

**EVALUATION OF THE USAID/DJIBOUTI PROGRAM  
IN MATERNAL CHILD HEALTH**

*Final Report*

Submitted to  
USAID/Djibouti

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## List of Acronyms

AIDS	Acquired Immune Deficiency Syndrome
DHMT	District Health Management Team
DPT3	Diphtheria Pertussis Tetanus, 3 <sup>rd</sup> dose
EDSF	Enquete Djiboutienne sur la Sante de la Famille
EPI	Expanded Program of Immunization
GORD	Government of the Republic of Djibouti
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
IEC	Information, Education and Information
MCH	Maternal and Child Health
MDG	Millennium Development Goals
M&E	Monitoring and Evaluation
MICS	Enquete a Indicateurs Multiple sur la Survie des Enfants
MOH	Ministry of Health
ORS	Oral Rehydration Solution
ORT	Oral Rehydration Therapy
PECSE	Project d'Extension de la Couverture de Services de Sante Essentials
PEV	Programme Elargi de la Vaccination
TB	Tuberculosis (tubercle bacillus)
UNICEF	United Nations Children's Fund
UNFPA	United Nations Fund for Population Assistance
US	United States
USAID	United States Agency for International Development
WHO	World Health Organization

## *I. Executive Summary*

### **A. Purpose of the Evaluation**

This evaluation was commissioned by the United States Agency for International Development's (USAID) Mission to Djibouti and USAID/East Africa in Nairobi to review USAID/Djibouti's health program that focused on improving maternal and child health (MCH) care, immunization coverage and training for the health sector. Much of the program was composed of the Expanded Coverage of Essential Health Services Project [Projet D'Extension de la Couverture de Services de Santé Essentials (PECSE Project)]. The Mission also provided funding to UNICEF and WHO to serve as implementation partners to improve vaccination coverage by strengthening the Expanded Program of Immunization (EPI).

The purpose of the evaluation was to document the accomplishments realized through implementation efforts financed by USAID and assess overall impact. A two-person team was recruited (a consultant who served as team leader and a staff member from USAID/EA) to undertake the evaluation. In performing the task, the evaluation team (Team) sought to identify accomplishments as well as any issues or lessons-learned under the program and to make general recommendations for sustaining MCH gains as well as for possible support of future MCH interventions.

### **B. Background**

#### 1) Program Development and Design

A main objective of the MOH health sector reform strategy is to: significantly increase equitable access to health care (especially among poorer rural populations); strengthen the quality and efficiency of health services; and, reduce infant, child and maternal morbidity and mortality. A main target group for assistance program was to be the hard-to-reach Djiboutian population (initially estimated at around 150,000) living in rural areas of the country. Under TASC II, proposals were submitted to the USAID mission and a technical evaluation committee selected John Snow Inc (Prime) and Manoff group (sub-partner) to implement the health program. Implementation began in 2004.

The PECSE Project, implemented by John Snow Inc. under, a \$9,195,958 million contract, has an activity life of nearly 4.5 years, from April, 2004 to September, 2008. Additionally, the Mission's health program included complimentary activities undertaken through grants to UNICEF and WHO to provide additional support to the Expanded Program of Immunizations (EPI).

#### 2) Status of Maternal and Child Health

When the program of assistance began, the child (< 5 years) mortality rate was around 129 per 1,000 live births, down from 175 in 1990 (a decline of about 26%). The maternal mortality rate, in 2002, was high at around 546 per 100,000 births. However, the 546 figure for the rate of maternal deaths represented a 26% decline from the extremely high mortality rate of 740 seen in 1990.

Each year, around 2,800 children die in Djibouti from preventable deaths and about 160 women die in childbirth (UNICEF 2007: MOH Strategic Plan and Investment Case for MDG 4, 5 & 6). The main causes of death among children less than 5 years of age include: pneumonia, diarrhea, and neonatal complications. Malnutrition is related to about half of all under 5 mortality in Djibouti. Maternal deaths in Djibouti are due to a variety of causes. The most common, accounting for 67% of maternal deaths include: hemorrhage (27%), eclampsia (27%) and infection (13%).

