FINAL EVALUATION

Gujarat Health System Development Project (GHSDP)

Sidhpur and Junagadh, India

Aga Khan Foundation U.S.A
(Grant Agreement/Award No. FAO-A-00-98-00078-00)

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October 25, 2004 – December 31, 2004
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List of Abbreviations

ACF  Ambuja Cement Foundation
AHF  Alternative Health Finance
AKDN  Aga Khan Development Network
AKES,I  Aga Khan Education Service, India
AKF  Aga Khan Foundation
AKF India  Aga Khan Foundation (India)
AKF USA  Aga Khan Foundation U.S.A.
AKHS, I  Aga Khan Health Service, India
AKPBS,I  Aga Khan Planning and Building Service, India
AKRSP  Aga Khan Rural Support Programme
ANC  Ante Natal Care
ARI  Acute Respiratory Infection
AWW  Anganwadi Worker
ANM  Auxiliary Nurse Midwife
BCC  Behavior Change Communication
BF  Breastfeeding
BHR  Bureau for Humanitarian Response
CHF  Community Health Fund
CHV  Community Health Volunteer
CORT  Centre for Operations Research and Training
CSSM  Child Survival and Safe Motherhood
DC  Diagnostic Center
DIP  Detailed Implementation Plan
EHS  Essential Health Services
FLE  Family Life Education
FP  Family Planning
GBAO  Gorno-Badakhshan Autonomous Oblast
GHSDP  Gujarat Health System Development Project
GoG  Government of Gujarat
GoI  Government of India
HC  Health Center
HH  Household
HIV/AIDS  Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
HPDC  Health Professional Development Centre
HRD  Human Resource Development
HRM  Human Resource Management
HSMC  Health Sector Management Committee
ICPD  International Conference on Population and Development
IEC  Information Education Communication
IFA  Iron Folic Acid
LHV  Lady Health Visitor
MCH  Maternal and Child Health
MGIMS  Mahatma Gandhi Institute for Medical Sciences
MG  Matching Grant
MIS  Management Information Systems
<table>
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<th>Acronym</th>
<th>Full Form</th>
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<tr>
<td>MO</td>
<td>Medical Officer</td>
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<tr>
<td>MoH</td>
<td>Ministry of Health</td>
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<td>MoU</td>
<td>Memorandum of Understanding</td>
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<td>MTR</td>
<td>Mid-term Review</td>
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<td>NCD</td>
<td>Non-Communicable Disease</td>
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<tr>
<td>OPD</td>
<td>Out Patient Delivery</td>
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<tr>
<td>ORS</td>
<td>Oral Rehydration Solution</td>
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<tr>
<td>PLA</td>
<td>Participatory Learning for Action</td>
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<tr>
<td>PNC</td>
<td>Post Natal Care</td>
</tr>
<tr>
<td>PPC</td>
<td>Postpartum Care</td>
</tr>
<tr>
<td>PPS</td>
<td>Proportionate to Population Size</td>
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<tr>
<td>PRA</td>
<td>Participatory Rural Appraisal</td>
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<tr>
<td>PVC</td>
<td>Office of Private and Voluntary Co-ordination</td>
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<td>QA</td>
<td>Quality Assurance</td>
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<tr>
<td>RCH</td>
<td>Reproductive and Child Health</td>
</tr>
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<td>RTI</td>
<td>Reproductive Tract Infections</td>
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<tr>
<td>SJHSP</td>
<td>Sidhpur and Junagadh Health Systems Project</td>
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<tr>
<td>SDC</td>
<td>Swiss Agency for Development Co-operation</td>
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<tr>
<td>SOP</td>
<td>Standard Operating Procedure</td>
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<tr>
<td>STI</td>
<td>Sexually Transmitted Infections</td>
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<tr>
<td>TBA</td>
<td>Traditional Birth Attendant</td>
</tr>
<tr>
<td>TT</td>
<td>Tetanus Toxoid</td>
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<tr>
<td>VLC</td>
<td>Village Health Committee</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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Executive Summary

Two external consultants carried out the Final Evaluation of the Gujarat Health System Development Project (GHSDP) in October 2004, funded under a Matching Grant (MG) from USAID, Office of Private and Voluntary Cooperation. This was Aga Khan Foundation’s (AKF) fifth MG. Under MG IV (1994-1997), Aga Khan Health Services, India (AKHS,I) established physical assets including health centers (HCs) and diagnostic centers (DCs), developed human resources, fostered a strong volunteer base and recovered about 75% of the HCs operating costs. The final evaluation recommendations of MG IV were, to: 1) expand coverage of services to non-Ismaili populations; 2) expand the range of services from a traditional maternal and child health (MCH) approach to comprehensive Reproductive and Child Health (RCH) interventions; 3) test service delivery models in non-Ismaili villages; and 4) enhance financial sustainability. Since MG IV was judged successful because of the large Ismaili volunteer base in the communities that supported the program, AKHS,I. was asked to extend coverage into non-Ismaili areas to assess the validity of the approach.

Thus, MG V had four main objectives, to: 1) improve access to and use of quality services; 2) enhance organizational efficiency; 3) increase financial self-sufficiency; and 4) document best practices. GHSDP operates in two areas, Sidhpur and Junagadh. The main livelihood options are agriculture and wage labor. In 1998, there was a significant Ismaili population in general and the “old villages” had a large Ismaili volunteer base. There was also a limited private sector competition.

GHSDP had a slow start-up and in 2000 there were major revisions of some of the project elements. The Team found that GHSDP had responded comprehensively to the Mid-Term Review recommendations and had made significant progress in achieving its objectives since 2001. The project has performed well both in terms of improved and sustained health outcomes and moderate to high levels of cost-recovery.

Objective 1: Improve Access to and Use of Quality Services

Three main efforts contributed to achieving the first objective: 1) broadening the types of services offered by AKHS,I incorporating a RCH focus; 2) expanding access to RCH services through greater involvement of non-Ismaili populations in the “old villages” and add “new” non-Ismaili villages; and 3) ensuring quality services. Table 1 outlines the key health outcomes achieved.
### Tables A: Key GHSDP Achievements

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<th>Significant Progress</th>
<th>Moderate/Little Progress</th>
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<td>ANC services in the first trimester</td>
<td>Women who take 90+ IFA</td>
</tr>
<tr>
<td>(49% Sidhpur, 56% Junagadh)</td>
<td>(31% Sidhpur, 38% Junagadh)</td>
</tr>
<tr>
<td>Institutional deliveries</td>
<td>Few deliveries (3%) are done by AKHS/I Staff. None of the LHVs are using partograph; they could only name 1-2 danger signs.</td>
</tr>
<tr>
<td>(70% Sidhpur, 47% on Junagadh)</td>
<td>Greater awareness for post-partum care, but use low.</td>
</tr>
<tr>
<td>Newborns weighed in the first 48hrs after delivery</td>
<td>Begin breastfeeding within 2 hrs of delivery</td>
</tr>
<tr>
<td>(71% Sidhpur, 62% Junagadh)</td>
<td>(17% Sidhpur, 32% Junagadh).</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Children 6-11 months who receive BF and solids</td>
<td>Management of LBW has been modest. It is unclear why the LBW rate is so high (16% Sidhpur, 8% in Junagadh).</td>
</tr>
<tr>
<td>(67% Sidhpur, 70% Junagadh)</td>
<td>Begin breastfeeding within 2 hrs of delivery</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Fully immunized in Junagadh 87% and measles 94%</td>
<td>Begin breastfeeding within 2 hrs of delivery</td>
</tr>
<tr>
<td>Immunization of Hepatitis B in Junagadh 62%</td>
<td>(17% Sidhpur, 32% Junagadh).</td>
</tr>
<tr>
<td>Immunization of Hepatitis B in Junagadh 62%</td>
<td>(24% Sidhpur, 14% Junagadh)</td>
</tr>
<tr>
<td>Children with ARI who sought treatment and received standard case mgmt</td>
<td>Fully immunized in Sidhpur 58% and measles immunization 62%</td>
</tr>
<tr>
<td>(86% in Sidhpur; 77% Junagadh)</td>
<td>Immunization of Hepatitis B in Sidhpur 27%</td>
</tr>
<tr>
<td>Increasing the use of temporary FP methods</td>
<td>Children with diarrhea who received ORS</td>
</tr>
<tr>
<td>(20% Sidhpur; 24.3% Junagadh)</td>
<td>(16% Sidhpur, 25% Junagadh)</td>
</tr>
<tr>
<td>Awareness of STIs/RTIs (63% Sidhpur, 42% Junagadh)</td>
<td>Birth Interval &lt; 2yrs</td>
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<tr>
<td></td>
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<tr>
<td>Based on the end of project survey</td>
<td>Awareness of HIV/AIDS 47.8%</td>
</tr>
</tbody>
</table>

To expand access to RCH services, particularly among non-Ismaili’s GHSDP tested three different services delivery models—standard, replication and facilitation. Table 2 outlines the basic elements of each service delivery model and highlights the key strengths and weaknesses, cost structure and potential for replication of each model.
## Table B: Characteristics of GHSDP Service Delivery Models

<table>
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<th>Area</th>
<th>Standard Model</th>
<th>Facilitation Model</th>
<th>Replication Model</th>
</tr>
</thead>
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<tr>
<td>Pop</td>
<td>Junagadh, Sidhpur</td>
<td>6 villages in Junagadh</td>
<td>4 villages in Sidhpur</td>
</tr>
<tr>
<td></td>
<td>Ismaili traditionally, expanding to non-Ismaili</td>
<td>Non-Ismaili</td>
<td>Non-Ismaili</td>
</tr>
<tr>
<td>DCs</td>
<td>Pathologists &amp; Radiologists provided services at 2 DCs. Revenue from user fees cross-subsidizes the HC costs as an aggregate.</td>
<td>Refer to DCs, although there is no cross-subsidization model.</td>
<td>A diagnostic center in Sidhpur provides both pathology and radiology services</td>
</tr>
<tr>
<td>Health Services</td>
<td>AKHS, I is a direct service provider through HCs. Each HC serves 3000-5,000 pop and provides preventive &amp; curative services to all beneficiaries. A HC is staffed by a LHV and provides clinical and outreach services. A part-time MO (1/2day –2-3days a wk) visits clinic to manage more difficult cases</td>
<td>AKHS, I is not a direct service provider. They work through a social educator to increase the effectiveness of the ANM, AWWs and TBAs through capacity building efforts. AKHS, I fostered partnerships between existing community stakeholders &amp; public &amp; private health providers</td>
<td>AKHS, I is a direct service provider through HCs. Same as Standard model</td>
</tr>
<tr>
<td>Providers have a well articulated referral system, cases are referred to the DCs or appropriate tertiary care facilities Less well-known by community</td>
<td>Greater emphasis of referral system; well-known by community</td>
<td>Providers have a well articulated referral system, cases are referred to the DCs or appropriate tertiary care facilities Less well-known by community</td>
<td></td>
</tr>
<tr>
<td>HSMC are responsible for management of HCs. They also help to mobilize community resources and support community activities</td>
<td>A Village Level committee promotes health awareness, liaise with village &amp; Gov officials to assist plan field activities, mobilize local resources.</td>
<td>HSMC helps to mobilize community resources and supports community activities</td>
<td></td>
</tr>
<tr>
<td>Community Involvement</td>
<td>Apex Body is a partnership between VLC Committees and public and private health care providers. They discuss comm. health needs and jointly devise strategies to address such needs using the services, infrastructure and human capital.</td>
<td>CHVs conduct outreach in villages to promote preventive and promotive services to direct beneficiaries, through BCC. 50% Ismaili and 50% non-Ismaili;</td>
<td>CHVs are all non-Ismaili. Same as standard</td>
</tr>
<tr>
<td>CHVs are all non-Ismaili. Same as standard</td>
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While the sample size in the replication and facilitation village was small, these villages performed either on par with or exceeded the overall results for Junagadh. Areas that have progressed include: ANC, particularly initiation in the first trimester; TT coverage; FP, immunization. Areas where the replication sites still need strengthening include: deliveries conducted by trained providers, women seeking treatment for STIs/RTIs and early initiation of breastfeeding.

GHSDP should be commended for testing these service delivery models, which look quite promising. Although the data in these areas with respect to health outcomes are quite small; indications are positive. AKF has already begun trying to incorporate the principles of the replication model in a project in Maharashtra. Key insights from this process should be shared within India and internationally. However, for AKHS, I and AKF, I to be able to do this, they need to further refine the critical factors that contributed to this success and this information needs to be well documented and disseminated.
Objective 2: Organizational Effectiveness and Capacity Building

Since its inception, AKHS, I has largely been a direct service provider. This has been a sound approach in the early years of operations because there was limited private sector involvement in health and weak government systems where AKHS, I was working. However, the situation has dramatically changed. In light of these changes, AKHS, I, as an institution, needs to determine its future role in a very dynamic, rapidly changing health care market in Gujarat and other states in India. AKHS, I could choose to: continue to be a direct service provider; serve as a facilitator among communities and the health system; become a technical resource; and/or be a researcher investigating key questions. These are not mutually exclusive roles, but AKHS, I will need to consider which roles they would like to play and prioritize their relevant importance.

Staff attrition was a major problem at all levels of the project throughout the course of implementation, although it has been managed fairly well. Two external reviews were conducted and some revisions have been put into place as a result. Improved compensation packages were offered to employees, particularly for LHVs. In 2003, the AKHS, I Board instituted measures to reduce personnel overhead costs to improve cost-efficiency of the organization. Still, retaining qualified staff will continue to be a challenge.

The MIS has improved greatly since 2000 by reducing the numbers of registers, developing an MIS manual, training staff and developing a software package. However, it seems that there is confusion on: the type of data needed for program management and tracking changes in health status at different levels; how the data links with relevant health actions; expected timeframes for change which determines how often data needs to be analyzed; and how to operationalize the M&E/logframes. In addition, each field office has developed a monthly report because none felt that the quarterly MIS tool meets their needs. Project staff use the monthly reports as a management tool. Minimal cost-analysis (e.g. break even analysis, costing of AHFs) is being conducted at the field offices; this may be due to a combination of insufficient time and limited capacity.

Objective 3: Increased Financial Sustainability

While many of the HCs have been able to achieve relatively high levels of their operating costs, most revenues were from curative services. It also should be highlighted that there is a constant tension between ensuring quality service provision and attaining financial sustainability. AKHS, I should be commended for giving priority to quality services. The community, represented by the Health Sector Management Committee (HSMC), had a strong sense of ownership of the HCs. They knew their level of cost-recovery, gaps and opportunities to secure funds from other sources. While the financial management by the HSMC is fairly good, more financial training would be useful.

Most (11/16) HCs were able to cover 45-60% of their operating costs. It should be noted that these levels of cost-recovery were achieved without increasing, and in some cases a reduction of user fees even though costs have risen. AKHS, I policy is to adjust user fees to inflation. However, the HSMCs determine the user fees and they chose to keep the user fees unchanged and identify other sources of revenues to address the gaps.
HCS were able to cover some of the fixed costs and all of the variable costs. However, it was difficult for them to pay the salaries of the LHVs. GHSDP tried to enhance the sustainability of the HCs by identifying other revenues. Junagadh worked with corporations to support community camps and introduced a family insurance plan with limited success. It was unclear to the Team if these plans were being offered at a profit or a loss. In Sidhpur AKHS,I receives 15,000R to 30,000R ($682) annually from dairy cooperatives. This has been an effective strategy; but, AKHS,I needs to renegotiate the levels of contributions to ensure all their costs are covered. The Team was encouraged that AKHS,I has developed plans to cover the cost recovery gap in selected HCs after GHSDP. In summary, in 2004 Junagadh was able to raise 58,902 Rs ($1339) from the corporate camps; 27,300 Rs. ($620) from the insurance programs; and 5,150Rs ($117) from student packages totaling 91,370 Rs. ($2076) additional resources. Sidhpur was able to raise 45,000Rs from the dairy cooperatives and 128,400 Rs ($2914) for a total of 173,400 Rs. ($3941) in the same year.

Four of the HCs (4/16) have achieved 100% cost recovery. All these facilities are in Sidhpur; two HCs have implemented the standard service delivery model and two HCs have the followed the replication model. GHSDP is in the process of handing-over most of the management responsibilities for these HCs over to the HSMCs. Initially, it was thought that all the responsibilities would be shifted to HSMC, it became clear to AKHS,I that there were several areas that HSMCs did not have the capacity to manage; particularly recruitment, training and supervision of medical personnel. Several legal and financial issues also required continuing involvement of AKHS,I. As a result, the HSMCs will take over the majority of the responsibilities, but AKHS,I will assist them in recruitment, training of supervision of medical staff.

Revenues generated by the DCs have covered most of their costs; some years they had covered their costs and had surpluses of an additional 27%. GHSDP was designed to have the DCs be highly profitable in order to address the gap in revenues at the HC level, however, the DCs have not been able to generate high levels of profits so the cross-subsidization model has not been very effective.

**Figure 1: Cost Recovery of Health Centers**

GHSDP has been able to achieve these rates of cost recovery because it was a priority within the project and have incorporated it into their regular monitoring system. The Team found five factors that influence the levels of recovery that can be achieved: population size/density; demand for health services; size of market-ability to pay; market share; and cost and pricing structure. Table 3 summarizes the conditions that influence the levels of cost-recovery that can be achieved.
Table C: Factors Influencing Levels of Cost Recovery from User Fees

<table>
<thead>
<tr>
<th>Factors</th>
<th>High Recovery 70-100%</th>
<th>Moderate Recovery 40-70%</th>
<th>Low Recovery Less than 40%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Size</td>
<td>Lg Population (dense)</td>
<td>Moderate</td>
<td>Moderate-Small</td>
</tr>
<tr>
<td>Location</td>
<td>Urban, large towns</td>
<td>Large Towns</td>
<td>Rural, remote</td>
</tr>
<tr>
<td>Level of Competition</td>
<td>Limited market competition, AKHS, I has lg market share.</td>
<td>Limited market competition, AKHS, I has lg market share.</td>
<td>Limited competition, AKHS, I has moderate market share.</td>
</tr>
<tr>
<td></td>
<td>High market competition but AKHS, I has lg market share.</td>
<td>High market competition AKHS, I has mod-low market share.</td>
<td>High competition with AKHS, I has moderate to low market share.</td>
</tr>
<tr>
<td>Existing Demand</td>
<td>High Demand for Services</td>
<td>Moderate to high demand</td>
<td>Low to moderate</td>
</tr>
<tr>
<td>Cost of Services</td>
<td>Moderate cost structure and appropriately priced services</td>
<td>High cost structure High Priced service</td>
<td>Cost structure high because it is expensive to transport supplies and difficult to get staff posted to these areas</td>
</tr>
<tr>
<td>Ability/Willingness to Pay</td>
<td>High to moderate</td>
<td>Moderate</td>
<td>Moderate to Low</td>
</tr>
</tbody>
</table>

**Objective 4: Documentation**

While some efforts were made to document the facilitation and replication models, the project did not have a documentation strategy; the documentation process and staff occurred very late in the project. VOICES, a series of 5 testimonials highlighted the role and impact that the CHVs and HSMC achieve in improved health outcomes and financial sustainability. A lessons learned document will be available by Dec 2004. Papers were presented at two international conferences.

The key challenges of the project are described below.

- **Striking an optimal balance between quality health care and financial sustainability.** Some services may generate high levels of revenues but may not represent good clinical practice or reflect the best quality of care.
- **Retaining high quality clinical staff,** at the field level. LHVs continue to leave for GOG jobs that have better job security and benefits. High levels of staff attrition decrease service utilization and revenues; it also places undue strain on core project staff who have to continually orient and re-train new staff.
- **Mobilizing marginalized groups** has not resulted in high levels of participation of these groups on community committees, although there is some evidence that the level of participation is increasing.
- **Involving private providers,** particularly in the facilitation model villages and ensuring better quality of their services.
- **Continuing to motivate CHVs** to conduct preventive activities without remuneration.
Lessons Learned: At the Field Level

- **Broader community participation** from the onset has greater returns in terms of improved health outcomes and levels of cost-recovery.
- **BCC activities** should be very specific, rooted in the predominant practices of each village and relate to interventions key to achieving long-term health gains.
- **Planned involvement** of communities in the management of HC and marketing of services can have a positive impact on service utilization and operational sustainability.
- **Hand-Over:** While it is laudable to completely hand-over all responsibilities of the HCs to the HSMCs, most have limited capacity with respect to recruitment, training and clinical supervision of medical personnel. There are also legal and financial issues that can probably only be addressed by AKHS,I. This is a vital but time-consuming process that should begin at least a year before any transition is made.

