse. This should not be regarded as necessarily a sign of breakdown of the negotiations. Indeed, such an impasse may be the most appropriate and realistic outcome.

The foregoing discussion is intended to suggest the strategies and the tone that will characterize the good faith negotiations. In practice and depending on the history of their relationship, the parties may not devote much time to the detailed, quantitative calculations of health-program tradeoffs, they may feel that they know this pretty well already. The important thing is that they be explicitly agreed and explicitly taken into account so that the role of the priorities is clear.

**APPENDIX G**

**THE CONCEPT OF  
SUSTAINABILITY**

## THE CONCEPT OF SUSTAINABILITY

The concept of sustainability is a hybrid of two rather different (albeit related ) elements:

- (1) a project success criterion which derives from cost-benefit considerations, in a figurative sense of this term, and
- (2) an expression of the intention that projects will fundamentally alter the way in which health programs and facilities in host countries perform over the long run.

As will be explained in what follows, some of the dissatisfaction that many people have with the concept of sustainability may stem from the way in which it combines these two elements.

The reference in the Introduction was to (1) when we said that the interest in sustainability is basically a cost-benefit interest. From the point of view of (1) the concept has always seemed rather untidy. For example, why a three-year time horizon rather than, say, one year, or ten years, etc.? Are project activities and benefits to be sustained at any cost, or only if they are costworthy (and if the latter, what do we mean by that)? We get away from some of this seeming arbitrariness in the definition of sustainability once we adopt the element (1) point of view, i.e., that the issue is whether the investment of resources in the project was worth it in terms of the value of the future time stream or benefits that were secured by the project. As pointed out in the Introduction, different projects will generate different time streams or benefits, both during the LOP and in the years after project funding stops. If a project may be said to have been "sustained" when, figuratively speaking, the value of the time stream of benefits provides an acceptable rate of return on the investment of funds in the project -- then it is clear that different projects will have different time horizons for sustainability (we can dispose of the three-year rule), that project activities and benefits should be continued only if they are at that point costworthy, etc.

An explicit recognition of the cost-benefit sense of sustainability has a number of advantages. Where this is really the issue (where the interest in sustainability stems from the concern that the value of the time stream of benefits justifies the investment in the project) we

recommend that the parties to health projects abandon the term "sustainability" in favor of terms which more directly identify what is at issue. Rather than promulgating a policy that A.I.D. projects should not be implemented unless there is good evidence that they will be sustainable the policy should state what ought to be taken for granted in any case -- projects should not be implemented unless there is good evidence that at the time of their implementation the present value of the future time-stream of benefits (figuratively speaking) provides an acceptable rate of return on the resources committed to the project (To adopt the concept of sustainability as an oblique way of engaging this issue simply adds unnecessary confusion.)

With this more straightforward statement of this success criterion, we immediately realize that projects may well be justified just in terms of benefits yielded during the LOP (no need for any continuation of activities/benefits when funding stops). Given the extravagant claims frequently made for EPI projects in terms of their cost-effectiveness, these projects may provide a case of this kind, even if rather modest values are assigned to reductions in the risk of mortality before age five, or QUALYs gained, etc. Whether this is the case could only be determined by empirical investigation (which should be undertaken). But as long as our cost-benefit thinking is confused by a focus on something called sustainability, we are not apt even to consider this possibility. More generally, with this more straightforward statement of the cost-benefit success criterion, we are prompted to realize that the benefits of project activities may continue with no continuation whatsoever of the project activities.

Health education project activities provide a case in point. For these activities, which were emphasized in the CCCD project in Lesotho, the benefits achieved take the form of changes in the health-related knowledge, beliefs and behavior of the cohorts of beneficiaries exposed to the health-education activities. Even with no follow on project-type activity, the members of these cohorts may retain their project-induced knowledge and beliefs and continue to exhibit their changed health-related behavior for some years following the LOP. In this case, to this extent, the benefits achieved during the life of this component would be sustained with no additional commitment of resources, no additional project-type activity. On the other hand, maintaining for the members of these cohorts their changed knowledge, beliefs and behaviors may require

substantial post-project commitment of project-type resources. Which way it will be in each project setting is an empirical question to be answered by making appropriate findings in the field - - e.g., interviewing and observing randomly selected members of these cohorts in the field following the termination of the project. It is a distinguishing feature of the sustainability issue as it presents itself for such project benefits that we typically will not know, for each particular setting, *ex ante* project implementation, what resources may be necessary *ex post* the project to sustain these benefits. (Sustaining the health-education activities themselves so that future cohorts may benefit from these activities is another matter and is the one usually looked at.)