## **B. Methodology**

The team conducted the evaluation during a two-week period in Djibouti in May and June, 2008. A combination of information gathering and analytical techniques were used, including the: analysis of available quantitative data from various survey reports and existing databases; collection of qualitative information primarily through: interviews with key informants or stakeholders and focus group interviews with members of local health committee and community residents; use of observation during field site visits conducted at five rural health posts (Dallay-Af, Sagalou, Mouloud, Dassbiyo and Holl-Holl) and two district hospitals (Ali-Sabieh and Tadjourah).

## **C. Overall Findings**

USAID/Djibouti's MCH Program to assist the MOH to expand essential health services to rural areas has been a remarkable success. Implementation through a variety of partners has produced impressive progress and improvements in health service delivery. The positive impact on the access to and use of essential MCH services is particularly noteworthy and a testament to the MOH's commitment to rapid improvement in basic health services.

The role that USAID assistance played has had a greater impact than the total value of financing might suggest. It appears that the progress made in this program was far greater than has been the case in most others with similar or greater levels of funding for health service improvement in Djibouti. In the view of the Evaluation Team, this is due to the mode of USAID assistance that provides on-the-ground implementation and technical support along with financing. Another factor was the quality of technical support accompanying the financing that was consistently available in country, as well as the close collaboration achieved with MOH counterparts. Implementation was a joint effort, in which MOH counterparts worked together with the PECSE Project team to further implementation efforts and assure assistance activities progressed. In the process, the MOH was able to combine its internal resources (whether human or financial) to accelerate implementation and achieve greater results during the four-year life of the MCH program. Given the impressive magnitude of impact, the results achieved represent a huge health sector return on USAID's investment in positive change.

## **D. Specific Findings**

### *1) PECSE Project*

Implementation of the PECSE Project generally has been quite successful and the rehabilitation or establishment of rural health posts has greatly improved access to essential health services. The most notable accomplishments of USAID support include:

- substantially upgraded care at 89% of the country's sub-district health facilities (23 of 26);
- enhanced services and facilities at 4 of 5 (80%) district hospitals;
- created a real option for maternity care in rural areas where virtually none existed before;
- established the first viable national health information system in the country that can regularly generate as well as aggregate facility-specific service-delivery statistics to both the district and national level;
- introduction of a system for involving communities in local-level health services and a providing important new capacity for community outreach in service delivery through the addition of health outreach workers;

- data generated by the HMIS will have long term benefits for health service delivery through improved monitoring, management and planning capabilities.

The evaluation noted some issues associated with the expansion of essential services within MOH facilities and supported by the PECSE Project. They include:

- Zinc is not part of the diarrhea treatment protocol of the MOH. Internationally, the recommended protocols for diarrhea treatment include zinc and the MOH's treatment guidelines should be updated accordingly.
- Not all capacities rehabilitated at facilities function. Several sites visited reported elements of the renovated infrastructure (such as running water) or equipment (such as instrument sterilizers) that were not working.
- Maintenance activities of facilities and equipment are weak to non-existent. Community-level facilities visited reported that maintenance problems or equipment servicing needs often were left un-resolved for months at a time – adversely affecting health service delivery.
- Supervision of rural health services is inconsistent and infrequently from the district level. This limits the intended role supervision should play in improving service quality.
- Limitations of skilled personnel and staff turn-over undermine service-delivery capacity. The lack of skilled service providers often limits how quickly services can be enhanced or made widely accessible. Staff turnover can cause capacity built at the local level to be lost.

## **2) Activities Implemented by UNICEF/WHO with USAID Funding**

Major accomplishments achieved by these two implementing partners include:

- Key host-country staff have been trained.
- The national cold storage facility was rehabilitated and is effectively serving the vaccine supply needs of the country.
- Cold chain coverage increased from 41% to 100% of the country (the PECSE Project also contributed to this achievement).
- Polio vaccination coverage now reaches 85% to 91% nationally; as a result, Djibouti remains polio-free, despite being surrounded by countries where polio cases are still being reported.

The Team identified two issues related to immunization activities:

- Routine EPI coverage is lagging behind that achieved for polio. The previous focus on polio work seems to have resulted in routine EPI activities receiving less attention.
- UNICEF's provision of motorcycles to improve immunization outreach has not had the intended result. The Team found only 2 of 5 the rural health clinics/posts visited that had a operating motorcycle. The other 3 facilities encountered problems (no spare parts, lack of fuel) and were not using them.