Lessons Learned: At the System Level

- **User Fees:** Complete recovery of costs solely through levying user fees is not a realistic expectation of a rural HC; access to other revenue streams are needed.
- **Competition:** Market competition has a major influence on cost-recovery. Highly unregulated markets allow unethical practices which skew the price differential among providers.
- **Staffing:** High staff turn-over hinders program implementation and service utilization.
- **Service Delivery Model:** AKHS,I success in improving health outcomes is related to its approach, rather than the specific populations (e.g., Ismaili vs. non Ismaili).

Lessons Learned: At the Institutional Level

- **Organizational Roles:** AKHS,I can play various roles to enhance the quality of services and facilitate improvements in health status (e.g., service provider, facilitator, researcher and technical support)
- **Service delivery Models:** The facilitation and replication models are interesting approaches that should be further explored, documented and tested in other settings.
- **Internal Partnering:** Working with other Aga Khan Services provides additional human resources, skills and networks that have benefited AKHS,I.

Table 4 provides a summary of the key recommendations of the Evaluation Team.
Table D: Key GHSDP Recommendations

<table>
<thead>
<tr>
<th>Areas</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1: To Improve Access to and Use of Quality Services</strong></td>
<td></td>
</tr>
<tr>
<td>Maternal &amp; Delivery Care</td>
<td>Recommendation #1: Conduct a cost benefit analysis of providing LHVs for 24 hour availability to provide delivery services when they only conduct a few, which makes it difficult to maintain their skills and increases cost of services. If AKHS, I decided to continue to provide delivery services, staff needs to be trained on use of partograph and maternal danger signs rather than just risks.</td>
</tr>
<tr>
<td>Newborn</td>
<td>Recommendation #2: Further analyze the LBW rates in the project areas. Medical staff needs training on: recalibration of scales and specific activities to manage LBW babies in the community.</td>
</tr>
<tr>
<td>Technical</td>
<td>Recommendation #3: Further strengthen the following information, behaviors and services: 1) complete course of IP during ANC; 2) continued follow-up with postpartum women; 3) early and exclusive Breastfeeding up to 6 months; 3) immunization coverage in Sidhpur; 4) use of ORS to treat diarrheas; 5) treatment of STI; and 6) awareness of HIV/AIDS.</td>
</tr>
<tr>
<td>HSMC</td>
<td>Recommendation #4: HSMC composition is in transition and should continue to be supported by AKHS, I, particularly increasing female representation and ensuring full participation.</td>
</tr>
<tr>
<td><strong>Objective 2: Organization Efficiency and Capacity Building</strong></td>
<td></td>
</tr>
<tr>
<td>Org Roles</td>
<td>Recommendation #5: AKHS, I could further articulate the new roles that AKHS, I could play in facilitating service delivery and providing technical support. Based on the changing role of AKHS, I, organizations structures and staff competencies would need to be aligned.</td>
</tr>
<tr>
<td></td>
<td>Recommendation #10: Develop a taskforce to understand what key policy issues AKHS, I could be involved with, either individually or collectively, based on AKHS, I's comparative advantage and Mission.</td>
</tr>
<tr>
<td>Capacity Building MIS</td>
<td>Recommendation #11a: Staff should be trained on how to develop a log frame approach (Goal, Objectives, Impact, Outcomes, Outputs and Inputs) and how to operationalize the process.</td>
</tr>
<tr>
<td></td>
<td>Recommendation #11b: Program objectives should drive the MIS. Each piece of data should be clearly linked with the program objectives.</td>
</tr>
<tr>
<td></td>
<td>Recommendation #11c: Which pieces of data are collected and how often are they collected/analyzed needs to be consistent with the expected change in objectives. The Team recommends the use of proxy indicators for program management.</td>
</tr>
<tr>
<td></td>
<td>Recommendation #11d: The HH register should serve as a census rather than a monitoring system. This would mean that it could be updated on a project need basis (e.g., yearly). Since information on FP is included in the HH register, a separate FP/RH register should be developed to monitor monthly utilization.</td>
</tr>
<tr>
<td><strong>Objective 3: Financial Sustainability</strong></td>
<td></td>
</tr>
<tr>
<td>Financial Mgmt</td>
<td>Recommendation #6: HSMCs still need support in managing the transition, particularly if there are large drops in utilization, requiring additional revenue streams. HSMCs need additional training in financial management—standardization of financial registers, accounting of petty cash, and credit and simple break-even analysis.</td>
</tr>
<tr>
<td></td>
<td>Recommendation #7: Staff need further training on cost analysis and financial management to assist the HSMCs better maintain their accounts. Further study is needed to identify and assess potential revenue sources (e.g., family insurance and dairy cooperatives). Staff needs to conduct more cost-analysis to understand which revenue generating activities should be prioritized.</td>
</tr>
<tr>
<td><strong>Objective 4: Documentation of Best Practices</strong></td>
<td></td>
</tr>
<tr>
<td>Document Best Practices</td>
<td>Recommendation #8: Develop a documentation plan at the onset of projects, develop mechanisms to ensure documentation throughout the project life and reward staff for their efforts. AKHS, I should further document and disseminate findings on GHSDPs work with small &amp; non-small populations, critical factors for the success of the replication and facilitation models, guidance on input needed to scale up the replication and facilitation models, what can be expected in terms of cost recovery under various market conditions and what are the key factors that enhance sustainability. The Team strongly recommends that AKHS, I write a journal article on its work in community-managed financial sustainability, particularly the factors that influence financial sustainability and levels that can be expected under certain situations.</td>
</tr>
<tr>
<td>Research</td>
<td>Recommendation #9: Encourage projects to have a research/pilot component with specific M&amp;E plans, some areas may include: alternative health financing schemes, management of LBW babies in the community, and related health outcomes; successful handover of the HCs to HSMCs.</td>
</tr>
</tbody>
</table>
Section One: Program Background

I. Matching Grant IV (1994-97)
Under the Matching Grant (MG) IV (1994-1997), Aga Khan Health Services, India (AKHS,I) has established physical assets including health and diagnostic centers, developed human resources, fostered a strong volunteer base and recovered 75% of health center’s (HC) operating costs. The final evaluation recommendations of MG IV were, to: 1) expand coverage of services to non-Ismaili populations; 2) expand the range of services from a traditional maternal and child health (MCH) approach to comprehensive Reproductive and Child Health (RCH) interventions; 3) test service delivery models in non-Ismaili villages; and 4) enhance financial sustainability. Since MG IV was judged successful because the large Ismaili volunteer base in the communities that supported the program, AKHS,I was asked to extend coverage into non-Ismaili areas to assess the validity of the approach.

In 1998, the Aga Khan Foundation USA (AKF USA) was awarded its fifth MG from the Office of Private and Voluntary Cooperation (PVC) in the Bureau of Humanitarian Response of the United States Agency for International Development (USAID). MG V is entitled “Promoting Health Reform in Three Countries in Central Asia and East Africa through Capacity Building, Partnership Strengthening and Documenting and Disseminating Best Practices”. All three countries had also received funding under MG IV, although for a different set of activities.

The goal of MG V was to achieve sustainable improvements in the health status of women and children under 3yrs in Tajikistan, India and Kenya by fostering health reform; and developing processes that address long-standing constraints to efficient resource management and effective health service delivery.

In India, the MG V grant was $1,381,500, with $465,600 from USAID and $915,900 contributed by the AKF USA. The grant was scheduled to end on September 2003, but due to a slow start-up, the 2001 earthquake and the 2002 communal riots in Gujarat, a no-cost extension was granted to December 31, 2004.

III. Gujarat Health Systems Development Project (GHSDP)
The Aga Khan Health System, India (AKHS,I), through the Gujarat Health Systems Development Project (GHSDP) aims to achieve this goal by supporting interventions designed to build institutional capacity, strengthen partnerships among key stakeholders, and document and disseminate best practices at local, national and international levels. AKHS,I specifically responded to the MG IV recommendations by trying to expand the range of (RCH) services and to broaden access for both Ismaili and non-Ismaili populations. Although not specifically stated in the objectives, MG V aimed to test the hypothesis that the several service delivery approaches could be successful with a non-Ismaili population.
GHSDP is operational in two areas, Sidhpur and Junagadh. The main livelihoods are agriculture and wage laborers. In the last several years there has been quite severe droughts and some damage to irrigation systems. The 2001 earthquake also caused a rise in temporary migration to Mumbai and other cities, particularly for men. In addition, there has been a dramatic out-migration of Ismailis to other countries. In 2004 the Ismaili population was only about 12% of the project areas populations. In 1998, there was a significant Ismaili population in general and the "old villages" (21 villages in Sidhpur and 24 villages in Junagadh) had a large Ismaili volunteer base. In addition there was a limited private sector competition. Change in the operating environment will be further discussed in latter sections of this document, but it is important to note here that there have been tremendous changes in terms of:

- Large numbers of Ismailis have migrated out of the villages, reducing the Ismaili volunteer basis
- Changing demographics of villages such as higher numbers of female headed households during much of the year
- Economic liberalization: growth of a highly unregulated market competition
- Communal riots
- Natural disasters
Section Two: Overview of the Evaluation

IV. Terms of Reference (TOR)
The Terms of Reference for the Final Evaluation (see Annex A) spells out clearly the priority issues for the evaluation team which include:

♦ **Access/Quality/Impact** - What has been achieved in reaching the priority population (children from 0-3 years and women of reproductive age)?

♦ **Organizational Efficiency** - Has the Aga Khan Health Services, India (AKHS,I) been strengthened in terms of human resources, training, communications, quality management and community mobilization?

♦ **Financial Self-Sufficiency** - What progress the AKHS,I made in generating income to cover operating costs of health centers and the viability of cross-subsidization mechanism?

♦ **Documentation** - To what extent have AKF and AKHS,I documented and disseminated the lessons learned and best practices resulting from the operations funded by GHSDP?

V. Team Composition and Schedule
AKF USA, with the approval of BHR/PVC, selected Ms. Susan Rae Ross, a health specialist, and Dr. Dhruv Mankad, a local health expert with experience in community health programs to conduct the final evaluation. Ms. Nemat Hajeebxoy, AFK, India Program Manager for Health, accompanied the team to all the site visits and debriefings. In addition, Dr. John B. Tomaro, Director of the AKF Health Programs, joined the team during the Sidhpur site visit and the debriefings in Mumbai and Delhi. (See Annex B for Calendar)

The team met on October 25, 2004 in Mumbai with AKF, the AKHS,I Board and the GHSDP staff. This was followed by three days in Junagadh and three days at Sidhpur project sites. At the conclusion of the review in each project site, the Team briefed the AKHS,I managers and staff in Junagadh and Sidhpur, respectively. The Team also presented key findings and recommendations to AKHS,I Board in Mumbai and staff at AKF in New Delhi. The team also discussed the evaluation findings with staff from the Office of Population, Health and Nutrition at USAID/Delhi.
VI. Methodology

The final evaluation methodology consisted of four primary elements described below.

♦ Document Review - The AKF USA office provided the consultants with background documents prior to the evaluation. These included the MG V proposal, annual and semi-annual reports, DIP revisions and budgets. In Mumbai and at the field sites the Team also received project-related documents (See Annex 3 for list of documents).

♦ Presentations - The managers of the GHSDP activities in the Ahmedabad office as well as the team members in both the Sidhpur and Junagadh sites made a series of presentations to the Team. Subjects included: project overview, finances, cost-recovery, replication and facilitation models, MIS, end of project survey, reviews of operations in the respective field sites and overview of HSMC. Time was available to raise questions and to discuss the material and information presented.

♦ Interviews - The Team interviewed key managers of AKHS, as well as those responsible for implementing project activities in the field. During field visits, team members had the opportunity to: 1) interview project managers, social educators, clinical staff (LHVs, MOS), and private practitioners; 2) meet and discuss issues with a large number of Health Sector Management Committee (HSMC) and Village-Level Committee (VLC) members; and 3) talk with Community Health Volunteers (CHVs) and CHWs. These were open-ended discussions designed to solicit information on the services provided and the populations reached, change in health status, local management of health center and cost-recovery.

♦ Site Visits/Observation: Villages selected for site visits were balanced between those performing well and more typical performers. In Junagadh, the Team visited 4 “old” villages that were implementing the standard model and two facilitation villages as well as the diagnostic center in Keshod. The standard model villages included: 1) Chitravad; 2) Sangodhra; 3) Jonpur; and 4) Gangecha. Meetings were held in Matarvaniya and Jalandhar to discuss the facilitation model. It should be noted that Private providers and VLC members from the other 4 facilitation villages attended these meetings. In Sidhpur the team visited four villages implementing the standard model and two replication sites. Two of the standard model sites—Methan and Meloj—visited have achieved almost 100% cost-recovery and AKHS, is in the process of “handing over these facilities to the community. Samoda and Metrana were the other two standard model sites visited by the Team. Replication sites visited by the Team included Vaghrol and Wadhana.
VII. Information Sources
A quantitative end-of-project survey was conducted by the Centre for Operations Research and Training (CORT). All project villages were surveyed using a PPS method; within each village a systematic sampling (every 10th house) was used to collect data. As one component of the final evaluation of GHSDP, the end-of-project survey will provide estimates to enable an understanding of the extent to which the project has been able to achieve its goal. The survey was designed to generate data (both knowledge and practice) on a range of RCH indicators as well as the health seeking behaviours and utilisation of AKHS, I services among beneficiaries. As there is no reliable baseline data, the results of the survey will be compared to indicators collected by the (1998-99) Gujarat State National Family Health Survey (NFHS II) that collects state data and the 2001 Reproductive and Child Health (RCH) Survey II, which collected district level data.

VIII. Limitations of Evaluation
The Team found the GHSDP very prepared for the evaluation. Documents were readily available and the staff was quite candid about discussing issues faced by the project. However, there were several constraints related to data collection, analysis and interpretation issues.

First, many issues were raised by AKHS, I and the Mid-Term Review Team regarding the quality and validity of the baseline conducted in 1998. After much effort and discussion AKHS, I concluded that the baseline was not of high enough quality to be useful for the project. As a result the only information available for comparison is the 1998 Gurajat State NFHS II. However this is state level data, which limits its comparability to the end of project survey data which only covers project villages within the district.

Second, GHSDP was designed as a health system project and did not articulate specific health service benchmarks. Thus the Team can only point to trends but cannot identify specific achievement levels for each objective.

Third, the MTR found that there were many issues with data collection and analysis between 1998-2001 was questionable, particularly in terms of calculating valid denominators. Since the MTR was a process review and there was not quantitative survey conducted it was unclear the status health indicators between 1998-2001. The Team used the 2001 RCH II survey conducted at district level. While this is more comparable to GHSDP than the NFHS II, it does not collect all the indications used by GHSDHP. The Team also only focused on MIS data from 2001-2004 and the end of project survey conducted by CORT.

Fourth, while there is congruence between the MIS and end of project data complied by CORT; there are some key differences included: use of temporary FP methods; immunization coverage in Sidhpur; early breastfeeding initiation; and low birth rates. Some of these differences are due to the difference in methodologies, but they make interpretation difficult.
Section Three: Program Approach

The tension between improving quality, extending services, and achieving a greater degree of financial sustainability in an increasingly unregulated, competitive market, called for a significant revision in the Detailed Implementation Plan (DIP) and the refinement of overall program goals and objectives. Two years after the initiation of MGV activities (Sept 2000), AKHS,I senior management, in collaboration with AKF, conducted a comprehensive review of GHSDP. Table 1 shows how the goals of the project were revised in 2000.

<table>
<thead>
<tr>
<th>Original Objectives</th>
<th>Revised Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve access to basic health services for an additional 15,000 residents, thus</td>
<td>Enhance the: 1) quality; 2) extend the range of diagnostic and essential health service of existing services; and 3) expand access to serve a total</td>
</tr>
<tr>
<td>serving a total population</td>
<td>population of 86,000</td>
</tr>
<tr>
<td>Provide diagnostic and maternity centers by establishing 2 maternity homes with</td>
<td>The feasibility found that these institutions would not be sustainable so this objective was dropped</td>
</tr>
<tr>
<td>polyclinics and blood banks</td>
<td></td>
</tr>
<tr>
<td>Enhance institutional capacity and program sustainability by internal planning,</td>
<td>Enhance organizational effectiveness of AKHS,I by introducing comprehensive systems for HR development, management and finance.</td>
</tr>
<tr>
<td>monitoring systems and HR management capacity, and establishing a Health</td>
<td></td>
</tr>
<tr>
<td>Professional Development Center (HPDC) to train staff and volunteers from AKHS,I</td>
<td></td>
</tr>
<tr>
<td>local NGOs and government</td>
<td></td>
</tr>
<tr>
<td>Strengthen/consolidate community development initiatives by enhancing the capacity</td>
<td>Dropped</td>
</tr>
<tr>
<td>of communities to manage at least 2 HCs</td>
<td></td>
</tr>
<tr>
<td>Implement alternative health financing schemes in half of the project villages and</td>
<td>The network of AKHS,I facilities recovering an increasing percentage of operating costs (baseline 1996)</td>
</tr>
<tr>
<td>achieve 90% operational self-sufficiency.</td>
<td></td>
</tr>
<tr>
<td>Test initiatives that contribute to project sustainability</td>
<td>Covered in Objective</td>
</tr>
<tr>
<td>Document and share project experiences with GoI and other organizations</td>
<td>Document and share outputs, outcomes, best practices and lessons learned with key stakeholders</td>
</tr>
</tbody>
</table>

Both the MTR and the final evaluation teams found these revised objectives sound, and assessed GHSDP progress against the revised objectives.

At the management level a Program Manager at the AKF India level supports AKHS,I. The project management team is based in Ahmedabad and is responsible for overall management of the project. Project field offices are located in each site, in Junagadh and Sidhpur; they are responsible for day-to-day implementation and management. Project field offices are located in each site in Junagadh and Sidhpur; they are responsible for day-to-day implementation and management. Financial management is centralized from AKF to AKHS,I and then GHSDP field offices. In terms of flow of information the reverse pattern is conducted; data are collected at the HCs and aggregated at each field office; then it is sent to the project manager who consolidates the data and reviews progress. Once the field has refined the information it is sent to the AKHS,I Board and then forwarded to AKF.
The Gujarat Health System Development Project (GHSDP) has two sites with a combined population of approximately 87,000. The project aims to reduce health disparities by establishing a three-tier system of community outreach, health centers (HCs) and diagnostic centers (DCs), as outlined in Table 2. Emphasis is on improving the quality of primary care services, enhancing access to secondary care and building the capacity of community-based organizations to manage their own health care initiatives. The project draws on a large base of community health workers and volunteers, primarily women, to ensure service delivery at the household level and facilitate health promotion, gender sensitization and behavior change. Table 2 contains information on the geographic reach of the project and its beneficiary population.

Table 2: Profile of the Three Tier Model

<table>
<thead>
<tr>
<th></th>
<th>Sidhpur</th>
<th>Junagadh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>42,670</td>
<td>41,294</td>
</tr>
<tr>
<td>WRA</td>
<td>7889</td>
<td>8076</td>
</tr>
<tr>
<td>Children 0-3yrs</td>
<td>2304</td>
<td>2008</td>
</tr>
<tr>
<td># Villages</td>
<td>21 old villages, 3 new replication villages</td>
<td>25 old villages, 6 new facilitation villages</td>
</tr>
<tr>
<td># HC</td>
<td>9 HCs 3/9 implementing replication model</td>
<td>Initially 8 HC but one was dropped in 2003 2004 7 HCs</td>
</tr>
<tr>
<td># diagnostic centers</td>
<td>Sidhpur provides pathological and radiological services.</td>
<td>Keshod provides pathology &amp; radiology services. One in Malia, provides pathology services.</td>
</tr>
<tr>
<td>Health Center</td>
<td>Each HC is staffed by a LHV who provides clinical and outreach services. A part-time MO (1/2day –2-3days a wk) visits clinic to manage more difficult cases. Providers have a well-articulated referral system, cases are referred to the DCs or appropriate tertiary care facilities</td>
<td>Each HC is staffed by a LHV who provides clinical and outreach services. A part-time MO (1/2day –2-3days a wk) visits clinic to manage more difficult cases. Providers have a well-articulated referral system. Cases are referred to the DCs or appropriate tertiary care facilities</td>
</tr>
<tr>
<td>Community Level</td>
<td>A Health Sector Management Committee (HSMC) manages the HC operations and supports community activities.</td>
<td>A Health Sector Management Committee (HSMC) manages the HC operations and supports community activities.</td>
</tr>
<tr>
<td></td>
<td>A network of CHVs, (50%) Ismaili, provides out-reach services to about 1,200 households each</td>
<td>A network of CHVs, (50%) Ismaili, provides out-reach services to about 1,200 households each.</td>
</tr>
</tbody>
</table>

Before detailing the process of how the system was made operational, it is important to note that, in order to test comparative effectiveness in achieving desired health impacts, AKHS,I employed three different models to refine the health system developed as illustrated in Table 3.
<table>
<thead>
<tr>
<th>Area</th>
<th>Standard Model</th>
<th>Facilitation Model</th>
<th>Replication Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pop</td>
<td>Ismaili traditionally, expanding to non-Ismaili</td>
<td>Non-Ismaili</td>
<td>Non-Ismaili</td>
</tr>
<tr>
<td>Diagnostic Centers</td>
<td>Pathologists &amp; Radiologists provided services at 2 DCs. Revenue from user fees cross-subsidizes the HC costs as an aggregate.</td>
<td>Refer to DCs, although there is no cross-subsidization model.</td>
<td>A diagnostic center in Sidhpur provides both pathology and radiology services</td>
</tr>
<tr>
<td>Health Services</td>
<td>AKHS,I is a direct service provider through HCs. Each HC serves a cluster of villages (3000-5,000 pop) and provides preventive &amp; curative services to all beneficiaries. A HC is staffed by a LHV and provides clinical and outreach services. A part-time MO (1/2day –2-3days a wk) visits clinic to manage more difficult cases</td>
<td>AKHS, I is not a direct service provider. They work through a social educator to increase the effectiveness of the ANM, AWWs and TBAs through capacity building efforts. AKHS,I fostered partnerships between existing community stakeholders &amp; public &amp; private health providers</td>
<td>AKHS,I is a direct service provider through HCs. Same as Standard model</td>
</tr>
<tr>
<td>Community Involvement</td>
<td>CHVs conduct outreach in villages to promote preventive and promotive services to direct beneficiaries, through BCC. 50% Ismaili and 50% non-Ismaili;</td>
<td>CHVs are all non-Ismaili. Same as standard</td>
<td>CHVs are all non-Ismaili. Same as standard</td>
</tr>
</tbody>
</table>

Strengths and weaknesses of each model are discussed under achievement of objectives
Section Four: Achievement of Objectives

In general, the Team found that GHSDP had comprehensively responded to the Mid-Term Review (MTR) recommendations and has made considerable progress in achieving its objectives since 2001. Annex D provides a comparison between the revised objectives, MTR recommendations and progress from the MTR until September 2004. GHSDP has performed well both in terms of improved health outcomes and moderate to high levels of cost-recovery.