Before leaving this topic, we should note that a potentially important point for sustainability analysis has been implicit in this discussion. Investment in project health-education activities may well be costworthy even if the activities themselves are not sustained *ex post* the project. This may be the case if the benefits achieved during the life of the component, in the form of changed knowledge, beliefs and behaviors for the members of the cohorts who were beneficiaries or the activities, are maintained in the post-project period, without the benefit of follow-on activity. Empirical analysis would be required (and should be undertaken) to determine whether this has been the case in various settings. It is in part the probability that this is the case that makes investment in health-education activities an attractive component, i.e., for the reasons explained, these activities may tend to be sustainability-failure proof, so to speak.

Similar points can be made for that project activity which provides training for various health occupations.

We turn now to sense (2) of sustainability, i.e., an expression of the intention that projects will fundamentally alter the way in which health programs and facilities in host countries perform over the longer run. This is the sense of sustainability associated with concepts such as "institutionalization," "strengthening institutions," "institution building, " etc. This intention amounts to an intention to change the host-country subculture represented by the health programs and facilities -- e.g., change priorities, change intellectual styles, change the nature of relationships among the parties to health programs, change habitual ways of doing things, etc.

We suppose that policy makers and project promoters should be free to entertain whatever aspirations appeal to them, including this one. However, given the problems necessarily encountered by any such intention to fundamentally alter the way in which host-country institutions perform, evidence for this sense of sustainability should certainly not be required as a condition of implementing projects. For one thing, sustainability in this sense is not necessary for projects to pay off in cost-benefit terms. For another thing, in most situations, the prospects of achieving through a health project such fundamental change in the normal LOP of a project are sufficiently remote so that insisting on evidence of the prospect of such change as a condition of project implementation would mean that there would be very few health projects.

Where the interest is in fundamental, long-run change in the way host-country institutions perform (changes in the institutional subculture, to use the short hand adopted above) -- we recommend that the parties to health projects abandon the term "sustainability" in favor of terms which more directly identify what is at issue. The use of the terms "sustainability" as an oblique way to represent interest in such fundamental change tends to deflect attention from what is really at issue, especially if we adopt arbitrary rules such as the three-year time horizon. If, encouraged by a change in terminology or for some other reason, we directly engage the issue of bringing about fundamental, long-run change in the way host-country programs and facilities perform, we are apt to be more realistic about the prospects for success.

This is not the place to undertake a detailed discussion of the content of reality in this domain. Suffice it is to say that, in many contexts, when projects seek sustainability in the sense of element (2), they are calling for changes in the way institutions and the parties to institutions perform of a fundamental kind that, in the normal (non-project) course of events would take a very long time and would occur as part of the process of overall economic and social development. Project implementers should pause to reflect on this and to seriously consider the prospects for bringing about this kind of change within the (even currently extended) LOP of projects. Projects may be able to speed up the pace of such fundamental change, indeed, this is one of the purposes of projects. But perhaps for projects with this intention we need to re-evaluate both the nature of the commitment that may be called for and the time that will be

required. Dropping fuzzy concepts of sustainability in favor of more straightforward engagement with this issue would be a step in the right direction.

**APPENDIX H**

**USER CHARGES IN THE MOH  
SYSTEM IN LESOTHO**

MINISTRY OF HEALTH

FEE SCHEDULE FOR HEALTH SERVICES

SEPTEMBER, 1992

CATEGORY

1. OUT-PATIENT (GENERAL)

ADULT

CHILD

Health Centre

M5.00

M2.50

District Hospital

M10.00

M5.00

Queen Elizabeth II Hospital

M10.00

M5.00

Referrals from Health Centres

M5.00

M2.50

Referrals to Republic of South Africa

M150 Deposit for initial visit

M30.00 Deposit for every subsequent visit.

a) No reconciliation of deposits and actual charges required.

b) Transport cost is part of deposit.

c) Charges to be levied as if the services provided were given at Q.E. II Hospital.

Family Planning (ante/post natal etc.)