GHSDP provides insight into the critical factors that influence levels of financial sustainability that can be achieved in different settings. Most of the HCs have been able to cover at least 50% of their operating costs, based on MIS data. Management of HCs by Health Sector Management Committees (HSMCs) was a key component of the program. The HSMCs are responsible for oversight of revenues, management of bank accounts, payment for utilities, reimbursement to AKHS,I for drugs and health personnel salaries if possible. Four (4/16) HCs have been able to recover almost 100% of their costs and are in the process of having the key management functions handed-over from AKHS,I to community.

While the financial data is very sound, there are some limitations of the behavioral and service delivery data as previously mentioned that makes the level of progress somewhat difficult to interpret (e.g., lack of baseline, difference between MIS and CORT data). The Team found that substantial progress has been achieved in terms of improved levels of knowledge and changes in behaviors in the key RCH areas. Although the Team cannot say specifically if the data meets or exceeded expectations, since service delivery benchmarks were not articulated, indications are that positive changes, consistent with overall areas of impact, have occurred. For example, increasing CPR is a good proxy indicator of the desired impact of lower TFR. Table 4 summarizes the main findings and recommendations by objective.
<table>
<thead>
<tr>
<th><strong>Objective 1</strong></th>
<th><strong>Strengths</strong></th>
<th><strong>Challenges</strong></th>
<th><strong>Recommendations</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RANGE OF SERVICES</strong></td>
<td>ANC services in 1st trimester (49% Sidhpur; 51% Junagadh)</td>
<td>Women who take 90+ IFA (31% Sidhpur; 38% Junagadh)</td>
<td>Conduct a cost benefit analysis of providing LHV for 24 hour availability to provide delivery services. If AKHS,I decides to continue to conduct deliveries, staff need to be trained on the use of partograph and maternal danger signs rather than just risks.</td>
</tr>
<tr>
<td></td>
<td>Institutional deliveries (69% Sidhpur; 47% Junagadh)</td>
<td>Few deliveries (3%) are done by AKHS,I Staff. Greater awareness for post-partum care and use of PPC</td>
<td>Conduct a cost benefit analysis of providing LHV for 24 hour availability to provide delivery services. If AKHS,I decides to continue to conduct deliveries, staff need to be trained on the use of partograph and maternal danger signs rather than just risks.</td>
</tr>
<tr>
<td></td>
<td>Newborns weighed within 48hrs (62% Sidhpur; 66% Junagadh)</td>
<td>Breastfeeding within 1 hr of delivery (17% Sidhpur; 32% Junagadh). LBW Rate (21% Sidhpur; 12% Junagadh).</td>
<td>AKHS,I should further analyze the LBW rates in the project areas. Medical staff needs training on: re-calibration of scales and specific activities to manage LBW babies in the community.</td>
</tr>
<tr>
<td></td>
<td>Fully immunized in Junagadh 81% and measles 84%</td>
<td>Fully immunized in Sidhpur 55% and measles immunization 58%</td>
<td>AKHS,I needs to further strengthen the following information, behaviors and services: 1) complete course of IF during ANC; 2) continued follow-up with PPC; 2) early &amp; exclusive breast-feeding up to 6 months; 3) immunization coverage in Sidhpur; 4) use of ORS to treat diarrheas; 6) treatment of STI; and 7) awareness of HIV/AIDS.</td>
</tr>
<tr>
<td></td>
<td>Immunization of Hep B in Junagadh 55%</td>
<td>Immunization of Hep B in Sidhpur 24%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Children with ARI who sought treatment and received standard case mgmt (&gt;85%)</td>
<td>Children with diarrhea who received ORS (16% Sidhpur; 25% Junagadh)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use of permanent FP methods (&gt;60%) and temporary FP methods (&gt;30%)</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Awareness of STIs/RTIs (63% Sidhpur; 42% Junagadh)</td>
<td>Women who receive STI treatment (44% Sidhpur; 38% Junagadh)</td>
<td></td>
</tr>
<tr>
<td><strong>ACCESS</strong></td>
<td>Standard Model: shows that improved health status can be achieved with moderate levels of cost recovery. AKHS,I has direct control over quality of services. Higher cost model due to capital investments.</td>
<td>AKHS,I should further document/disseminate findings on critical factors that influenced the replication and facilitation models.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Replication Model: was able to mobilize the community relatively quickly because they began with broader representation from the outset. AKHS,I has direct control of the quality of the services that are provided and adjustments can be made easily. Level of cost recovery is more sensitive to market forces (e.g., existing unmet demand for health services and competition) than the specific model.</td>
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<td></td>
<td>Facilitation Model: shows that building on and mobilizing existing structures can benefit the community. Supporting community structures created locally ownership and created educated health care consumers who knew what services they should expect to receive. I GHSDP was able to improve the quality of services offered by private providers. GHSDP was not able to train the ANMs who are key providers; it is unclear what level of quality they are able to provide to the community. AKHS,I has much less direct control over the quality of the services provided.</td>
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<tr>
<td></td>
<td>Staff highly committed. LHV 24 hrs Available. High regards from Community. Client friendly environment. High staff turnover</td>
<td>Continue to maintain quality staff</td>
<td></td>
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<tr>
<td><strong>Table 4: Characteristics of GHSDP Service Delivery Models</strong></td>
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<tr>
<td>-------------------------------------------------------------</td>
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<tr>
<td><strong>Strengths</strong></td>
<td><strong>Challenges</strong></td>
<td><strong>Recommendations</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Objective 2: Organization Effectiveness</strong></td>
<td></td>
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<tr>
<td><strong>Org Eff</strong></td>
<td>AKHS,I has largely been a direct service provider. This worked when there was limited private sector competition and weak government systems; this has changed dramatically</td>
<td>Market competition</td>
<td>AKHS,I could further articulate the new roles that it could play in facilitating service delivery and providing technical support. Based on the changing role of AKHS, organization structures and staff competencies would need to be aligned.</td>
</tr>
<tr>
<td><strong>HR</strong></td>
<td>Two external reviews; resulted in an improved compensation package for AKHS, I employees, particularly LHV's. Efforts have been taken to implement creative solutions LHV/MO turnover (e.g., Use of MO interns from MGIMS, re-allocated of MO's time to cover two HC's profit-sharing arrangement with a radiologist).</td>
<td>Staff turnover was a major problem at all levels of the project, although it has been managed fairly well.</td>
<td>Develop a task force to understand what key policy issues AKHS,I should be involved with, either individually or collectively, based on the organization's comparative advantage and Mission</td>
</tr>
<tr>
<td><strong>Capacity Building</strong></td>
<td>AKHS, I conducted a training needs assessment and developed a two-year training plan and strategy.</td>
<td>Since Jan 2000 there has been 45 trainings, due to LHV turnover (40%).</td>
<td></td>
</tr>
<tr>
<td><strong>MIS</strong></td>
<td>The LHVs spend between 30-40hr a month completing registers and forms. Registers are complete, there are some constant errors.</td>
<td>It seems that there is confusion on: 1) the type of data needed for program mgmt and those needed to monitoring health status; 2) linking the data that is recorded with the relevant health actions that are needed to manage the individual case; 3) the time frames which change can be expected among the indicators which would indicate how often data needed to be analyzed; and 4) how to operationalize the M&amp;E plans/logframes.</td>
<td>Mgmt and field staff should be trained on how to develop a log frame approach (Goal, Objectives, Impact, Outcomes, Outputs and Inputs) and how to operationalize. Data needed for program mgmt and those for tracking health status should be identified and clearly link with the program objectives. The data to be collected and how often they are collected/analyzed needs to be consistent with the expected change in objectives. The Team recommends the use of proxy indicators for program mgmt.</td>
</tr>
<tr>
<td></td>
<td>The numbers of registers and forms were reduced. A MIS manual was developed; translated in Gujarati and staff was trained. In 2002 a custom-made software package was developed for the MIS.</td>
<td>Even though the numbers of registers and forms were reduced the pieces of data remained relatively unchanged.</td>
<td>The HH register should serve as a census rather than a monitoring system. It should be updated on a project need basis (e.g., yearly). Since FP information is included in the HH register, a separate FP/RH register should be developed.</td>
</tr>
<tr>
<td><strong>Strengths</strong></td>
<td><strong>Challenges</strong></td>
<td><strong>Recommendations</strong></td>
<td></td>
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<tr>
<td>------------------------------------------------------------------------------</td>
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<tr>
<td>HCs were able to cover between 45-60% of their operating costs; 4/16 achieved almost 100% cost – recovery. HMSC members were very active in managing the HCs. Both areas were able to raise additional revenues other than user fees.</td>
<td>Cross-Subsization model – profits from the DCs was not very effective because DCs could not generate enough surplus to shortfall of funds need by the HCs</td>
<td>HSMCs need support in managing the transition, particularly if there are large drops in utilization, requiring additional revenue streams. HSMC’s need additional training in financial management, particularly standardization of financial registers, accounting of petty cash and credit and simple break-even analysis.</td>
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<tr>
<td><strong>Objective 3: Financial Management</strong></td>
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<tr>
<td>AKHS,I staff need further training on: 1) cost analysis and financial management to assist the HSMCs better maintain their accounts. Further study on potential revenue sources (e.g. family insurance and dairy cooperatives). Conduct more analysis to better understand changing market conditions.</td>
<td></td>
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<tr>
<td><strong>Objective 4: Documentation of Best Practices</strong></td>
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<tr>
<td>VOICES, a series of 5 testimonials highlighting the role and impact of community health workers,. Papers were presented at 2 international conferences. A lessons learned document of the project will be available by the Dec 2004.</td>
<td>Lack of a overall documentation strategy Documentation Officer hired in 2004,.</td>
<td>Develop a documentation plan at the onset of projects, develop mechanisms to ensure documentation throughout the project life and reward staff for their efforts.</td>
<td></td>
</tr>
<tr>
<td>AKHS,I should further document and disseminate findings on : 1) GHSDP’s work with Ismaili and non-Ismaili populations; 2) critical factors for the success of the replication and facilitation models; 3) guidance on inputs needed to scale-up service delivery models; 4) what can be expected in terms of cost-recovery under various market conditions and what are the key factors that enhance sustainability.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>It is strongly recommended that AKHS,I write a journal article on its work in community-managed financial sustainability, particularly the factors that influence financial sustainability and levels that can be expected under certain</td>
<td></td>
<td>Encourage projects to have a research/pilot component with specific M&amp;E plans.</td>
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</tbody>
</table>
IX. Objective 1: Improve Access to and Quality of Key RCH Services

The first GHSDP objective encompasses three main efforts, to:

♦ Broaden the types of services offered by AKHS,I from a traditional MCH approach to a RCH focus
♦ Expand access to RCH services through greater involvement of non-Ismaili populations in the “old villages” and add “new” non-Ismaili villages
♦ Ensure quality services.

A. Broadening the Types of RCH Services

GHSDP aimed to strengthen and/or add key RCH information and services including:

♦ Benefits of institutional deliveries
♦ Need for early post-partum care
♦ Importance of essential newborn care
♦ Options of family planning methods
♦ Knowledge and treatment of STIs/RTIs
♦ Awareness of HIV/AIDS.

The Team found that overall health awareness is fairly high in the community and among the HSMC members, areas included: 1) the importance of post-partum care; 2) weighing the baby within the first 48 hrs after delivery; 3) FP methods, although there is still a preference for IUDs and permanent FP methods; 4) signs and symptoms of STIs with about 40% of women seeking treatment; and 5) awareness of HIV/AIDS modes of transmission and prevention actions, but condom use is still low. In one area the community identified two people living with AIDS and intervened to support the family. During one discussion with the HSMC members, a young member raised AIDS as a key future challenge.

The community health volunteers (CHVs) were quite vocal and had a good community rapport. They were able to correctly transmit key RCH messages through innovative modes of communication. GHSDP is in the process of upgrading some of the most active CHVs to community health workers (CHWs) who will: 1) have more information to provide to the community; 2) be able to do some data collection; and 3) be able to treat minor illnesses.

The LHVs provide outreach services, home visits, and home deliveries, if called. They spend about half of their time in the field focusing on BCC and preventive services; the remaining time is in the clinic providing OPD and clinical RCH services. The Team found that RCH services have been strengthened. However, GSHDP services are highly integrated and provide a comprehensive package (e.g., mental health, communicable diseases, RCH, non-communicable diseases). While this is beneficial overall for the community, it appeared to the evaluators that there was little prioritization of key RCH services in comparison to other services. For example, the staff spoke often of non-communicable diseases and mental health, which while important for the community, do not directly relate to RCH services.
The DCs provide a referral site for the HCs as well as serving other clients. These facilities conduct key tests that enhance diagnosis and treatment of reproductive tract (RTIs) and sexually transmitted infections (STIs) as well as common illnesses such as malaria and TB. Table 5 outlines progress in key “expanded” RCH practices.

Table 5: GHDSP Results: Delivery, Post-partum Care and Newborn Care

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Delivery, Post-Partum Care</td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>% Deliveries by trained personnel (1)</td>
<td>&lt;50(2)</td>
<td>97</td>
<td>98</td>
<td>98</td>
<td>43</td>
<td>62</td>
<td>55</td>
</tr>
<tr>
<td>% Institutional delivery</td>
<td>33.6</td>
<td>51</td>
<td>56</td>
<td>63</td>
<td>69</td>
<td>47</td>
<td>59</td>
</tr>
<tr>
<td>% Women with Post-partum Care</td>
<td>N/A</td>
<td>83</td>
<td>85</td>
<td>86</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Newborn</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>% newborn weighed within 48 hours</td>
<td>N/A</td>
<td>91</td>
<td>94</td>
<td>96</td>
<td>62</td>
<td>66</td>
<td>66</td>
</tr>
<tr>
<td>% of LBW babies</td>
<td>20</td>
<td>9</td>
<td>7</td>
<td>6</td>
<td>21</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>% of babies BF within 1 hour</td>
<td>N/A</td>
<td>N/a</td>
<td>N/a</td>
<td>N/a</td>
<td>9</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>% of babies BF within two hours</td>
<td>12</td>
<td>43</td>
<td>48</td>
<td>51.5</td>
<td>8</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>% of babies BF within eight hours</td>
<td>32</td>
<td>90</td>
<td>91</td>
<td>92</td>
<td>19</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

NFHS, National Family Health Survey, Gujarat state level; AKHS, I Management information System. (1) trained personnel includes doctors, LHV’s and Trained TBAs (2) does not include TBAs

GHSDP trained LHV’s on management of deliveries through the protocols and on-going supervision. TBAs were also trained on clean delivery practices and, through the GOG, were provided clean delivery kits for their use. Thus, GHSDP used the number of deliveries with trained personnel, which included trained TBAs, to track progress. It is unclear why the end of project survey found higher rates of institutional deliveries than deliveries conducted by trained providers in Sidhpur. While the number of deliveries conducted by trained providers was high, based on the CORT data, many cadres of providers provide these services which include:

- GOG providers (9% in Sidhpur; 29% in Junagadh)
- Private providers (56% in Sidhpur; 16% in Junagadh)
- AKHS, I providers (2% in Sidhpur; 3% in Junagadh)
- Trained TBAs (13% in Sidhpur; 32% in Junagadh)
- Untrained TBAs (17% in Sidhpur; 20% in Junagadh)

Although there are a large number of institutional deliveries (about 50%), few are conducted in GHSDP providers (25%). Cost is a key reason why AKHS, I services were not frequently used. In terms of quality delivery services, none of the LHV’s have been trained on or are using partograph to monitor labor. Infection prevention practices in the HCs seemed good. In discussions with staff and CHVs, they could name risk signs, such as short stature and age, but they could only name 1-2 danger signs—knowledge of bleeding was particularly low. A sizable number of deliveries are conducted by TBAs (30% in Sidhpur and 52% in Junagadh), and by private providers particularly in Sidhpur (56%). It would be useful to train TBAs, private providers and even the GOG providers in better management of labor and identification of maternal and newborn danger signs, appropriate for each cadre.
Recommendation # 1: Deliveries
Conduct a cost benefit analysis of providing LHVs for 24-hour availability to provide delivery services when they only conduct a few which makes it difficult to maintain their skills and increases cost of services. If AKHS,I decides to continue to provide delivery services, staff needs to receive training on: use of partograph and maternal danger signs rather than just risks.

It is encouraging to see that there is greater awareness for post-partum care (PPC) within the first week, based on the MIS data. There is no comparable data from the end of project survey on PPC. One factor that influences PPC is the common practice that a primipara leaves the village in the 7th month to delivery at her mother’s house. She usually does not return before the 3rd month after delivery, so there is no opportunity to offer post-partum care.

The project has done a good job in improving awareness of essential newborn care with respect to clean deliveries and keeping the baby warm. GHSDP has been able to reach a high level of newborns being weighed in the first 48 hours after delivery. While there are still some challenges with newborn weights (e.g., scales are only marked in 100gm increments, re-calibration of the scale); extremely few projects have been able to achieve these results. Results in terms of early initiation of breastfeeding is low; less than 10% of women began breastfeeding within the first hour after delivery.

The LBW data are confusing. It appears that 21% of babies were LBW in Sidhpur and 12% in Junagadh. According to the NFHS II the LBW rate for the state was 20%. The MIS data had recorded much lower levels than the CORT Survey. It appears that the rate in Sidhpur has not changed and it is unclear if Junagadh had a LBW of 12% at the outset of the project or if this rate has been unchanged over time. Thus, no clear conclusion can be drawn about progress with respect to the LBW rate. AKHS,I should look further into these data and try to understand the differences in the project sites.

Recommendation # 2: LBW
AKHS,I should further analyze the LBW rates in the project areas. Medical staff needs training on: re-calibration of scales and specific activities to manage LBW babies in the community.