Consultation

FREE

FREE

Supplies

Same as Attachment 1

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CATEGORY

2. IN-PATIENT (GENERAL)

Admission fee	M10.00
Daily Rate	M10.00 for first 7 days M5.00 every subsequent day
Special examinations	Same as attachment 4
Delivery (including Caesarian)	M20.00 for all cases
Loggers	M2.50 per day

3. OUT-PATIENTS (PRIVATE)

Consultation (direct non-referred) Specialist	M30.00 Adult	M15.00 Child
Consultation (direct non-referred) Non-Specialist	M15.00 Adult	M7.50 Child
All Re-attendances	M10.00 Adult	M5.00 Child
Special examinations	Attachment 4	

4. IN-PATIENT (PRIVATE WARD (S))

Admission fee	M20.00
Daily Rate	M30.00
Delivery : (including Caesarian)	M40.00
Special examination	Same as attachment 4

5. DENTAL SERVICES

Attachment 5 proposed column

CATEGORY

6. OPERATIONS (SEE ATTACHMENT 6 FOR CLASSIFICATIONS)

Major	M40.00
Intermediate	M20.00
Minor	M10.00

7. PHYSIOTHERAPY

Out-Patients	Proposed OPD fee
In-Patients (excluding board/lodging)	FREE
Re-attendance (OPD cases only)	First 30 days free Proposed OPD fee for every attendance after every 30 days.

8. AMBULANCE SERVICES

Urban areas	M20.00 basic
Special requests to RSA	M20.00 basic; plus M0.50 per/km
To referral hospitals (e.g. O.E.II)	M20.00 basic
L.F.D.S. Referrals	M20.00

9. MORTUARY

(For hospital and police corpse first two days free)

	<u>Hospital</u>	<u>Police</u>	<u>Private</u>
1st Week	M2.50	M2.50	M5.00
2nd Week	M5.00	M5.00	M18.00
3rd and subsequent weeks	M10.00	M10.00	M10.00
Shrouding	M10.00	M10.00	M10.00

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\* Charges commence 2 days after post mortem for police cases  
\* Charges commence 2 days from day of receiving a private corpse.

10.	<u>ORTHOPAEDIC SERVICES</u>	Same as attachment 7
11.	<u>ENVIRONMENTAL HEALTH SERVICES</u>	Same as attachment 8
12.	<u>MEDICAL EXAMINATION/CERTIFICATES/AFFIDAVITS</u>	
	Schools	M5.00
	Life Assurance/Insurance	M50.00
	Assault (except rape)	M20.00
	Rape	M5.00
	Death Certificates	M5.00
	Post-mortem reports	M20.00
	Employment	M20.00
	Residence Permit	M30.00
	Driving	M20.00
13.	<u>VACCINATIONS</u>	
	International Travel	
	Yellow fever	M10.00 per vaccination
	Others	M5.00 per vaccination
	Others (Rabies)	M10.00 Per treatment
14.	<u>POST MORTEMS</u>	
	Medical	FREE
	Legal (Police)	M25.00
	Private	M50.00
15.	NON LESOTHO CITIZENS	TWO TIMES EVERY CHARGE

\* Post-mortem charges under 14 are inclusive of Post-mortem report charges under 12.

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NOTES ACCOMPANYING PROPOSED FEE SCHEDULE

A. DEFINITIONS

1. Child : Any one aged 10 and below.
2. Re-attendance: a) going back to the health facility with the same sickness within 14 days.  
b) four consecutive attendances of a clinic.
3. Private patient: Any one who opts to see a consultant/ a specific medical officer without joining a health facility's queing system.

B. EXEMPTIONS

The following categories of patients/service provided are exempted from fee paying:

1. Fauzers certified by their District Secretary on the recommendation of Headman/Chief/Village health worker.
2. ACTIVE HEALTH WORKERS and their wives/husbands and their children 10years old and below.
3. Mental, TB and Epileptic patients.
4. Patients under police custody.
5. Prisoners.
6. Ante-natal/post-natal/family planning consultations.
7. Expanded programme in Immunization services (including treatment of outbreaks of contagious diseases).
8. Pap smear; VDRL (tests for syphilis); widal (tests for typhoid) weil-felix (test for Brucellosis).

SPECIAL INVESTIGATIONS

1. Charges for special examinations for an adult should not exceed M50.00 per episode/course of treatment.
2. Charges for special examinations for a child should not exceed M25.00 per episode/course of treatment.

ATTACHMENT 1

PROPOSED CHARGES

FOR FAMILY PLANNING SUPPLIES

METHOD	FEE
Orals	Free, first cycle M1 per subsequent 3 cycles
IUCD	M1 per insertion
Injectables	M1 per dose
Condoms	M1 Per pack of 20
Other Barrier methods	M1 per month (2 cans of foam, 2 tube jelly, 2 packets of vaginal pessaries)
Tubal Ligation	M10.00
Vasectomy	M10.00

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