Based on the final evaluation, the total fertility rates in the project sites are 3.3 in Sidhpur and 2.7 in Junagadh. Unmet need for FP is about 20% in each area. As outlined in Table 6 women still prefer permanent FP methods (>60%); the Reproductive and Child Health (RCH) District Survey found only 21% of women in Sidhpur and 51% in Junagadh using permanent methods. It is encouraging to see a growing use of temporary FP methods. In Sidhpur 38% of women were using a temporary method compared to 9.3% in the RCH survey; in Junagadh 33% of women were using these methods compared to 11.3% in the RCH survey.
Table 6: GHSDP Results: Family Planning, RTIs/STIs and HIV/AIDS

<table>
<thead>
<tr>
<th>Indicators</th>
<th>NFHS Gujarat Jan-Dec 1998</th>
<th>AKHI, S MIS Jan-Dec 2002</th>
<th>Jan-Dec 2003</th>
<th>Jan-Sept 2004</th>
<th>Final Survey CORT</th>
<th>CORT Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family Planning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>% Using Permanent Methods</td>
<td>49</td>
<td>45</td>
<td>45</td>
<td>49</td>
<td>62</td>
<td>67</td>
</tr>
<tr>
<td>% Using Temporary Methods</td>
<td>8</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>38</td>
<td>33</td>
</tr>
<tr>
<td><strong>RTI/STI &amp; HIV/AIDS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% pop aware of RTI / STI</td>
<td>N/A</td>
<td></td>
<td></td>
<td>63</td>
<td>42</td>
<td>53</td>
</tr>
<tr>
<td>% of women aware of RTI/STI</td>
<td>N/A</td>
<td></td>
<td></td>
<td>56</td>
<td>47</td>
<td>52</td>
</tr>
<tr>
<td>% women reported s/s RTI/STI</td>
<td>N/A</td>
<td></td>
<td></td>
<td>55/28</td>
<td>60/41</td>
<td>57</td>
</tr>
<tr>
<td>% of women sought treatment</td>
<td>N/A</td>
<td></td>
<td></td>
<td>44/19</td>
<td>38/20</td>
<td>38</td>
</tr>
<tr>
<td>% women aware of HIV/AIDS</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>47.8</td>
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</tbody>
</table>

GHSDP aimed to strengthen the quality of STI/RTI information and services. Knowledge levels were higher in the project sites than in the RCH survey: 63% compared to 43% in Sidhpur and 42% vs 28% in Junagadh. It is encouraging to see a rise in STI/RTI knowledge linked with about 40% of women identifying seeking treatment. This was almost double the rate found in the RCH survey. In discussions with the DCs the Team was told that most clients who come for testing are men, largely because they are symptomatic.

Information on HIV/AIDS is growing in India, but knowledge is not universal; only about half the women interviewed were aware of HIV/AIDS; of these only 67% knew that there was no cure. Knowledge of the modes of transmission was high: 78.5% knew HIV/AIDS could be transmitted through heterosexual relations; 31% by blood transfusions and 28% with dirty needles. AKHS,I seems to have been quite successful in terms of providing information and they have become a main information source in these areas.

GHSDP has been successful in expanding access to and use of RCH services, especially increasing the use of temporary FP methods, promotion of treatment for STIs/RTIs and raising awareness on HIV/AIDS and essential newborn care, particularly weighing newborns. There has been less progress in terms of early/exclusive breastfeeding.

Although most of these services are not “high income-generating services”, the HCs have been able to recover an average of 50% of the operating costs. Staff turnover, particularly of the LHV has been the main weakness in the project because community participation and utilization is dependent on having qualified personnel. Most of the LHV have left because they wanted GOG jobs with more job security and better benefits. Attrition of MOs was due to their desire to be posted in urban areas and/or to open their own private practice. While GHSDP has implemented some innovative solutions, this will continue to be a problem in India.
B. Expanding Access to RCH Services

As stated previously, it was perceived that MG IV’s success was due largely to the Ismaili volunteer base. Thus this objective is specifically aimed at ways to test this successful approach with a non-Ismaili population. MG V aimed to expand access by:

♦ Reaching out to the non-Ismaili populations in the “old villages” with the standard (MG IV) model
♦ Increasing coverage by expanding to 9 villages and additional 15,000 population by 1) replicating the standard model in non-Ismaili villages; and 2) playing a facilitation role, rather than a direct service provider, to increase the effectiveness of existing health structures and systems.

The aim of these approaches was to see if the good health practices that were adopted under the standard model could be maintained in the old villages and improved in the new villages as well as recovering costs.

Before going into detail of each service delivery model, there are some key findings, described below, that were observed by the Team in all the field sites.

♦ Program Elements: The Team found three key elements in each of the models that contributed to their success: 1) effective awareness and demand generation; 2) active community participation; and 3) access to affordable quality services. The operational tactics of how each of these elements was implemented were slightly different across the three models.

♦ High Knowledge Levels: Overall health awareness was high among community members. This was largely due to the CHVs in both Ismaili and non-Ismaili populations. During a field visit, a group of CHVs presented a skit in the local language with key messages about the family responsibilities for ANC to the pregnant woman. The story included the message about how to have effective BCC using local opinion leaders like those who influence family level decision makers.

♦ Behavior Change: Knowledge is the first step in behavior change, but there are many other factors that influence behavior (e.g., attitudes, community norms). It is encouraging that some behaviors have changed (e.g., use of clean delivery kit, ANC check-ups and weighing the newborn within the first 48hrs) as a result of changes in knowledge and community mobilization. However, there are some gaps (e.g., management of LBW and condom use) that still need to be addressed.

♦ Ownership and Sustainability: The community had a high sense of ownership of the HCs; they were aware of the level of cost-recovery in their area, gaps and opportunities in achieving a reasonable level of financial sustainability.
Table 7 outlines coverage of traditional MCH services in both the old and new villages.

### Table 7: GHSDP Results: Key Services with New Populations

<table>
<thead>
<tr>
<th>Indicators</th>
<th>NFHS</th>
<th>AKHS, I, MIS</th>
<th>CORT Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ante Natal Care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% mothers registered in 1st trimester</td>
<td>25</td>
<td>65</td>
<td>62</td>
</tr>
<tr>
<td>% 3 ANC visits during pregnancy</td>
<td>52</td>
<td>88</td>
<td>89</td>
</tr>
<tr>
<td>% TT coverage</td>
<td>67</td>
<td>96</td>
<td>98</td>
</tr>
<tr>
<td>% IFA tablets consumed(90 &amp; more)</td>
<td>59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visit by AKHS,I LHV</td>
<td>N/A</td>
<td>24</td>
<td>39</td>
</tr>
<tr>
<td>ANC Check up AKHS,I personnel</td>
<td>N/A</td>
<td>15</td>
<td>33</td>
</tr>
<tr>
<td><strong>NUTRITION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of children suffering from ARI</td>
<td>11</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>% of children with ARI who received Standard case mngmt.</td>
<td>71</td>
<td>86</td>
<td>81</td>
</tr>
<tr>
<td>% children with diarrhea (2 weeks) who received ORS</td>
<td>29</td>
<td>16</td>
<td>25</td>
</tr>
<tr>
<td><strong>IMMUNISATION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of children (12-23 months) fully immunized</td>
<td>53</td>
<td>55</td>
<td>81</td>
</tr>
<tr>
<td>% children (12-23 months) given measles vaccine</td>
<td>64</td>
<td>58</td>
<td>84</td>
</tr>
<tr>
<td>% of children immunized for hepatitis B</td>
<td>N/a</td>
<td>24</td>
<td>55</td>
</tr>
</tbody>
</table>

As outlined in Table 7, about half of the women surveyed had initiated ANC in the first trimester, which was higher than the RCH data (41%). The majority of women (>60%) in the project areas received three ANC visits. TT coverage in Junagadh was much higher than the RCH survey (82% vs 62%) and Sidhpur had comparable figures. Women consume IFA; however, few completed a total course of treatment; based on the CORT data, only a third of women have consumed 90 or more IFA tablets. This finding is consistent with the RCH survey conducted in both areas. In Junagadh, about a third of women received ANC from the GHSDP LHV while only 15% of women in Sidhpur received ANC from GHSDP staff.

The CORT data found that most women in the project area breastfeed, however, few exclusively breastfeed for 6 month, 24% in Sidhpur and 14% in Junagadh. Immunization is an important component of child health. Junagadh has reached a high level of immunization coverage; some children are not fully immunized. In Sidhpur the coverage is somewhat. This may be due to the fact that in March-April 2004, GHSDP lost 20 LHVs, who took GOG jobs. As a result service utilization dropped and many women may not have gotten immunization cards, which was the basis of the end of project survey.

GHSDP has introduced Hepatitis B immunization for children; the GOG endorses the vaccine but they do not have any supplies. There has been a dramatic uptake of the immunization in Junagadh because they conducted many Hep B camps. The coverage in Sidhpur is lower, but GHSDP should be commended for making this important immunization available to the public.
Recommendation #3: Technical Areas

AKHS-I needs to further strengthen the following information, behaviors and services: 1) complete course of IF during ANC; 2) continued follow-up with post-partum women; 2) early and exclusive Breastfeeding up to 6 months; 3) immunization coverage in Sidhpur; 4) use of ORS to treat diarrheas; 5) treatment of STI; and 6) awareness of HIV/AIDS.

About a third of children under 5 years had ARI; an encouraging sign is that the majority of these children sought treatment and received standard case management. Unfortunately the findings were not so positive for treatment of diarrhea; few children (16% Sidhpur; 25% Junagadh) who had diarrhea received ORS.

GHSDP has been somewhat successful in expanding access RCH services with new populations, particularly increasing use of ANC in the first trimester, immunizations especially Hepatitis B, management of ARI cases. In some of these areas there are differences in performance between Sidhpur and Junagadh that need to be better understood. There has been less progress in terms of consumption of 100 tablets of IFA, exclusive breastfeeding for 6 months, provision of ORS to treat diarrhea.

1. Standard Service Delivery Model: As outlined in Table 3, there are three main components of this model, including: 1) community mobilization through CHVs; 2) community management of the HC by the HSMCs; and 3) quality service delivery.

Community Mobilization: Community mobilization is a critical step in all of the service delivery models. To be effective, efforts need to be taken to fully understand the community’s needs, concerns, capabilities and resources. In the “old villages” there was a perception that the HCs were only available to the Ismaili community. This was due in part to the fact that some of the HCs were in the religious holy places (jamatkhanas) so other segments of the community did not feel comfortable seeking services. In order to overcome this perception, MG V undertook the following activities:

- Specifically selected non-Ismaili CHVs to provide messages to the non-Ismaili populations
- Changed meeting locations to more common places such as the local government buildings
- Made specific efforts, going house to house, to increase involvement and plan activities reflecting more diverse cultural traditions
- Moved the location of the HCs, in some villages, to a more neutral (non-religious) building
- Expanded participation of non-Ismaili and women on the HSMC

The Team Found that the non-Ismaili CHVs have been very active in increasing awareness and prompting adoption of healthy practices. These efforts had resulted in a growing non-Ismaili awareness of health issues and use of services.
**Community Management Committees:** A HSMC is a representative body that has 8-10 members, usually selected by the community, to manage the HC and assist with outreach activities. The two top officials are the Convenor and Secretary. The HSMC meets monthly to monitor the HC activities; specific responsibilities include:

- Managing/supporting HC staff MOs LHV, CHV
- Identifying and mobilizing local resources; Networking with local public and private health care providers, other NGOs, dairy cooperatives, village-level governing bodies.
- Submitting a monthly report of activities and financial statements showing expenditure vs. income
- Maintaining health, demographic and service statistics
- Assisting in maintaining accounts and stock registers.

Currently the HSMC term is for one year, although members can be re-appointed. This has posed some challenges when many members have been replaced at once. AKHS,I aims to have 3 yr terms and a staggered rotation of members to ensure continued institutional memory. As stated previously there has been a dramatic Ismaili out-migration, thus it is vital to expand the use of the HCs by all community members to ensure sustainability. Even in places where there is a small Ismaili population, many feel it is their responsibility to maintain the HC, even for those in the community who cannot pay. For example, the Team found many instances where the HSMC Convenor would pay (provide credit) for services to be provided to very poor members of the community.

Another key strategy was to diversify the representation on the HSMC’s to ensure that the HSMC reflected the community composition. In 2003, the AKHS,I Board approved a motion to increase the representation of non-Ismaili and women members on the HSMC. Table 8 shows the changes in the composition of HSMC over time.

<table>
<thead>
<tr>
<th>Table 8: HSMC Composition</th>
<th>Junagadh</th>
<th>Sidhpur</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSMC Members</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Members</td>
<td>74</td>
<td>91</td>
</tr>
<tr>
<td>Ismaili Members</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>35 (47%)</td>
<td>35 (38%)</td>
</tr>
<tr>
<td>Female</td>
<td>22 (29%)</td>
<td>24 (26%)</td>
</tr>
<tr>
<td>Non-Ismaili Members</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>15 (20%)</td>
<td>28 (31%)</td>
</tr>
<tr>
<td>Female</td>
<td>2 (03%)</td>
<td>4 (4%)</td>
</tr>
</tbody>
</table>

It is clear that Ismaili female representation still needs to improve in Junagadh. Based on discussions with staff and HSMC members true participation of women on the HSMC still needs to be supported.

**Recommendation #4: HSMC Composition**

HSMC composition is in transition and should continue to be supported by AKHS,I, particularly increasing female representation and true participation.
Health Service Delivery: As outlined in Table 3, in this model AKHS,I is a direct service provider. The 13 HCs implementing the standard model are staffed with a LHV who: 1) provides clinical services, outreach and home visits; 2) conducts deliveries in the HC and at home if called; 3) oversees revenue collection; and 4) collects data through registers and cards; and 5) maintains financial, MIS and medical stock records of the HCs for routine reporting purposes. CHVs, women from various ethnic groups in each village, are trained by AKHS,I and responsible for providing promotive care at the household level. Both CHVs and LHVs report directly to the HSMCs. A part-time doctor visits the HC, usually for a half day, 2-3 days a week, to manage more difficult cases. The Team found the health personnel to be very competent and highly regarded by the communities. Quality is further discussed in the next section.

Cost Data: Out of the 13 HCs implementing the standard model, most have been able to achieve a cost recovery rate between 45-60%. Two of the HCs in Sidhpur have achieved almost 100% self-sufficiency. GHSDP has developed a hand-over strategy for these HCs. The two parties have been in discussion for a year and in general they have clarified the roles and responsibilities. AKHS,I will continue to oversee recruitment, training of health personnel and clinical supervision of medical staff. Cost recovery is further discussed under Objective 3.

Interpretation of the cost-recovery data among the service delivery models needs to be analyzed with caution. It is clear that the standard model can recover about 50% or more of its operating costs. However, the key elements of the model: 1) effective awareness and demand generation; 2) active community participation; and 3) access to affordable quality services seem to be the key drivers in each of these models. Cost-recovery levels of an individual HC are largely dependent on market factors.

The standard model shows that improved health status can be achieved with moderate levels of cost recovery. AKHS,I as a service provider has direct control over the quality of the services provided and adjustments can be made easily. This is a higher cost model than the other two approaches because higher levels of capital investments are required. GHSDP has made great strides to involve the non-Ismaili population in the standard model; as a result, the differences between the standard and replication model has lessened over time.

2. Replication Model

The replication model aimed to expand the standard approach, including quality service delivery and community-managed HCs, community mobilization through CHVs in three non-Ismaili villages in Sidhpur. GHSDP conducted a feasibility study of several potential villages to implement this approach. Villages were selected based on: 1) high levels of existing unmet demand for health services; 2) little or no other health providers practicing in the village; and 3) community discussions that indicated a high level of interest (e.g., ability to contribute both capital and human resources towards the construction, management and maintenance of HCs).
Community Mobilization: One of the key differences between the standard and replication model was its community approach. While MG IV created strong HSMC’s among the Ismaili population there was not a clear end date when they would completely manage the HCs. In the replication model, a two-year timeframe was discussed up front so that communities knew that they were expected to be fully responsible for the programmatic and financial sustainability at the outset of the relationship. MoUs were signed clearly outlining roles and responsibilities.

Community Management Committees: The villages were all non-Ismaili, GHSDP did not have to overcome the perception that the HC was only for Ismaili’s. Also because the project had evolved in it’s thinking, there was greater representation of various parts of the community and women. In addition, there were much stronger links formed with the local officials at the outset of the project. Orientation, training and functions of the HSMC are the same as in the standard model.

Health Services: The types of services offered under this model are the same as in the standard model. However, GHDSP looked to use existing space in the replication model rather than building new facilities to lower capitol investments. In one site a room was donated by the dairy cooperative; in another the community was paying the rent for the space. GHDSP provided the medical supplies and equipment and the community provided all the other furnishings. These efforts reduced the cost of this model compared to the standard model because there were fewer capitol costs.

Table 9 outlines the comparisons of all 24 villages in Sidhpur and the three replication villages. Because the sample is so small in the replication villages the indicators are not comparable.
### Table 9: GHSDP Results: Replication Villages

<table>
<thead>
<tr>
<th></th>
<th>NFHS Gujarat 1998</th>
<th>AKHS, I MIS Jan-Dec 2002</th>
<th>CORT- Final Survey Sidhpur 2004 All Villages</th>
<th>Sidhpur 2004 Replication Villages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% mothers registered in 1st trimester</td>
<td>25</td>
<td>46</td>
<td>49</td>
<td>73</td>
</tr>
<tr>
<td>% 3 ANC visits during pregnancy</td>
<td>52</td>
<td>54</td>
<td>62</td>
<td>68</td>
</tr>
<tr>
<td>% TT coverage</td>
<td>67</td>
<td>49</td>
<td>61</td>
<td>97</td>
</tr>
<tr>
<td>% IFA tablets consumed (90+)</td>
<td>59</td>
<td>N/A</td>
<td>32</td>
<td>38</td>
</tr>
<tr>
<td>Visit by AKHS, I LHV</td>
<td>N/A</td>
<td>55</td>
<td>24</td>
<td>29</td>
</tr>
<tr>
<td>ANC Check up AKHS, I personnel</td>
<td>N/A</td>
<td>38</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td><strong>Delivery</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Deliveries by trained personnel (1)</td>
<td>&lt;50(2)</td>
<td>55</td>
<td>44</td>
<td>25</td>
</tr>
<tr>
<td>% Institutional delivery</td>
<td>33.6</td>
<td>38</td>
<td>70</td>
<td>63</td>
</tr>
<tr>
<td>% Women with Post-partum Care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Family Planning</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Using Permanent Methods</td>
<td>49</td>
<td>41</td>
<td>62</td>
<td>36</td>
</tr>
<tr>
<td>% Using Temporary Methods</td>
<td>8</td>
<td>5</td>
<td>38</td>
<td>15</td>
</tr>
<tr>
<td><strong>Newborn</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% newborn weighed within 48 hours</td>
<td>N/A</td>
<td>24</td>
<td>62</td>
<td>63</td>
</tr>
<tr>
<td>% Low Birth Weight babies</td>
<td>20</td>
<td>28</td>
<td>21</td>
<td>26</td>
</tr>
<tr>
<td>% of babies BF within 1 hr</td>
<td>9</td>
<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>% of babies BF within 2hrs</td>
<td>12</td>
<td>8</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>% of babies BF within 8hrs</td>
<td>71</td>
<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>IMMUNISATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of children (12-23mos) fully immunized</td>
<td>53</td>
<td>27</td>
<td>63</td>
<td>46</td>
</tr>
<tr>
<td>% children (12-23 mos) given measles</td>
<td>64</td>
<td>38</td>
<td>58</td>
<td>54</td>
</tr>
<tr>
<td>% of children immunized for hepatitis B</td>
<td>N/A</td>
<td>6</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td><strong>RTI/STI &amp; HIV/AIDS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% pop aware of RTI / STI</td>
<td>N/A</td>
<td>52</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>% women reported s/s RTI/STI</td>
<td>N/A</td>
<td>55</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>% of women sought treatment</td>
<td>N/A</td>
<td>44</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>

NFHS: National Family Health Survey, Gujarat state level; AKHS, I Management Information System. (1) trained personnel includes doctors, LHVs and Trained TBAs.

While the sample size of the replication sites are small, one can see that these villages were either on par with or exceeded the overall results for Sidhpur several area including: ANC, particularly initiation in the first trimester; TT coverage; women who consume 90+ IFA; newborns weighed; and women who sought treatment for syphilis. Areas where the replication sites still need strengthening include deliveries conducted by trained providers, family planning, LBW and early initiation of breastfeeding and immunization coverage.

**Cost Recovery:** This model has demonstrated that cost-recovery can be achieved under certain market conditions; however, sustaining those achievements is a challenge. In the first few years service utilization was very high, largely because there was no competition in the villages. In 2003, several “qualified” private providers started offering services at lower prices in the villages, although the quality is questionable. Thus it has been a challenge for the HC to cover all their costs. They are very aware of the gaps in revenues and have implemented other strategies, other than user fees, to generate revenues.
Two of the replication HCs have achieved almost 100% cost-recovery and will be “handed-over” to the community to manage. This process is the same as the one described previously under the standard model.

The Team believes that it was the combination of the program elements of the model, the lower cost structure of the model and the market conditions that enabled this success. It should be highlighted that these levels of cost-recovery may not be realized under different scenarios - for example where there is a significant competition or in very remote areas where the people may be very poor. AKF,I has already begun to test the principles of the replication model in Maharashtra. The preliminary results are cost-recovery rates of about 40-45%.

While the numbers in the replication site sample are small, significant progress has been made in terms of: 1) ANC, particularly initiation in the first trimester; 2) TT coverage; 3) women who consume 90+ IFA; 4) newborns weighed; and 5) women who sought treatment for syphilis.

Areas where the replication sites still need strengthening include: 1) deliveries conducted by trained providers; 2) understanding and managing LBW; 3) supporting FP; 4) early initiation of breastfeeding and 5) immunization coverage.

The replication model also shows that cost-recovery can be achieved under certain market conditions. This model was able to mobilize the community relatively quickly because they began with broader representation from the outset. AKHS,I as the service provider has more direct control of the quality of the services that are provided.

3. Facilitation Service Delivery Model

This less costly approach to improving health status was undertaken in the Junagadh district because the population was thought to be of a lower economic status than in Sidhpur. Six villages were selected based on the following criteria: 1) geographic contiguity with existing villages; 2) non-Ismaili population; 3) presence of the government and/or private provider; 4) community support; and 5) level of health need.

In this approach GHDSP is not a direct service provider; the aim was to achieve improved health status by facilitating partnerships between the community and providers from both the public and private sectors. GHDSP aimed to enable the community to effectively identify and express their health needs and undertake appropriate actions on their own behalf. It should be noted that cost-recovery was not a component of this model because AKHS,I was not a service provider.

Community Mobilization: As stated previously, community mobilization is a key component to all three models. This process initially takes several months of concerted effort through meetings with village leaders, existing community agents (e.g., TBAs) and health providers to get a sense of the community’s interest in participating in the project and the types and levels of inputs required to carry out selected interventions.
Because the facilitation approach aimed to engage with a wide array of constituencies at
the outset the community mobilization process probably took longer initially than the other
two models. After the assessment phase, one GHSDP social educator was assigned to
two villages from 1998-2001; in 2002 this was reduced to a 1:3 ratio. The GHSDP social
educator was responsible for identifying and supporting existing comm..unity agents and
new CHVs. In addition, the social educator was the linchpin in forming the Village Level
Committee (VLC) and Apex bodies described below. The ratio of social educators to
villages is quite high and raises questions as to the replication of the model and the level of
results that could be expected. In addition, it is unfortunate that a phased out exit strategy
was not implemented. This could have provided useful information in terms of: 1) the
length of time and level of effort required for group formation; 2) efforts required to make
groups fully functional; and 3) recommended mobilizer to village ratios that would assist in
taking this model to a larger scale. CHVs were quite vocal having a good rapport with the
community keeping in mind the cultural limitations. They were found to be active in IEC
activities. Particularly, in the sites having facilitation models, the CHVs played a key role in
organizing immunization camps. They generally have good knowledge about breast-
feeding practices, common illnesses, and antenatal care.

GHSDP did a good job in training community workers to improve awareness and to
change key practices, including: 1) TBAs using clean delivery kits; 2) promotion of
colostrum feeding; and 3) increased demand for immunization coverage.

**Community Committees:** There are two levels of committees in the facilitation sites: a
village level committee (VLC) and an APEX body. The VLCs are a representative body
that has 8-10 members, usually selected by the community. They are established to
promote health awareness, liaise with village and government officials to assist and plan
field activities, mobilize local resources and provide a discussion forum for the community
about health issues. Efforts were made to ensure that the VLCs were representative of
gender, religion and caste. The Team found that overall health awareness is fairly high in
the community and with VLC.

The Team found that the VLC range in functionality and independence. The program had
helped increase their understanding of health issues, what services they should expect to
receive and it provided a way for the community to discuss problems and develop plans of
action. However, it appeared that some of the VLCs were still somewhat dependent on the
GHSDP staff. If a problem arose they would go to GHSDP before going to the medical
supervisor. In addition, unlike the HSMCs these bodies did not have a HC to manage.
After 4 years they were much more active, but like many similar types of groups they were
struggling to see their future role. Groups often begin with a health agenda, but then once
they have achieved some success they want to include other efforts such as micro-
finance.
The Apex Body is a partnership between Village-Level Committees and public and private health care providers. The latter are a group of health care service providers already operational in Junagadh consisting of indigenous healers, semi-qualified medical practitioners and government workers such as Traditional Birth Attendants, Anganwadi Workers (AWWs), Community Health Workers, and Auxiliary Nurse Midwives (ANMs). The Apex Body convenes monthly meetings in which VLC members meet with public and private providers to discuss the health needs of the community and jointly devise strategies to address such needs using the services, infrastructure and human capital already available in the community.

**Health Services:** Under this model, GHSDP is not a direct service provider, thus they have much less control and/or influence over the quality of the services provided. The main service providers in these communities were the GOG and/or private providers. This model employed three main service delivery strategies: 1) converging GOG services; 2) training private providers; and 3) developing a strong referral system.

First, GHSDP worked to bring together the health services provided by the ANM—who is part of the MoH and the AWW—who is part of the ICDS system. The AWW main target population is pregnant and lactating women and children under three. While the focus of the services is on the provision of food and growth monitoring; she is suppose to focus on early childhood development but often does not have time. The ANM is responsible for providing basic PHC services including, ANC check-ups, IFA, immunizations including TT, treatment of childhood illnesses and FP. GHSDP developed a schedule to bring these two sets of services together to foster mobilization for services and enhance efficiencies. While GSHDP trained the AWWs, they were unable to obtain GOG approval to train the ANMs. Since the ANMs are the main GOG service providers and it is widely perceived that their training has been very basic, this is a limitation of the project. The Team was unclear of the level of quality being provided by the ANMs in the 6 villages.

Second, the project found that the private providers were using many “clinically incorrect” practices, such as re-using syringes on several patients. GHSDP decided to train them to enhance their ability to provide better quality services. Initially, the private providers were quite reluctant to participate in the training offered by GHSPD. (Note: The Team feels that if GHSDP had been a direct service provider they would have been in direct competition and could not have played this role). After much discussion, GHSDP designed training, trying to schedule the sessions with the least amount of disruptions for the providers.

Three private providers participated in the training; initially for 3 days and then again for 2 days. While only a few providers were trained, both the providers and the communities commented on the benefits. The providers told the Team that they have seen their client volumes increase as well as revenues. In addition, they feel good about providing quality services that are beneficial to the community. Now the demand for training by other private providers is growing.
Third, GHSDP undertook an extensive process to identify potential referral sites to ensure that these services were of high quality. It was very apparent in community discussions that community members and the providers knew exactly (by name) where they would refer. This is a key strength of the model. Table 10 comparison progress in all Junagadh villages and the six facilitation model villages. Because the sample is so small in the facilitation villages no concrete conclusions can be made.

<table>
<thead>
<tr>
<th>Table 10: GHSDP Results: Facilitation Villages</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFHS AKHS.I MIS CORT-Final Survey</td>
</tr>
<tr>
<td>Gujarat Jan-Dec Junagadh 2004 Junagadh 2004 All Villages Facilitation Villages</td>
</tr>
<tr>
<td>ANC</td>
</tr>
<tr>
<td>% mothers registered in 1st trimester</td>
</tr>
<tr>
<td>% 3 ANC visits during pregnancy</td>
</tr>
<tr>
<td>% TT coverage</td>
</tr>
<tr>
<td>% IFA tablets consumed (90+)</td>
</tr>
<tr>
<td>Delivery</td>
</tr>
<tr>
<td>% Deliveries by trained personnel (1)</td>
</tr>
<tr>
<td>% Institutional delivery</td>
</tr>
<tr>
<td>Reproductive Health</td>
</tr>
<tr>
<td>% Using Permanent Methods</td>
</tr>
<tr>
<td>% Using Temporary Methods</td>
</tr>
<tr>
<td>% pop aware of RTI/STI</td>
</tr>
<tr>
<td>% women reported s/s RTI/STI</td>
</tr>
<tr>
<td>% of women sought treatment</td>
</tr>
<tr>
<td>Newborn</td>
</tr>
<tr>
<td>% newborn weighed within 48 hours</td>
</tr>
<tr>
<td>% Low Birth Weight babies</td>
</tr>
<tr>
<td>% of babies BF within 1hrs</td>
</tr>
<tr>
<td>% of babies BF within 2hrs</td>
</tr>
<tr>
<td>% of babies BF within 8hrs</td>
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<td>IMMUNIZATION</td>
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<tr>
<td>% of children (12-23mos) fully immunized</td>
</tr>
<tr>
<td>% children (12-23 mos) given measles</td>
</tr>
<tr>
<td>% of children immunized for hepatitis B</td>
</tr>
</tbody>
</table>

NFHS, National Family Health Survey, Gujarat state level; AKHS.I, Management Information System. (1) trained personnel includes doctors, LHV’s and Trained TBAs

While the sample size in the facilitation village was small, one can see that these villages performed either on par with or exceeded the overall results for Junagadh. Areas that have progressed include: ANC, particularly initiation in the first trimester; TT coverage; FP, immunization, particularly Hepatitis B. Areas where the replication sites still need strengthening include: deliveries conducted by trained providers, women seeking treatment for STIs/RTIs and early initiation of breastfeeding.
The facilitation model also shows that building on and mobilizing existing structures can be beneficial to the community and the providers. This model was effective in increasing awareness of health issues within the community, supporting community structures to create ownership, engaging the community, and creating educated health care consumers who know what services they should expect to receive. In addition, GHSDP was able to improve the quality of services offered by private providers. This resulted in enhanced health care for the community and greater profits for the providers. Unfortunately GHSDP was not able to train the ANMs who are one of the main service providers; it is unclear what level of quality they are able to provide to the community. Under this model, AKHS,I has much less control over the quality of the services provided.

Table 11 compares the basic strengths and weaknesses of the three service delivery models. These are based on the basic approaches of the models but not the results of implementation of each model component. For example, the HSMCs were formed differently under the standard and replication model, which are outlined in the table. The fact that all HSMCs need more training in financial management is a function of implementation not a particular strength or weakness of the service delivery approach.
<table>
<thead>
<tr>
<th></th>
<th>Standard Model</th>
<th>Replication Model</th>
<th>Facilitation Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strength</strong></td>
<td>Active Ismaili CHVs to build. Long-term presence in community. Links with TBAs and to a lesser extent ANMs/AWWs</td>
<td>Revised community approach building on strengths of standard model. Broader participation of a variety of players at the onset</td>
<td>Different approach with AKHS, facilitating access to care provided by existing public and private providers. Broader community participating from the onset.</td>
</tr>
<tr>
<td><strong>Challenge</strong></td>
<td>Perception that HCs only available to Ismaili. Needed to create a new cadre of non-Ismaili CHVs which was successfully done by the project</td>
<td>Limited existing community volunteers, needed to create a new cadre</td>
<td>More time consuming initially to develop participation of various parties</td>
</tr>
<tr>
<td><strong>Strength</strong></td>
<td>Active HSMC involvement but unclear end date for total HSMC management.</td>
<td>Active HSMC; composition more reflective of community; clear hand-over time frame</td>
<td>VLC has been created and are active</td>
</tr>
<tr>
<td><strong>Challenge</strong></td>
<td>HSMC largely Ismaili members although composition is changing. While much of the groundwork has been done to prepare for the “handing-over of 2 HCs this process has not been dully implemented to date. There may be challenges in managing this process</td>
<td>While much of the groundwork has been done to prepare for the “handing-over of 2 HCs this process has not been dully implemented to date. There may be challenges in managing this process</td>
<td>VLC role in the future is somewhat unclear; they may follow other health groups who move on to other issues. Unlike the HSMC they have no management responsibilities</td>
</tr>
</tbody>
</table>
### Table 11: Strengths and Weaknesses of the Service Delivery Model

<table>
<thead>
<tr>
<th>Strength</th>
<th>Standard Model</th>
<th>Replication Model</th>
<th>Facilitation Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GHSDP</strong> is able to ensure high quality services, particularly access to preventive services with moderately high levels of cost-recovery. Using existing structures which reduce operating costs, thus making cost-recovery more feasible.</td>
<td></td>
<td></td>
<td>Utilizes existing structures; aims to build capacity and public-private-community partnerships. Trained private providers and community workers (e.g., TBAS, AWW) to improve practices.</td>
</tr>
<tr>
<td><strong>Management burden to retain staff, provide technical oversight, liaise with HSMCs and address cost-recovery gaps.</strong> AKHS,I has little control over the quality of services offered by other providers.</td>
<td>Management burden to retain staff, provide technical oversight, liaise with HSMCs and address cost-recovery gaps. AKHS,I has little control over the quality of services offered by other providers.</td>
<td></td>
<td>AKHS,I has little direct influence over the quality of the services provided by existing community, public and private providers.</td>
</tr>
<tr>
<td><strong>Fairly high cost model due to capitol investments.</strong></td>
<td>Lower cost model than standard because it builds on existing infrastructure.</td>
<td></td>
<td>Low cost model in terms of AKHS, I involvement, costs of this model are not comparable to the other models because AKHS,I is not a direct service provider.</td>
</tr>
<tr>
<td><strong>High cost structure potential replication.</strong></td>
<td>Lower cost model than standard because it builds on existing infrastructure; cost-recovery is more feasible. Easier to replicate because clear time frame has been established. Success of replicating this model depends on positive market conditions.</td>
<td></td>
<td>Could be replicated in other areas, however the level of effort needs to be more clearly defined in terms of mobilize/village ratio. Successful replication depends on access to quality services, which varies by location and AKHS,I has little direct influence on it.</td>
</tr>
</tbody>
</table>
GHSDP should be commended for testing these service delivery models, which look quite promising. Although the data available in these areas are quite small, indications are positive. AKHS,I has already begun trying to incorporate the principles of the replication model in another site. There are key insights that should be shared within India and internationally. In order for AKHS,I to be able to do this, they need to further refine the critical factors that contributed to this success and this information needs to be well documented and disseminated.

C. Quality of RCH Information and Services
The Team found the GHSDP health personnel, both LHVs and MOs, highly qualified and well-regarded by the community. In fact, during discussions with the community/HSMC members there was a sharp reaction about turnover of the local LHV; there was a general demand not even to transfer senior LHVs. The physical infrastructure of the HCs was clean and they were well maintained. Staff did report any shortages of drugs, supplies, or IEC materials. Most of the HCs had ample IEC materials, appropriate for the population, displayed in the waiting rooms for clients. The HCs were well organized, infection practices seemed good and registers were well kept.

AKHS,I has developed service protocols and staff have been trained on these materials. Regular GHSDP supervision has also contributed to ensuring quality service delivery. In general the Team found that the quality of the services was quite high. Some areas to be address include: 1) understanding maternal danger signs; 2) recalibration of newborn scales; 3) use of partograph; and 4) STIs/RTIs and HIV/AIDS.

While utilization of the AKHS,I services has varied over the life of the project, the final survey found that about 19% of households in Sidhpur and 16% in Junagadh had visited the AKHS,I in the last three months for any health problem. Overall satisfaction rates were high; 95% in Sidhpur and 87% in Junagadh. The majority of clients (85%) found that the services were affordable and the facilities were well-maintained. Equipment was rated slightly higher in Sidhpur (93%) than (81%) in Junagadh. All the health providers were rated very high on being friendly and skilled; LHVs were rated slightly higher than the MOs. The quality of services was perceived as quite high; 93% in Sidhpur and 86% in Junagadh. The facilities scored slightly lower with, convenient hours (84%), waiting times (82%) and location (83%)

All the DCs visited by the Team had their Statutory Boards displayed. The DCs are highly recognized by the GoG as a quality pathological service provider. They were certified as a GoG approved lab to test for TB and malaria.

GHSDP has been very successful in expanding access to and use of RCH services. As outlined in Tables 5 and 6 there were significant behavior changes resulting in improved health outcomes. See Recommendation #3 for Technical areas that need strengthening.
X. Objective 2: Organizational Effectiveness and Capacity Building
The second objective relates to AKHS,I’s internal capacity to deliver quality information and services as well as the system efficiencies needed to support the project. This objective will be discussed in terms of: 1) the organizational effectiveness in a changing market place; 2) human resource management; and 3) capacity building.

A. Organizational Effectiveness
Since its inception, AKHS,I has largely been a direct service provider. This was a sound approach when there was limited private sector involvement in health care and weak government systems. During the project life of MG V there has been tremendous changes in the operating environment including:

♦ Large numbers of Ismaili out-migration in villages that has reduced the Ismaili volunteer basis
♦ Changing demographics of villages
♦ Economic liberalization: growth of a highly unregulated market competition
♦ Communal riots, 2002
♦ Natural disaster, 2001

AKHS,I, particularly at the field level, has tried to be flexible and institute creative solutions to the shifting marketplace conditions. However, in light of these changes, AKHS,I as an institution has to determine its future role in the ever changing Indian landscape. AKHS,I could choose to:

♦ Continue to be a direct service provider
♦ Serve as a facilitator strengthening the effectiveness and linkages among communities and the health system
♦ Become a technical resource for other organizations and/or
♦ Researcher to answer key questions.

These are not mutually exclusive roles, but AKHS,I will need to consider which roles they would like to play and prioritize their relevant importance.

Recommendation #5: AKHS,I Role
AKHS,I could further articulate the new roles that it could play in facilitating service delivery and providing technical support. Based on the changing role of AKHS, organization structures and staff, competencies would need to be aligned.
B. Human Resource Management

Staff turnover was a major problem at all levels of the project, although it has been managed fairly well. This was a main issue highlighted in the MTR. As a result, two external reviews (2002 and 2003) were conducted; a limited number of revisions have been put into place. Job descriptions were developed, induction manual was prepared and staff was trained. Improved compensation packages were offered to AKHS,I employees, particularly at the LHV level. However, in 2003, the AKHS,I Board instituted measures to reduce personnel-related overhead costs to improve cost-efficiency of the organization.

Efforts have been taken to implement creative solutions for LHV/MO turnover. For example, GHSDP is in the process of upgrading the CHVs to CHWs that could reduce the workload of LHVs and it would partially fill in the gap where the HC/LHV is not present. GHSDP has contracted with MO interns from MGIMS/Sevagram; the only drawback is that they can only serve for 1.5 years. The project also did a time series analysis; as a result they re-allocated MO's time to cover several centers and address the community's need for quality care. Consultant turn-over was also high at the DCs. One approach taken in Junagadh was to develop a profit-sharing arrangement with a radiologist. He received 66% of the income and AKHS,I received a third. This way the radiologist was more motivated to work longer and refer clients to the AKHS,I DC.

C. Capacity Building

As recommended by the MTR, AKHS,I conducted a training needs assessment and developed a two-year training plan and strategy. Capacity building trainings have included: 1) executives/sr. managers on performance appraisal techniques; 2) program staff, field managers, field officers, and community organizers on training methodologies; 3) LHVs, LHV Supervisors, CHVs and Social Educators on Adolescent Health/Family Life Education; 4) TBAs on safe delivery practices in the six new villages in Junagadh District; and 5) CHVs and AWW on Infant Feeding and Childhood Nutrition for Effective Growth Monitoring. Since Jan 2000 there has been 45 trainings, due in part to the large turnover of LHV staff (40%); so new LHVs needed training.

The Health Professional Development Center (HPDC) was established in 1999; it has limited viability due to location training center resources and limited resources to operate as a full-fledge training institute. An internal task force was appointed as per the MTR recommendation, but HPDC still remains underutilized. AKHS,I has approached other agencies in the Aga Khan Development Network to utilize this centre as a training resource. Training conducted at HPDC has included: 1) activity based budgeting; 2) essential health services packages; 3) BCC; 4) diagnosis and treatment of RTI/STI; and 5) family life education. There was no training on the broader approach to alternative health financing as recommended by the MTR.
XI. Objective 3: Increased Financial Sustainability

Financial sustainability will be discussed in terms of: 1) community level management/HSMC; 2) health centers; 3) diagnostic centers; 4) cross-subsidization; and 5) alternative health financing schemes. It should be highlighted that there is a constant tension between balancing the quality of services with cost-recovery goals; meaning that many practices could be undertaken to generate revenues that are not consistent with quality service provision. In addition, there is also tension between providing preventive and promotive services that generate little income and curative services that generate the bulk of revenues. AKHS,I should be commended for prioritizing quality services first.

A. Community/HSMC Level

The community, particularly among the HSMC, had a high sense of ownership of the HCs. They were aware of the level of cost recovery in their area, gaps and opportunities in achieving a reasonable level of financial sustainability. In-kind contributions are significant (e.g., time of HSMC 30hrs a month) that should be included as revenue source. The HSMC members have divided the roles and responsibility among themselves. The Convenor is usually responsible for verifying the revenues collected, maintaining the financial register and depositing funds in the bank account. The Team thought that it was very useful that the financial statements are integrated into the MIS. While the financial management by the HSCM is fairly good, they still need more financial training (e.g., standardization of financial registers, accounting of petty cash and credit and simple break even analysis). As previously stated, representation on the HSMC is in transition; the numbers of non-Ismaili and female HSMC members are growing which should continue to be supported.

Recommendation #6: Health Sector Management Committees

HSMCs still need support in managing the transition, particularly if there are large drops in utilization, requiring additional revenue streams. HSMC’s also need additional training in financial management, particularly standardization of financial registers, accounting of petty cash and credit and simple break even analysis).

B. Health Center

Figure 1 presents the rates of cost-recovery achieved by HCs over the life of the project. In general HCs were able to cover between 45-60% of their operating costs. However, it should be noted that this level of cost-recovery has been achieved without any rise, and in some cases a reduction of user fees while it is clear that costs have increased (e.g., inflation, increased salary costs). The HSMCs decide the rates for user fees; they have preferred to solicit donations or undertake special initiatives to cover the gap of resources rather than increase user fees.
The dip in Junagadh revenues is due to a drop in utilization at Malia HC which fell from 68% in 2001 to 46% in 2002. This drop in utilization and revenue generated occurred because there was no doctor posted at the Malia HC from May to October 2002.

The Team was encouraged to find that AKHS,I has developed plans to cover the cost recovery gap in selected HCs after the life of the project. It should be noted that cost recovery levels varies by HC. Four of the HCs (4/15) receive 100% cost recovery. All these facilities were in Sidhpur; two HCs implemented the standard service delivery model and two HCs replication model.

Figure 2 outlines which costs revenues were able to cover and costs that were not met. In Junagadh HCs, the revenues generated were able to cover about a third of their costs. These revenues have enabled the HCs to cover key fix costs (e.g., rent, utilities, maintenance) and variable costs of drugs and supplies, but covering medical personnel salaries is difficult. In Figure 2, the blue line indicates the level of cost-recovery achieved as an aggregate for Junagadh in Jan-Dec 2003 and Jan-Sept 2004. It demonstrates that this level of cost recovery can cover basic administrative costs (e.g., utilities, rent, maintenance) and variable costs of supplies. There is a significant gap between, but there is a gap between the revenues generated and the cost of health personnel.
In general the Sidhpur cost recovery rates are higher, although it appears that the income had actually fallen between 2003 and 2004. This may be due to two factors: 1) large numbers of LHV’s left the project in Feb 2004 which greatly affected utilization; and/or 2) the 2004 figure is only for 9 months compared to 12 month in 2003. As shown in Figure 3 salaries have increased between the two years.

![Figure 3: Distribution of Costs Covered by Revenues, Sidhpur](image)

C. Diagnostic Centers
Overall, the diagnostic centers seem to be self-sufficient. The revenues generated by the DC enabled them to cover most of their costs; in some years (2000, 2001) they generated profits outlined in Figure 4.

![Figure 4: Cost Recovery among Diagnostic Centers](image)

The main reason for reduction in revenue generation was the turnover of consultants (e.g., radiologist, pathologists), many of whom have opened their own practices. In addition, the market is highly unregulated so there is little incentive to provide quality services that directly benefit the client. A common practice is that the pathologist gives a “kickback” to the physicians to ensure client referrals. One way that GHSDP has responded to this practice is by directly marketing to the community; this resulted in a 22% self-referral in Junagadh.
D. Cross-Subsidization
The project was designed to have the DCs be highly profitable in order to address the gap in revenues at the HC level. While the diagnostic centers have been able to recover their costs, they have not been able to generate high levels of profits. Thus, the cross-subsidization model has not been very effective. Figure 5 shows the average cost recovery by HC and DCs per year.

Figure 5: Overall Cost Recovery with combined HC and DC Revenues by District

It should be noted that the original project design also planned to develop polyclinics and maternity homes that would provide revenue streams for cross-subsidization. However, the feasibility study of these facilities found that these efforts would not be profitable and thus were dropped from the project in 2000.

E. Community-based Health Financing Schemes
The project tried to expand the sustainability of the HCs by looking for other revenue streams. In Junagadh GHSDP worked with corporations to support special camps for communities and in some cases corporate employees. In collaboration with Ambuja Cement Foundation (ACF), GHSDP conducted a health needs assessment in the Ambuja adopted villages. Based on these results it also conducted sessions on the RCH and importance of Vitamin A for foundation staff. Gujarat Heavy Chemical Limited sponsored five camps for their contractors working in the factory and GHCL adopted villages. Table 12 shows the number of camps conducted, beneficiaries and revenues generated.
Table 12: Revenues Generated by Corporate Supported Camps

<table>
<thead>
<tr>
<th>Date</th>
<th>Types of Camps</th>
<th>Total beneficiaries</th>
<th>Total revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/04</td>
<td>Gen health check-up camp</td>
<td>194 - Adopted Villages</td>
<td>1,940 Rs ($45)</td>
</tr>
<tr>
<td>08/04</td>
<td>Hemoglobin testing, Blood glucose</td>
<td>1,136 - Contract labor</td>
<td>45,440 Rs ($103)</td>
</tr>
<tr>
<td>01/04</td>
<td>Ob/Gyn</td>
<td>123 Adopted villages</td>
<td>1,230 Rs ($28)</td>
</tr>
<tr>
<td>10/03</td>
<td>Blood Glucose</td>
<td>61 Employees</td>
<td>1,220 Rs ($20)</td>
</tr>
<tr>
<td>07/02</td>
<td>Blood Glucose</td>
<td>303 Adopted villages</td>
<td>9,090 Rs</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1,817</td>
<td>58,920 Rs ($1339)</td>
</tr>
</tbody>
</table>

GHSDP also tried to provide a family (OPD) insurance plan, ranging from 150-200Rs depending on the package. This plan provides a free annual medical check-up, waiver of registration fees, and discounts on medicines, delivery services, and diagnostic tests. It was unclear to the Team if these packages are being offered at a profit or a loss (e.g., unclear how the cost of the package relates to expenditures) so pricing of these packages needs further study. There has been limited success with utilization of these packages. In Junagadh 182 families used the AHF scheme in 2003 generating 30,000Rs ($685). In 2004 the rate dropped, largely because of the drop in Malia, from 54 families to one; revenues fell to 27,300Rs ($620). There are also students’ packages of Rs 25 for Malia hostel students that include waivers of MOs fees and health check-up once a quarter. In 2003 there were 187 students who opted for the package generating 4,675Rs in revenues; in 2004 206 students used the packages generating 5150Rs ($117). Table 13 outlines the AHF packages used and revenues generated in 2003 and 2004.

Table 13: Use of Insurance Plans, Junagadh

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jonpur</td>
<td>58</td>
<td>8700</td>
<td>198</td>
<td>69</td>
<td>10350</td>
<td>235</td>
</tr>
<tr>
<td>Gangecha</td>
<td>33</td>
<td>4950</td>
<td>113</td>
<td>55</td>
<td>8250</td>
<td>188</td>
</tr>
<tr>
<td>Chitravad</td>
<td>38</td>
<td>5700</td>
<td>130</td>
<td>19</td>
<td>2850</td>
<td>65</td>
</tr>
<tr>
<td>Malia</td>
<td>54</td>
<td>8100</td>
<td>184</td>
<td>1</td>
<td>150</td>
<td>3</td>
</tr>
<tr>
<td>Badodar</td>
<td>40</td>
<td>6000</td>
<td>136</td>
<td>5</td>
<td>750</td>
<td>17</td>
</tr>
<tr>
<td>Sangodra</td>
<td>36</td>
<td>5400</td>
<td>123</td>
<td>33</td>
<td>4950</td>
<td>113</td>
</tr>
<tr>
<td>Sub-total</td>
<td>259</td>
<td>30150Rs.</td>
<td>$685</td>
<td>201</td>
<td>27300 Rs.</td>
<td>$620</td>
</tr>
</tbody>
</table>

Note: 2004 data is only for Jan –Sept, 04

In Sidhpur the project developed strong relationships with the dairy cooperatives. Many dairy cooperative members have agreed to have 1 pasica removed from their payment to go for AKHS,I health services. Dairy cooperatives have provided between 15,000R to 30,000R ($682) annually to GHSDP; in turn GSDHP provides health services to these members. This has been an effective cost-recovery strategy. However, the rate (30,000R) has not been adjusted since the beginning of the project. Due to inflation and higher health care costs, the dairy cooperative expenditures are now exceeding their contributions, thus AKHS,I needs to renegotiate the levels of contributions with dairy cooperative scheme. It should be noted that some dairy cooperative members are not interested in the dairy scheme because they are quite poor.
In Sidhpur, GHSDP also tried to provide a family (OPD) insurance plan; it provided similar services for 200Rs. Table 14 outlines the beneficiaries and revenues generated from these packages.

Table 14: Use of Insurance Plans, Sidhpur

<table>
<thead>
<tr>
<th>Health Center</th>
<th># Plans 2003</th>
<th>Rs Revenues</th>
<th>$ Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methan</td>
<td>40</td>
<td>8000</td>
<td>182</td>
</tr>
<tr>
<td>Samoda</td>
<td>3</td>
<td>600</td>
<td>13</td>
</tr>
<tr>
<td>Punasan</td>
<td>15</td>
<td>3000</td>
<td>68</td>
</tr>
<tr>
<td>Vashila</td>
<td>12</td>
<td>2400</td>
<td>55</td>
</tr>
<tr>
<td>Meloj</td>
<td>572</td>
<td>114,400</td>
<td>2600</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>642</strong></td>
<td><strong>128,400 Rs.</strong></td>
<td><strong>$2914</strong></td>
</tr>
</tbody>
</table>

In summary, in 2004 Junagadh was able to raise 58,902 Rs ($1339) from the corporate camps; 27,300 Rs. ($620) from the insurance programs; and 5,150Rs ($117) from student packages totaling 91,370 Rs. ($2076) additional resources. Sidhpur was able to raise 45,000Rs from the dairy cooperatives and 128,400 Rs ($2914) for a total of 173,400 Rs. ($3941) in the same year.

It does not appear that AKHS,I has not systematically identified the range of alternative financing mechanisms that could have been used to generate funds to support operations or even capital costs. While different mechanisms have been accessed as opportunities came available, there have been systematic efforts to define the range of approaches. (e.g. taxation, insurance, donation/grants, endowment, user fees/cost-sharing, fund-raisers, etc. and to assess the extent to which any could be developed to raise revenues).

**Recommendation #7: Financial Management/Market Analysis**

Staff need further training on cost analysis and financial management to assist the HSMCs to better maintain their accounts. Further study is need to identify and assess potential revenue sources (e.g. family insurance and dairy cooperatives). Staff needs to conduct more cost-analysis to understand which revenue generating activities should be prioritized.

GHSDP has been able to achieve moderately high levels of cost recovery because of the project’s constant focus on this aspect. The Team found five key indications that influence the level of recovery that can be achieved from user fees which include: 1) population size/density; 2) demand for health services; 3) size of marketability to pay; 4) market share; 5) cost and pricing structure. Table 15 summarizes the characteristics that contribute to various levels of cost-recovery.
<table>
<thead>
<tr>
<th>Factors</th>
<th>High Recovery 70-100%</th>
<th>Moderate Recovery 40-70%</th>
<th>Low Recovery Less than 40%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Size</td>
<td>Lg Population/dense)</td>
<td>Moderate</td>
<td>Moderate-Small</td>
</tr>
<tr>
<td>Location</td>
<td>Urban, large towns</td>
<td>Large Towns</td>
<td>Rural, remote,</td>
</tr>
<tr>
<td>Level of Competition</td>
<td>Limited market competition, AKHS,I has lg market share.</td>
<td>Limited market competition, AKHS,I has lg market share.</td>
<td>Limited competition, AKHS,I has moderate market share.</td>
</tr>
<tr>
<td></td>
<td>High market competition but AKHS,I has lg market share.</td>
<td>High market competition AKHS,I has mod-low market share.</td>
<td>High competition with AKHS,I has moderate to low market share.</td>
</tr>
<tr>
<td>Existing Demand</td>
<td>High Demand for Services</td>
<td>Moderate to high demand</td>
<td>Low to moderate</td>
</tr>
<tr>
<td>Cost of Services</td>
<td>Moderate cost structure and appropriately priced services</td>
<td>High cost structure</td>
<td>Cost structure high because it is expensive to transport supplies and difficult to get staff posted to these areas</td>
</tr>
<tr>
<td>Ability/Willingness to Pay</td>
<td>High to moderate</td>
<td>Moderate</td>
<td>Moderate to Low</td>
</tr>
</tbody>
</table>

**High levels of cost recovery from user fees** can be achieved in situations where there is a high demand for health services among large, densely populated areas. Market factors such as income base, level of competition, cost structure and overall size of the market. For example, if competition is high and a provider has a large market share then they may be able to achieve high rates of cost recovery. Additionally if the cost structure and pricing is competitive in areas where there is high demand and ability to pay for services, revenues can be large.

**Moderate levels of cost-recovery from user fees** can be due to any combination of the following conditions: 1) moderate to small populations in towns (less densely populated); 2) low demand for health services; 3) fierce competition with different cost-structures (highly unregulated markets) resulting in moderate market share; 4) moderate market that can pay for services; and 5) overpriced services.

**In remote rural areas**, even if demand for services is high, cost-recovery is limited because the cost-structure is much higher than in urban areas. In addition, many of these areas have lower demand and ability to pay for services.
XII. Objective 4: Documentation

While some efforts were made to document the facilitation and replications, there did not seem to be an overall documentation strategy for the project. This was also noted in the MTR. In 2004, a Documentation Officer was hired. VOICES, a series of 5 testimonials highlighting the role and impact of community health workers, have been developed and are currently being distributed to key stakeholders. Two papers were presented at 2 international conferences. Lastly, a lessons learned document of the project will be available by Dec 2004.

Specific Areas that GHSDP should document are provided below.

♦ GHSDP’s work with Ismaili and non-Ismaili populations; any similarities or differences that influenced changes in health seeking behaviors.
♦ The Critical factors that facilitated or inhibited the implementation of replication and facilitation models
♦ What can be expected in terms of cost-recovery and what are the critical factors that influence sustainability?
♦ Case studies and good practices studies, particularly the partnerships with dairy cooperatives and corporate partnerships.

Recommendation #8:

Develop a documentation plan at the onset of projects, develop mechanisms to ensure documentation throughout the project life and reward staff for their efforts.

AKHS,I should further document and disseminate findings on: 1) GHSDP’s work with Ismaili and non-Ismaili populations; 2) critical factors for the success of the replication and facilitation models; 3) guidance on inputs needed to scale-up the replication and facilitation models;

The Team strongly recommends that AKHS,I write a journal article on its work in community-managed financial sustainability, particularly the factors that influence financial sustainability and levels that can be expected under certain situations.

AKHS,I is well-suited to test interventions and service delivery approaches. Thus The Team encourages AKHS,I to develop some of these skills in house and design research components within their larger projects. The Interns employed, as MOs would be one cadre that could contribute to these efforts. Specific areas could include:

♦ Alternative health financing schemes;
♦ Management of LBW babies in the community and related health outcomes;
♦ Successful hand-over of the HCs to HSMCs

Recommendation #9: Research/Testing Interventions

Encourage projects to have a research/pilot component with specific M&E plans.
Section Five: Cross-Cutting Issues

XIII. Partnerships
GHSDP was very successful in developing relationships with a range of partners. It was clear throughout the field visits that the program had been implemented with the partners and they felt a great deal of ownership. Table 16 outlines the key partnerships formed by GHSDP.

<table>
<thead>
<tr>
<th>Partnership with</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>AKF</td>
<td>There seems to be a good relationship between AKF and AKHS.I. There has been greater collaboration between AKF and the AKHS.I Board over the life of the project. There are regular meetings among AKHS.I and AKF staff.</td>
</tr>
</tbody>
</table>
| Other Aga Khan Institutions | Aga Khan Rural Support Program trained staff on PRA  
Aga Khan Planning and Building Services, India has collaborated with AKHS.I on water and sanitation as well as hygiene promotion  
Aga Khan Educational Services and AKHS.I worked in schools to introduce FLE |
| GOG              | GoG provides immunization, IFA, clean delivery kits  
GoG Schools for FLE |
| Dairy Cooperatives | In Sidhpur the project developed a worker-based scheme. Dairy cooperatives have withdrawn 1 pica from their members pay to provide for health services; This has totaled between 15,000-30,000Rs annually depending on the year. |
| Corporations     | Ambuja Cement Foundation (ACF), GHSDP conducted a supported camps in adopted villages  
Gujarat Heavy Chemical Limited sponsored five camps for their contractors working in the factory and GHCL adopted villages |
| Communities      | MoU with community committees. There seems to be HSMC, VLC Corporate partnerships. The approach to establishing the partnership and subsequently building capacity. Activities that have been instrumental in strengthening partner capacities such that relationships established are mutually satisfactory and beneficial. Changes in the partner capacities and constraints to developing durable partnerships |

XIV. New Tools, Guidance, Standards
There are four key areas where GHSDP developed materials that were beneficial to the project and may extend to others. First, GHSDP developed health protocols for their staff, based on MoH and international standards. This was done because there were no practical protocols in the local language- Gujarati. The staff was trained on these protocols and they were available at the HC for reference. The Team felt that the protocols are high quality materials; they are appropriate for use by the GoG and others working in the state. Second, an induction manual was developed as a result of the MTR. This proved to be beneficial, particularly because of the staff attrition. Third, GHSDP was able to use many existing BCC materials from GoG and other NGOs, which enhanced their coverage and reduced the costs for GHSDP. In addition, GHSDP developed a set of 100 flashcards on RCH services which can be shared/used by other projects. GHSDP has used the PRA techniques for its community based health program.
XV. Policy Advocacy
AKHS,I was quite successful in increasing the use of disposal syringes among the private providers and GoG. GHSDP was able to do this by providing disposal syringes in the market and serving as a role model. While AKHS,I is having on-going discussions with GoG, most of the focus under GHSDP has been focused largely on local collaboration, with few policy advocacy efforts at the district or state level. AKHS,I may want to consider key issues that they can influence at the district/state level policy such as understanding community needs, operationalizing community committees, and facilitation model.

Recommendation #10: Policy Advocacy
Develop a task force to understand what key policy issues AKHS,I should be involved with, either individually or collectively, based on the organization’s comparative advantage and mission.
Section Six: Program Management

XVI. Project Management
Although there has been staff turn-over, AKHS has taken many steps to orient new staff and try to maintain the institutional memory of the project. Managers seem to have good rapport with their team members and the community. AKHS, I is to be commended for its ability to be flexible and willingness, based on data, to make difficult decisions. The project has used the DIP as a management tool. It has been revised based on the comprehensive review in 2000; comments from the MTR, and application for no-cost extension.

XVII. Monitoring and Evaluation (M&E) System
At the beginning of MGV the project had 14 registers, 12 forms and 5 cards. After the 2000 internal review, which revised the goals of the project, the MIS was reviewed. This process began before the MTR in 2001, but there were several recommendations made by the MTR regarding the MIS system. The main issue raised by the MTR was the lack of valid denominators for the calculation of the data. See Annex D for specific MTR recommendations.

In 2001-02 there were several meetings to review the MIS formats and make revisions. The information was duplicated in several of the 14 registers; thus the number of registers was reduced from 14 to 5 (e.g. household, maternal, child, OPD and financial). Similarly the number of forms was reduced from 12 to 5. A MIS manual, that clearly outlined the definitions of the data to be collected, was developed and translated in Gujarati. In 2002 a custom-made software package was developed for the MIS. Standard formats were developed and data was collected on a quarterly basis. However, the Team found that while the numbers of registers and forms were reduced the pieces of data remained relatively unchanged; the same amount of data was consolidated into fewer reporting formats.

A. Data Collection
Data collected by the LHV's both monthly and quarterly. The LHV's spend between 30-40 hrs a month completing registers and forms. In general, registers are complete, the errors that do exist seem to be either due to transferring data from the register to a form or they are confusions about the definition. For example there was confusion over the definition of eligible women who could use FP methods. Most of these areas are constant so training/supervision should be able to address these issues.

B. Use of Data for Decision-Making
It seems that there is confusion on: 1) the type of data needed for program management at different levels and monitoring health status; 2) linking the data that is recorded with the relevant health actions that are needed to manage the individual case; 3) the time frames which change can be expected among the indicators which would indicate how often data needed to be analyzed; and 4) how to operationalize the M&E/logframes.
At the Health Center Level, the LHVs are very careful about recording the data, but it seemed to be a very mechanical activity. There seems to be gaps between recording the data and the associated health actions. For example, there were cases where a baby weighed less than 2500g but no special efforts were made for home-based management. In addition, it did not appear to the evaluators that the data was being used to implement target interventions. For example, the CHV would have a list of women to target for FP services (e.g., short birth intervals, many children, post-partum women) instead of providing messages to everyone where she could use her time most efficiently and optimize her effectiveness. On the other hand, AKHS,I will need to define the revenue-generation services that link with child and reproductive health. It is noted that these services do not generate full financial recovery and ensure program sustainability.

At the Project Site Level, each office has developed a monthly report because they did not feel that the quarterly MIS tool meets their needs. Thus, the staff are using the monthly report as a management tool but not the quarterly report. Staff meets with the LHVs and CHVs to review data. While using MIS reports to measure targets achieved is a positive step, it can also be used for mid-course corrections if the MIS includes and interprets process indicators. The main reason may be an absence of a log frame approach. There are still many issues with the software and staff have to keep two sets of data for verification purposes. While it is beneficial that services are well integrated, it seems that there is little prioritization on key issues. In addition, minimal cost-analysis is being conducted at the field offices. This may be due to a combination of insufficient time and limited capacity.

At AKHS,I and AKF,I level there is lots of output data, sometimes too much. Some of this information is useful to make decisions, but some is duplicative and does not add a lot of value at this level. For example, immunization coverage rates for each vaccine (5 pieces of data) could be combined to fully immunized children or % of children who have received measles at a given time. This would reduce the burden of the system and help direct AKHS,I's and AKF,I's efforts in supporting the field. Since a new MIS was established in 2001/2002 there has been some difficulty getting reliable data, particularly due to kinks in the customized computer software system. This has improved over the life of the project.
**Recommendation #11:** Management information System,

11a. The management and the field staff should be trained on how to develop a log frame approach (Goal, Objectives, Impact, Outcomes, Outputs and Inputs) and how to operationalize the process.

11b. Program objectives should drive the MIS. Data needed for program management and those for tracking health status should be identified. Each piece of data should be clearly linked with the program objectives.

11d. Data to be collected and the timing of how often they are collected/analyzed needs to be consistent with the expected change in objectives. For example, the number of FP users can be collected monthly and gives some indication if more or less people are coming for services; on the other hand, CPR can only be assessed every 2-3 years because it will take that long to see any changes. The Team recommends the use of proxy indicators for program management.

11e. A monitoring system is meant to give an indication if the project activities are moving in right direction towards the objectives so management decision can be made. In order to assess these trends a 100% sample-or census is not required. The Team recommends that the HH register should serve as a census rather than a monitoring system. This would mean that it could be updated on a project need basis (e.g., yearly). Since information on FP is included in the HH register, a separate FP/RH register should be developed to monitor monthly utilization.

**XVIII. Staffing and Supervision**

As stated throughout the document, a high rate of staff attrition has been a challenge for the projects. This has placed a tremendous burden on the project management team in Ahmedabad who are responsible for recruitment, training, monitoring and overall support. With that said, the staff seemed to have managed this transition well. For example, both the project co-ordinators in the field sites had been with GHSDP for less than a year, but the Team found them extremely knowledgeable about the project.

**XIX. USAID Program Management**

This program was awarded by the USAID PVC office. This office was re-organized due to political changes in Washington and the Matching Grants Program has been disbanded. As a result there has been little involvement from USAID/Washington. A presentation was given to USAID/India, but no one from the Mission has ever visited the project.
Section Seven: Challenges, Lessons Learned and Recommendations

The key challenges of the project are described below.

♦ Striking an optimal **balance between quality health care and financial sustainability**. Some services may generate high levels of revenues but may not represent good clinical practice or reflect the best quality of care.

♦ **Retaining high quality clinical staff**, at the field level. LHV s continue to leave for GoG jobs that have better job security and benefits. High levels of staff attrition decrease service utilization and revenues; it also places undue strain on core project staff who have to continually orient and re-train new staff.

♦ **Mobilizing marginalized** groups has not resulted in high levels of participation of these groups on community committees, although there is some evidence that the level of participation is increasing.

♦ **Involving private providers**, particularly in the facilitation model villages and ensuring better **quality of their services**.

♦ **Continuing to motivate CHVs** to conduct preventive activities without remuneration.
Lessons Learned: At the Field Level

♦ **Broader community participation** from the onset has greater returns in terms of improved health outcomes and levels of cost-recovery.

♦ **BCC activities** should be very specific, rooted in the predominant practices of each village and relate to interventions key to achieving long-term health gains.

♦ **Planned involvement** of communities in the management of HC and marketing of services can have a positive impact on service utilization and operational sustainability.

♦ **Hand-Over:** While it is laudable to completely hand-over all responsibilities of the HCs to the HSMCs, most have limited capacity with respect to recruitment, training and clinical supervision of medical personnel. There are also legal and financial issues that can probably only be addressed by AKHS. This is a vital but time-consuming process that should begin at least a year before any transition is made.

Lessons Learned: At the System Level

♦ **User Fees:** Complete recovery of costs solely through levying user fees is not a realistic expectation of a rural HC; access to other revenue streams are needed.

♦ **Competition:** Market competition has a major influence on cost-recovery. Highly unregulated markets allow unethical practices which skew the price differential among providers.

♦ **Staffing:** High staff turnover hinders program implementation and service utilization.

♦ **Service Delivery Model:** AKHS success in improving health outcomes is related to its approach, rather than the specific populations (e.g., Ismaili vs. non Ismaili).

Lessons Learned: At the Institutional Level

♦ **Organizational Roles:** AKHS can play various roles to enhance the quality of services and facilitate improvements in health status (e.g., service provider, facilitator, researcher and technical support)

♦ **Service delivery Models:** The facilitation and replication models are interesting approaches that should be further explored, documented and tested in other settings.

♦ **Internal Partnering:** Working with other Aga Khan Services provides additional human resources, skills and networks that have benefited AKHS.

Table 17 provides a summary of the key Recommendations of the Evaluation Team.
### Tables 17: Key GHSDP Recommendations

<table>
<thead>
<tr>
<th>Areas</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal &amp; Delivery Care</td>
<td>Recommendation #1: Conduct a cost benefit analysis of providing LHV's for 24 hour availability to provide delivery services when they only conduct a few which makes it difficult to maintain their skills and increases cost of services. If AKHS/I decided to continue to provide delivery services, staff needs to be trained on use of partograph and maternal danger signs rather than just risks.</td>
</tr>
<tr>
<td>Newborn</td>
<td>Recommendation #2: Further analyze the LBW rates in the project areas. Medical staff needs training on: recalibration of scales and specific activities to manage LBW babies in the community.</td>
</tr>
<tr>
<td>Technical</td>
<td>Recommendation #3: Further strengthen the following information, behaviors and services: 1) complete course of IF during ANC; 2) continued follow-up with post partum women; 2) early and exclusive Breastfeeding up to 6 months; 3) immunization coverage in Sidhpur; 4) use of ORS to treat diarrhoeas; 5) treatment of STI; and 6) awareness of HIV/AIDS.</td>
</tr>
<tr>
<td>HSMC</td>
<td>Recommendation #4: HSMC composition is in transition and should continue to be supported by AKHS/I, particularly increasing female representation and ensuring full participation.</td>
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<tr>
<td></td>
<td><strong>Objective 2: Organization Efficiency and Capacity Building</strong></td>
</tr>
<tr>
<td>Org Roles</td>
<td>Recommendation #5: AKHS/I could further articulate the new roles that AKHS/I could play in facilitating service delivery and providing technical support. Based on the changing role of AKHS/I, organization structures and staff competencies would need to be aligned.</td>
</tr>
<tr>
<td></td>
<td>Recommendation #10: Develop a taskforce to understand what key policy issues AKHS/I could be involved with, either individually or collectively, based on AKHS/I’s comparative advantage and mission.</td>
</tr>
<tr>
<td>Capacity Building MIS</td>
<td>Recommendation #11a: Staff should be trained on how to develop a log frame approach (Goal, Objectives, Impact, Outcomes, Outputs and Inputs) and how to operationalize the process.</td>
</tr>
<tr>
<td></td>
<td>Recommendation #11b: Program objectives should drive the MIS. Each piece of data should be clearly linked with the program objectives.</td>
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<td></td>
<td>Recommendation #11c: Which pieces of data are collected and how often they are collected/analyzed needs to be consistent with the expected change in objectives. The team recommends the use of proxy indicators for program management.</td>
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<td></td>
<td>Recommendation #11d: The HH register should serve as a census rather than a monitoring system. This would mean that it could be updated on a project need basis (e.g., yearly). Since information on FP is included in the HH register, a separate FP/RH register should be developed to monitor monthly utilization.</td>
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<tr>
<td></td>
<td><strong>Objective 3: Financial Sustainability</strong></td>
</tr>
<tr>
<td>Financial Mgmt</td>
<td>Recommendation #6: HSMCs still need support in managing the transition, particularly if there are large drops in utilization, requiring additional revenue streams. HSMCs needed additional training in financial management-standardization of financial registers, accounting of petty cash and credit and simple break-even analysis.</td>
</tr>
<tr>
<td></td>
<td>Recommendation #7: Staff need further training on: cost analysis and financial management to assist the HSMCs better maintain their accounts. Further study is need to identify and assess potential revenue sources (e.g., family insurance and dairy cooperatives). Staff needs to conduct more cost-analysis to understand which revenue generating activities should be prioritized.</td>
</tr>
<tr>
<td></td>
<td><strong>Objective 4: Documentation of Best Practices</strong></td>
</tr>
<tr>
<td>Document Best Practices</td>
<td>Recommendation #8: Develop a documentation plan at the onset of projects, develop mechanisms to ensure documentation throughout the project life and reward staff for their efforts. AKHS/I should further document and disseminate findings on: GHSDPs work with small &amp; non-Islam populations; critical factors for the success of the replication and facilitation models; guidance on inputs needed to scale-up the replication and facilitation models; what can be expected in terms of cost recovery under various market conditions and what are the key factors that enhance sustainability. The Team strongly recommends that AKHS/I write a journal article on its work in community-managed financial sustainability, particularly the factors that influence financial sustainability and levels that can be expected under certain situations.</td>
</tr>
<tr>
<td>Research</td>
<td>Recommendation #9: Encourage projects to have a research/ pilot component with specific M&amp;E plans, some areas may include: alternative health financing schemes; management of LBW babies in the community and related health outcomes; successful hand-over of the HCs to HSMCs.</td>
</tr>
</tbody>
</table>
ANNEX A

TERMS of REFERENCE

PROJECT: Matching Grant 1998 (MG98): Gujarat Health Systems Development Project (GHSDP)


Program Context: The Aga Khan Foundation USA (AKF USA) has been funded by the Matching Grants Program of the Office of Private and Voluntary Cooperation Bureau for Democracy, Conflict and Humanitarian Assistance (DCHA/PVC) of the United States Agency for International Development (USAID) for a grant entitled Promoting Health Reform in Three Countries in Central and South Asia and East Africa through Institutional Capacity Building, Partnership Strengthening and Documenting and Disseminating Best Practice.

The goal of MG98 is, “to achieve sustainable improvements in the health status of women and children in South and Central Asia and East Africa”.

To accomplish this goal, the MG98 seeks to:

- Introduce or refine policies that increase efficiency, effectiveness and sustainability of basic health services;
- Enhance prospects for sustainable financing of basic health services at the local or regional level; and
- Improve the accessibility, quality and equity of basic health services.

Towards achieving these goals, AKF supports the following six projects that build the institutional capacity of local and international health organizations, strengthen partnerships among stakeholder institutions and document and disseminate best practices for informing health policy and practice at local, national and international levels:

- Gujarat Health System Development Project implemented by Aga Khan Health Service, India (AKHS, I).
- Building Capacity for Restructuring and Reforming the Health Sector (BCRR) in Gorno-Badakshan Autonomous Oblast (GBAO) implemented by AKF (Tajikistan) in collaboration with the Department of Health (DoH)/GBAO.
- Rationalizing Pharmaceutical Policies, Practices and Management (RPPM) in GBAO implemented by AKF (Tajikistan) in collaboration with the DoH/GBAO.
- Improving Reproductive Health and Child Survival Services (RHCS) in GBAO implemented by AKF (Tajikistan) and DoH/GBAO.
- Strengthening the Institutional Capacity of AKHS East Africa’s Community Health Department to Support Organizations Working in Community Health, implemented by AKHS, East Africa.
- Management, Monitoring and Institutional Learning, implemented by AKF USA.
The project in India contributes to the goals of MG98 by aiming to achieve the following distinct objectives:

- To enhance the quality and extend the range of diagnostic and essential health services in the existing program areas and expand coverage to an additional 15,000 residents, thus serving a total population of 86,000;

- To enhance the organizational effectiveness of AKHS,I by introducing comprehensive systems for human resource development/training, management and finance;

- To increase the financial sustainability of the network of AKHS,I facilities in Sidhpur and Junagadh; and

- To document and share project outputs, best practices and lessons learned with key stakeholders (communities, government, AKF, USAID, NGOs, private sector providers)

**OBJECTIVE of CONSULTANCY:** Carry out a final evaluation of the MG98-funded project in India by supplying the information specified below through reading appropriate materials, visiting the project sites and interviewing AKF and AKHS,I staff and selected beneficiaries. The format of the written evaluation report must adhere to the following outline:

1.1. Evaluation Profile Sheet
- PVO name and Cooperative Agreement number: Aga Khan Foundation USA, FAO-A-00-98-00078-00
- Country program site(s) and name(s) of principle partner(s). Junagadh and Patan Districts of Gujarat State, India. Aga Khan Health Service, India (AKHS,I)
- Duration of Grant: October 1998-December 2004
- Beneficiary Populations: 84,000
- PVC-AKF match totals: $
- PVC-AKF match funds disbursed to date: $
- Date DIP first approved by PVC: 1998 (and subsequent changes)
- Evaluation Start Date and End Date: October 25th-November 4th, 2004

1.2. Summary of Conclusions and Recommendations
Provide a short summary of the evaluation’s main conclusions and recommendations.

1.3 Program Background
- Brief history of the project in India
- Rationale for the project
- Status of interventions in October 1998
- Project objectives and strategies
- Principal partners
- Current implementation status
• AKF’s health and development plans after the MG98 grant ends

1.4. Program Effectiveness

1.4.1. Program Approach
Provide a brief description of the general approach of AKF and AKHS,I in implementing the project. Determine if this approach appears to be sound and how it has evolved over the project period. Include information on mid-course corrections and the effectiveness of the same.

1.4.2. Achievement of Objectives
For each project objective, provide evidence (citing data sources) or criteria for judgment to assess progress made. In particular:

• Identify major strengths and weaknesses in achieving each objective and summarize them in a chart (using the template attached to this Terms of Reference in Annex A).
• Discuss the impact of the projects on the target population
• Assess the impact of the projects on strengthening AKHS,I’s capacity to deliver sustainable services.
• Discuss unintended impacts to date, whether positive or negative.
• Assess how main strategies and activities have been effective in achieving results

1.4.3. Cross-Cutting Issues

Partnerships
Assess the status of AKF’s partnership with AKHS,I through MG98 according to the following criteria:

• The extent to which it has contributed to building the institutional capacity of AKHS,I at the district level, citing evidence;
• The extent to which it has contributed to building the institutional capacity of AKF (India), citing evidence;
• Operational constraints that precluded developing institutional capacity in AKF (India) and AKHS,I.

Examine the status and outcomes of AKHS,I’s partnerships with community based organisations, local NGOs and the government according to the following criteria:
• The approach to establishing the partnership and subsequently building capacity
• Activities that have been instrumental in strengthening partner capacities such that relationships established are mutually satisfactory and beneficial
• Changes in the partner capacities and constraints to developing durable partnerships
• Attach partnerships table (Annex C)
New Tools, Guidance, Standards
- Identify what tools, guidance or standards were developed under the project through MG98
- Assess the usefulness of these materials for the project and if they merit broader distribution, citing at least one specific example.

Advocacy
- Describe any advocacy efforts undertaken in the project through MG98 and cite evidence of how they might have established/strengthened specific health policies and programs at the local, state or national level.

Sustainability and Coverage
- Assess the extent to which the target population has access to the services and health-related products made available through MG98.
- Cite gaps in coverage (by district)
- Cite available evidence of the financial sustainability of the services and health-related products provided through MG98.
- Cite available evidence of progress being made towards diversifying resources to sustain the services and health-related products made available through MG98
- Assess project sustainability and scale-up plans:
  ♦ Magnitude of the program: size of beneficiary population by age and sex
  ♦ Progress and potential for scale up or replication
  ♦ Progress made towards achieving sustainability particularly of services provided through MG98
  ♦ Need and evidence of progress being made towards diversifying resources to sustain the services made available through MG98

1.4.4. Program Lessons Learned and Recommendations.
- Outline main lessons learned that would be applicable beyond the project site.
- Provide recommendations for AKF, AKHS,I and USAID, stemming from findings made during this evaluation.

1.5 Program Management

1.5.1. Management Approach
- In the context of the program approach (described in 1.4.1) and country situation, assess if overall program management has been flexible, appropriate and adequate. Cite evidence to support judgments.

1.5.2. Quality and Status of the Detailed Implementation Plan (DIP)
- Assess the quality of the DIP in terms of clarity, adequacy of objective statements, indicators, baseline studies, description of project activities.
- Comment on the utility of the DIP as a management tool for AKF and AKHS,I.
1.5.3 Financial Management
- Describe the financial management and control system in place at AKF, and as practiced by the AKF, the MG98 project manager.
- Make recommendations on ways to improve financial management of AKF-funded health projects in India (with special reference to USAID-funded).

1.5.4 Monitoring and Evaluation (M&E) System
- Describe the M&E system used for the MG98 grant.
- Does this M&E system supply accurate, reliable and timely performance data? Cite specific examples from implementing the MG98 grant.
- Describe and assess changes brought about in the capacity of AKHS,I (if different from the information supplied in 1.4.3.) and other partners (particularly the community) through MG98 to conduct monitoring and evaluation activities and use data for decision-making and advocacy.
- Describe and assess the quality and utility of special studies undertaken to assess program operations or impact.

1.5.5 Information Systems
- Describe what information technologies (if any) AKHS,I has access to as a result of participating in the MG98 grant.
- Describe any steps that have been taken by AKF and AKHS,I to share program information and learning

1.5.6 Staffing and Supervision
- Have the numbers and types of staff working for both AKF and AKHS,I been adequate? Support answers with evidence.

1.5.7 PVC Program Management
- Assess USAID/PVC’s oversight and backstopping of the MG98 grant.

1.5.8 Program Management Lessons Learned and Recommendations
- Discuss management lessons learned and recommendations for AKF (India), AKHS,I and USAID/PVC.

1.6 Evaluation Methodology
- Briefly present the methodology for assessing various aspects of the project
- Describe the evaluation team member’s roles and responsibilities
- Outline the methods of data collection and analysis used their constraints and data limitations
- Attach a list of places visited, persons/groups interviewed for the evaluation
- Attach a list of documents reviewed/analyzed

1.7 Evaluation Report
Prepare a full and complete report using a 12-point font for the report’s narrative sections and a 10-point font for any tables and charts. Attach a list of relevant attachments which at a minimum should include:
• The final SOW
• DIP Matrix
• Partnerships Table
• List of places visited, persons/groups interviewed for the evaluation persons/ groups interviewed
• Select bibliography
# ANNEX B: Calendar of Evaluation

<table>
<thead>
<tr>
<th>Date</th>
<th>Activities</th>
<th>Facilitator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oct 25</strong></td>
<td>* Discussion on Terms of Reference review</td>
<td>Nemat Hajeebhoy; Dr. S. Mukherjee</td>
</tr>
<tr>
<td></td>
<td>*GHSDP Overview</td>
<td>Nemat Hajeebhoy</td>
</tr>
<tr>
<td></td>
<td>* Progress against objectives (DIP); Review Documents</td>
<td>Dr. S. Mukherjee</td>
</tr>
<tr>
<td><strong>Oct 26</strong></td>
<td>* Meeting of Review Team with Senior AKHS,I staff</td>
<td>Mr. N. Malaviya</td>
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<tr>
<td></td>
<td>Presentation on cost recovery</td>
<td>Jai Merchant</td>
</tr>
<tr>
<td></td>
<td>Presentation on Endline Study; MIS</td>
<td>CORT Team; Dr. Faizi</td>
</tr>
<tr>
<td><strong>Oct 27</strong></td>
<td>Introduction to Field Team</td>
<td>Mr. Sarat Kumar</td>
</tr>
<tr>
<td></td>
<td>Presentation on Key Facts, Achievement and Challenges</td>
<td></td>
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<tr>
<td></td>
<td>Village visit, HC, Diagnostic center</td>
<td></td>
</tr>
<tr>
<td><strong>Oct 28</strong></td>
<td>* Village visit: Facilitation village</td>
<td>Mr. Sarat Kumar</td>
</tr>
<tr>
<td><strong>Oct 29</strong></td>
<td>* Debrief: Field Team</td>
<td>Evaluation Team</td>
</tr>
<tr>
<td></td>
<td>* Introduction to the Field Team</td>
<td>Mr. Anshul Kumar</td>
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<td></td>
<td>Presentation on Key Facts, Achievement and Challenges</td>
<td>Mr. Anshul Kumar</td>
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<td></td>
<td>Visit Replication model</td>
<td>Mr. Anshul Kumar</td>
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<td><strong>Oct 31</strong></td>
<td>Presentation and discussion on handing over of HCs</td>
<td>Mr. Anshul Kumar</td>
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<td>Visit to Methan/Meloj &amp;DC</td>
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<td><strong>Nov 1</strong></td>
<td>Interaction with Team</td>
<td>Dr. S. Mukherjee, Mr. Anshul Kumar</td>
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<td></td>
<td>Debrief : Field Team</td>
<td>Evaluation Team</td>
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<td><strong>Nov 4</strong></td>
<td>*Debriefing for AKF and USAID</td>
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# ANNEX C: Revised Detailed Implementation Plan

**Objective 1** Enhance the quality and extend the range of diagnostic and essential health services in the existing program areas and expand coverage to an additional 15,000 residents

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<tr>
<td><strong>1.1</strong> Ensure Uniform package of EHS for the target population by March 2004</td>
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<td>a. Building capacities of personnel</td>
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<td>b. Create Infrastructure</td>
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<td>c. Ensure implementation</td>
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<td><strong>1.2</strong> To improve overall quality of EHS by March 2004</td>
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<td><strong>1.2.1</strong> Technical Quality</td>
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<td>a. Ensure that all the protocols are available for reference in the local language.</td>
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<td>b. Ensure that all the professionals are well trained in protocols for EHS</td>
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<td>c. Develop/Field test and finalize quality assurance checklist for EHS.</td>
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<td>d. Ensure that all the staff are trained in QA.</td>
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<td>e. Ensure standard operating procedures in place.(Manual, training, Implementation)</td>
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<td><strong>1.2.2</strong> Skills &amp; competence dev. of personnel</td>
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<td>a. Develop training modules on:</td>
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<td>b. Trainings to staff/volunteers to ensure minimum standards</td>
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<td><strong>1.2.3</strong> Physical Infrastructure</td>
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<td>a. Establish standard waste disposal system in all health centers</td>
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<td>b. Ensure standard package of equipments and facilities</td>
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<td>c. Improve system of maintenance of equipments, facilities</td>
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<td>d. Strengthen monitoring system</td>
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<td><strong>1.3</strong> Extension of EHS package to additional 15000 population</td>
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<td>a. Revise the list of quality care providers</td>
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<td>b. Rapport with Public Private Providers (PPP)</td>
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<td>c. Conduct study on health seeking behavior</td>
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<td>d. Capacity building trainings for private providers, TBAs, AWWs, ISM practitioners</td>
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<td>e. Implementation plan</td>
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<td>f. Identify &amp; develop future trainers</td>
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<td>g. Strengthen supervision &amp; monitoring system</td>
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<td>h. Evolve an Exit strategy with the help of the community</td>
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<td>i. Formation of apex body with representation of PPP, Community &amp; AKHS</td>
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<td>j. Develop service delivery mechanism</td>
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<td>k. Establish referral systems</td>
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<td>l. Preparation &amp; signing of MOU</td>
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<td>b. Training of village health committee members</td>
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<td>1.4 <strong>Enhance range and quality of DC services by mid 2003</strong></td>
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<td>a. Assess present quality / range of services provided / Identify gaps XXX XXX XXX XXX XXX XXX XXX XXX XXX</td>
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<td>b. Do feasibility for adding new services - ELIZA, Serum Electrolytes, Histopathology/HIV/HepB XXX XXX XXX XXX</td>
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<td>c. Add/initiate new services XXX XXX XXX XXX XXX XXX XXX XXX XXX</td>
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<td>d. Capacity building/trainings XXX XXX XXX XXX XXX XXX XXX XXX XXX</td>
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<td>e. Develop/field test quality assurance check lists/SOPs for DC XXX XXX XXX XXX</td>
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<td>f. IT network - connect DC with PAKH. XXX XXX XXX XXX XXX XXX XXX XXX XXX</td>
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<th>1.5 <strong>Expand range of services to include STI/RTI/HIV/AIDS awareness</strong></th>
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<tr>
<td><strong>A. In existing areas.</strong> XXX XXX XXX XXX XXX XXX</td>
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<tr>
<td>a. Develop MIS, Supervision/ Monitoring system XXX XXX XXX XXX XXX XXX</td>
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<td>b. Develop/field test/ Finalize protocols/ IEC guidelines XXX XXX XXX XXX</td>
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<tr>
<td>c. Develop service delivery mechanisms (prevention/Diagnosis/ treatment for RTI/STI/HIV) XXX XXX XXX</td>
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<td>d. Pilot test FLE in 4 centers XXX XXX XXX XXX XXX</td>
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<td>e. Document experiences/make revisions XXX XXX XXX XXX XXX</td>
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<td>f. Replicate in all existing sectors XXX XXX XXX XXX</td>
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| **B. In New areas.** XXX XXX XXX XXX XXX |
| a. Capacity building/trainings XXX XXX XXX XXX |
| b. Develop MIS, Supervision/ Monitoring system XXX XXX XXX XXX |
| c. Develop service delivery mechanisms (prevention/Diagnosis/ treatment for RTI/STI/HIV) XXX XXX XXX |
| d. Initiate implementation. XXX XXX XXX XXX |

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<th>1.6 <strong>Develop IEC Strategy</strong></th>
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<tr>
<td>a. Undertake communication need assessment XXX</td>
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<td>b. Develop core team for carrying IEC activities XXX XXX</td>
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<td>c. Develop IEC packages XXX XXX</td>
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<td>d. Explore possibilities for marketing the IEC developed capacities XXX XXX XXX XXX</td>
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**Objective 2. Enhance the organizational effectiveness by introducing comprehensive systems for human resource development, management and finance**

<table>
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<tr>
<th>2.1 <strong>Introducing comprehensive HRM system</strong></th>
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<td>a. Organizational review XXX</td>
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<td>b. Compensation review XXX</td>
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<td>c. Appraisal system XXX</td>
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<td>d. Comprehensive audit of HRM in AKHSI XXX</td>
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<td>e. Review &amp; revise HR policy XXX XXX</td>
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<td>f. Prepare HR plans XXX XXX</td>
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<td>g. Analyze/develop role-task skill list XXX XXX XXX</td>
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<td>h. Review &amp; revise JDs XXX XXX XXX XXX</td>
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<td>i. Identify/recruit required staff XXX XXX XXX XXX XXX XXX XXX XXX</td>
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<td>j. Establish performance management system XXX XXX</td>
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<th>2.2 <strong>Establish &amp; operationalize HPDC by September 2003</strong></th>
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<tr>
<td>a. Develop strategies for HPDC utilization XXX XXX XXX XXX XXX XXX</td>
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<tr>
<td>b. Develop marketing strategies for HPDC XXX XXX XXX XXX XXX XXX</td>
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<tr>
<td>c. Organize training program at HPDC XXX XXX XXX XXX XXX XXX</td>
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### 2.3 Capacity building of staff & volunteers

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<th>a. TNA for all levels</th>
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<tr>
<td>b. Strengthen the core team for future programs</td>
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<td>Mental health, Gender in RCH, HIV/AIDS</td>
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<td>c. Continue to develop need based training packages</td>
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<td>d. Conduct prioritized training</td>
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<td>e. Develop MIS system for effective training &amp; follow up of training activities</td>
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<td>f. Measure effectiveness of trainings</td>
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### 2.4 Develop IEC strategies to address the emerging program needs

| a. Review baseline for KABP of communities | XXX |
| b. IEC needs assessment | XXX |
| c. Develop packages for IEC | XXX | XXX |
| d. Develop Core teams | XXX | XXX |
| e. Consolidate the activities to develop IEC resource centre | XXX | XXX | XXX | XXX |
| f. Market IEC services | XXX | XXX | XXX |

### 2.5 To Improve the Management systems

| a. Strengthen/establish Health Management Information System | XXX | XXX | XXX | XXX |
| b. Strengthen/establish logistics system | XXX | XXX |
| c. Institutionalizing program review meeting (quarterly) |
| XXX | XXX | XXX | XXX | XXX | XXX | XXX |
| d. Strengthen program planning/supervision/monitoring in field | XXX | XXX | XXX | XXX | XXX | XXX | XXX |
| e. Capacity building | XXX |

### 2.6 To improve finance

| a. Institutionalize & monitor use of activity based budget | XXX | XXX | XXX | XXX | XXX | XXX | XXX |
| b. Train staff & volunteers | XXX | XXX | XXX | XXX |
| c. Implement activity based reporting with narrative reports | XXX | XXX | XXX | XXX | XXX |
| d. Periodical review and follow up | XXX | XXX | XXX | XXX |
| e. Institute a system of maintaining self-sustainability analysis at each facility level. | XXX | XXX | XXX | XXX | XXX | XXX | XXX |

### Objective 3: Improve financial sustainability of network of facilities in the project area

#### 3.1 Take over of at least 4 old HCs by the community by the end of the Project

| a. Signing of Memorandum of understanding between AKHS,I and the Community representatives | XXX | XXX |
| b. Training of the community especially vis-à-vis. Finance, Inventory Management, Day to day administration & personnel management. | XXX | XXX | XXX | XXX | XXX |
| c. Phase wise take over |
| 1. Inventory management | XXX | XXX |
| 2. Day to day administration | XXX | XXX |
| 3. Finance Management | XXX | XXX |
| 4. Personnel Management | XXX | XXX |
| 5. Marketing of Services | XXX | XXX | XXX | XXX | XXX | XXX |
| 6. IEC session with the community | XXX | XXX | XXX | XXX | XXX | XXX | XXX | XXX |
| d. Regular monitoring & evaluation of program |
| XXX | XXX | XXX | XXX | XXX | XXX | XXX | XXX | XXX |
| e. Ensure the quality of program through on going refresher trainings | XXX | XXX | XXX | XXX | XXX | XXX |

#### 3.2 AHF mechanisms developed and introduced in at least two additional facilities

| a. Study the various AHF mechanism | XXX | XXX | XXX |
| b. Pilot test and adopt AHF mechanisms for two additional villages | XXX | XXX | XXX |
| c. Review on regular basis | XXX | XXX | XXX | XXX |
### 3.3 Increase the utilization & operational self-sufficiency for the network of health facilities in Gujarat by 10% at the end of 2003 and 15 % by Dec 2004.

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<tbody>
<tr>
<td>a.</td>
<td>Social Marketing of HC &amp; DC services ongoing XXX XXX XXX XXX XXX XXX XXX X</td>
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<tr>
<td>b.</td>
<td>Develop package of services for HC &amp; DC XXX XXX</td>
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<td>c.</td>
<td>Sensitization on initial cost saving mechanism XXX XXX XXX XXX XXX XXX XXX X</td>
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### 3.4 Close Amrapur Health Centre

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<tbody>
<tr>
<td>a.</td>
<td>Initiate dialogue with HC community XXX</td>
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<td>b.</td>
<td>Strengthen the HSMC for taking up facilitator role through trainings XXX</td>
</tr>
<tr>
<td>c.</td>
<td>Network with PPP for service XXX</td>
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<tr>
<td>d.</td>
<td>Close HC (Only Curative Service) XXX</td>
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<tr>
<td>e.</td>
<td>Take up facilitators role &amp; continue with prevention &amp; promotion services XXX XXX XXX XXX XXX XXX XXX X</td>
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### Objective 4 Documentation and share project outputs, outcomes, best practices and lessons learnt with key stakeholders (Communities, government, AKF/USAID, AKDN institutions, NGOs, Private sector providers)

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<tbody>
<tr>
<td>a.</td>
<td>Formation of PRC &amp; advisory committee with representation of stakeholders XXX XXX XXX</td>
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<tr>
<td>b.</td>
<td>Form a core group for monitoring all the documentation activities of the project. XXX XXX</td>
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<td>c.</td>
<td>Organize &amp; participate in Workshops / Seminars /review meeting X X X X X X</td>
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| d. | Carry out special studies & case studies on  
1. AHF XXX XXX  
2. New Villages especially focusing on community mobilization & organization, PPP, SHG. XXX  
3. TOT and Counseling skill training XXX |
## ANNEX D: Progress to Date

<table>
<thead>
<tr>
<th>Objectives</th>
<th>MTR Recommendations</th>
<th>Progress Since MTR</th>
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<tbody>
<tr>
<td>Quality Essential Health Services (EHS) and diagnostic facilities expanded to serve a total population of 86,000</td>
<td><strong>#1</strong> – AKHS, I should carry out a survey of 3 randomly selected health facility populations to determine project performance.</td>
<td>In 2002 household enumeration was conducted in 6 villages – 3 in each site. This was followed by a full-fledged household enumeration in all 55-project villages. The HH registers are updated on a monthly basis. HMIS reviewed and revised. MIS manual developed/staff trained HMIS reviewed and revised. While the number of registers has been reduced, there is still too much information required to be useful for project management.</td>
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<td></td>
<td><strong>#2</strong> – AKHS, I should carefully define the balance between a focus on interventions that directly impact the health status of the target population and those that can contribute to financial sustainability</td>
<td>With respect to this, AKHS, I has done a time and cost analysis – LHV’s spend 50% of their time on preventive promotive services (not revenue generating) but which enable community level health impact and the other 50% providing curative care (revenue generating) but limited impact. AKHS, I has chosen to continue its focus on preventive promotive services realizing that cost recovery is compromised. There is always a tension between providing quality services and revenue generation. AKHS, I has prioritized quality services, particularly ensuring access to preventive services.</td>
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<td><strong>#8</strong> - BCC efforts should be focused on priority interventions. Appropriate materials that already exist should be adopted/adapted. Staff at all levels should be trained in their use and in counseling skills.</td>
<td>GHSDP developed protocols for training LHV’s; regular supervision to monitor quality. Developed essential standard drug list. Waste disposal system. IEC strategy paper developed/focus group discussion on KABP was conducted in all 55 villages. In 2002, sets of 100 flashcards on RCH (ANC, post-natal care, proper breastfeeding practices, STIs/HIV/AIDS) were developed and a training on their use delivered to LHV’s and CHV’s. Posters illustrating the importance of immunization, ANC and condom use have been procured from GOI sources and are on display in the health and diagnostic centers. Booklets in the local language on safe motherhood have been developed by AKHS, I. BCC training has improved health knowledge at various levels; less seems to have focused on counseling per say.</td>
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<td>Organizational effectiveness of the AKHS,I operations strengthened in terms of human resource development/training, and operational (e.g., MIS) and financial management.</td>
<td>#3: AKHS,I should take steps to improve the working conditions in the organization</td>
<td>In 2002, two external reviews have been conducted; a limited number of revisions have been put into place. Job descriptions were developed, induction manual was prepared. Improved compensation packages were offered to AKHS,I employees, particularly at the LHV level. However, in 2003, the Board of AKHS,I instituted measures to reduce personnel-related overhead costs to improve cost-efficiency of the organization.</td>
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<td>#5 - AKHS,I should undergo an organizational assessment to identify aspects in need of strengthening and adapt the tool(s) to determine the progress of villages toward managing their own health activities</td>
<td>Some initial attempts were made to outline the key features that the HSMCs need to possess for effective administration of HCs, but this needs greater attention.</td>
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<td>#4 - The training officer should make a thorough study of the AKHS,I technical/managerial needs and establish priorities while identifying training programs in the country.</td>
<td>Training Needs assessment was conducted; 45 training have been conducted since Jan 2000. There has been 40% staff turnover, particularly among LHVs, so training costs have been high.</td>
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<td>Capacity building trainings have included: 1) executives/sr managers on performance appraisal techniques; 2) program staff, field managers, field officers, and community organizers on training methodologies; 3) LHVs, LHV Supervisors, CHVs and Social Educators on Adolescent Health/ Family Life Education; 4) TBAs on safe delivery practices in the six new villages in Junagadh District; and 5) CHVs and AWW on Infant Feeding and Childhood Nutrition for Effective Growth Monitoring</td>
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<td>Organizational effectiveness of the AKHS, I operations strengthened in terms of human resource development/training, communications, and operational (e.g., MIS) and financial management.</td>
<td><strong>#7</strong> - Those responsible for training, documentation should identify specific training areas (e.g., AHF, community mobilization, private/public collaboration)</td>
<td>Health Professional Development Center was established in 1999; it has limited viability of the HPDC due to location training center resources. An internal task force was appointed, but HPDC still remains underutilized. AKHS, I has approached other agencies of the Aga Khan Development Network to utilize this center as a training resource across sectors. Training conducted at HPDC include: (ABB, EHS, BCC, RTI/STI, FLE) There was no trg on the broader approach to AHF</td>
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<td>#9 - AKHS, I should review existing instruments (e.g., Health Facility Assessment) that have been developed and found useful in monitoring the quality of training and service delivery.</td>
<td></td>
<td>No externally-developed instruments have been utilized to this end. In 2003 a client satisfaction survey covering 10% of patients.</td>
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<td>#10 - The key managers and Community Organizers of AKHS, I should be trained in PRA or PLA</td>
<td></td>
<td>The GHSDP staff was trained by Aga Khan Rural Support Program on PRA and PLA techniques. In turn, the staff conducted PRA exercises in all 55 villages. Major findings were the high occurrence of non-communicable diseases such as diabetes, hypertension and cancer in the project area, as well as low awareness levels on maternal and child health in the six new villages.</td>
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<td>The network of AKHS, I facilities recovering an increasing percentage of operating costs (baseline 1996)</td>
<td><strong>#6</strong> – AKHS, I should articulate clearly its approaches to community health and the phases of operations in each model of assistance (e.g., fixed facility, facilitation, replication).</td>
<td>This recommendation was not fully agreed to as AKHS, I has a clearly articulated approach to community health. What was seen as more critical was the need to develop future strategic direction based on experience and demographic trends in the region. A series of meetings were held between AKF India and AKHS, I between 2003-2004 to develop internal thinking for AKHS, I’s future strategy development, the results of which are being reviewed and considered by the governing Boards of both. The Team felt that while the models were articulated, the expected evolution models could have been more thoroughly documented with the focus on it operational aspects. It appears that the replication model had a clearer exit strategy than the facilitation model. A comparative study of both the moels needs to be explored.</td>
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<tr>
<td>The network of AKHS,1 facilities recovering an increasing percentage of operating costs (baseline 1996)</td>
<td><strong>#6</strong> – AKHS,1 should articulate clearly its approaches to community health and the phases of operations in each model of assistance (e.g., fixed facility, facilitation, replication).</td>
<td>The HSMC members were trained on finance, logistics, personnel mgmt and health issues, but further financial management training is needed. Regular financial reports are in place. Cost and revenue analysis needs to be strengthened to identify alternative means for financial sustainability.</td>
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<td>GHSDP operates 2 diagnostic centers. It was intended that the profits from these centers would be able to cross-subsidized any gaps in cost recovery among the HCs. Due to staff attrition and increase competition, the overall cost recovery rate for both types of centers has markedly decreased from 82% in 2001 to 54% in 2003. While diagnostic centers have been able to cover their costs, they have had limited success in creating revenues for cross-subsidization Currently, the HCs recover an average of 46% of their costs, while diagnostic centers 63%</td>
<td>15 HC have cost-recovery rate of 46%. Attention is currently being paid to utilization rates at the HCs, a component of which entails educating the community at large as well as public and private providers on the long-term health benefits gained by using the preventive and promotive services offered at the HCs. Marketing strategies for increasing patient load are also being devised for future implementation though much work remains to be done.</td>
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<td>It was acknowledged that user fees cover a portion of the operating cost of the Health centers. Thus, GHSDP tried to develop alternative financing schemes (AHF). This included linkages with dairy cooperatives, offering a type of family insurance package and partnerships with corporations for specific health camps. Satellite clinics and camps were used to enhance sustainability</td>
<td>G</td>
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<td>Document and share outputs, outcomes, best practices and lessons learned with key stakeholders</td>
<td><strong>#11</strong> – Hire a local writer to document 5 lessons</td>
<td>In 2004, a Documentation Officer was hired. A comprehensive lessons learned document will be available by the end of the project period. Specific focus will be given to the viability of both the facilitation and replication models of community-based health care systems. VOICES, a series of 5 testimonials highlighting the role and impact of community health workers and is currently being distributed to key stakeholders. Two papers were presented at 2 international conferences</td>
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ANNEX E: Bibliography of Documents Reviewed


4. Annual Report to USAID on a Matching Grant for Promoting Health Reform in Three Countries in Central and South Asia and East Africa Through Institutional Capacity building, partnership strengthening and documenting and disseminating Best Practices, April 2000


9. Project documents including:
   - Service Protocols;
   - House Listing Manual;
   - Bio-Medical Waste Management;
   - Replication Model;
   - Family Life Education Programme
   - Nursing Protocol for LHVs,
   - MIS manual,
   - Essential Drug list;
   - Facilitation Model
   - Medical Information Centre


11. GHSDP End of Project Report, 2004