## *3) Impact on Access to and Use of Services*

The impact of the combined implementation efforts on access to and use of essential service has been the greatest success of USAID's assistance. The following is a selection of some of the most compelling examples of improved access and use of essential services in the target areas and to which USAID assistance contributed:

- Between 2004 and 2007, the number of people living in rural areas and accessing the facilities improved by the PECSE Project has doubled.

- The percentage of the total population in target districts that accessed services from health facilities rose from 22% to nearly 50% in 3 years of implementation.
- The number of deliveries assisted at supported health facilities went from less than 400 to over 2,100 per year by the end of 2007, a five-fold increase in just 3 years.
- In 2004, less than 1 in 5 pregnant women (16.6%) living in the program districts delivered at a facility. By 2007, that figure had risen to a remarkable 4 out of 5 (83%) of all women estimated to have become pregnant that year.
- DPT3 coverage rate for rural areas rose from 14% in 2004 and more than doubled to reach 38% in 2007.
- Oral rehydration treatment in the rural areas experienced phenomenal improvement. Increasing nearly 3.6 times, the total coverage for oral rehydration treatment exceeds that of the nation as a whole and benefits 9 of 10 children.
- Although the total percentage of children receiving the preferred treatment for pneumonia in rural areas is less than that for the nation, the portion of children reached with an antibiotic more than doubled.

#### *V. General Conclusions*

Based on the findings, the Evaluation Team concludes that USAID assistance achieved its overall objectives and surpassed the magnitude of positive change that would have been expected in a 4-year period. The rapid progress made in the access to and use of MCH services contributed to an acceleration in the decline in child mortality.

Between 2002 and 2006, the mortality rate for children less than 5 years of age declined by 27% to 94/1000 live births. Between 1990 and 2002, the annual rate of decline for under-5 mortality was around 2% while the annual rate of decrease for the same statistic between 2002 and 2006 was nearly 7% (6.75) – about 3 times as fast as the previous decade. During the same period (2002 to 2006), infant mortality dropped by an even greater amount (34.9%) to 67. The four-year decline in infant mortality represents an impressive average annual decrease of nearly 9% (8.7).

In addition, the social mobilization program, introduced with support from USAID, brought principles of civil society to bear on the health care delivery system and increased both the involvement and stake of communities in the process of health care improvement.

Due to the very visible and dramatic changes in the availability of and access to improved basic health services, there is widespread credit accorded to the U.S. for assisting these valued achievements. This progress has brought broad-based public (and official) recognition of the value of U.S. Government relations to Djibouti.

One conclusion of concern is that it appears unlikely that the host-country will be able to sustain or maintain rehabilitated facilities in the next 2 to 5 years without external technical and financial assistance. The prospect of another donor filling the gap produced by the cessation of USAID assistance for general essential health services seems unlikely. Consequently, the impressive gains achieved by USAID's recent investments are at risk unless USAID or another donor with assistance that includes on-the-ground technical and implementation support continues to support essential health services.

Another concern is that the family planning services are so weak that the full potential contribution of birth-spacing to mortality and morbidity reduction is not being realized. Similarly, the fact that neonatal care and survival services are weak or absent at many maternities means that an important opportunity to reduce mortality is often missed.

## *VI. Recommendations*

Recommendations for the include those for the short-term (actionable before the scheduled close-out of the PECSE Project in August, 2008 and over the next 6 months) and for general steps that would continue to improve MCH services or realize further declines in mortality over the next 5 to 10 years.

### **A. In the Short-Term**

#### 1) Identify the extent to which capacities intended for rehabilitated facilities are non-functional

A survey of all rehabilitated facilities should be undertaken to identify and inventory all the problems (lack of running water, non-functioning incinerators, non-operable autoclaves, etc.) that prevent the health facility from operating at a fully functional level. If possible, root causes for the problems should also be defined and recommended solutions offered as part of the survey. The survey should involve MOH personnel and the results shared with senior MOH decision-makers to determine if longer-term mechanisms to address such problems in the future can be identified.

#### *2) Assist as many the repairs as possible before the end of PECSE Project implementation*

The PECSE should assist in repairing or directly address as many of the problems with rehabilitated facilities as time and funding allow. The list of repair needs generated by the survey proposed above should also be shared with the U.S. Military to see if some repairs would be suitable for its community outreach activities.

#### *3) Assist the MOH to review facility maintenance procedures and capacities*

Since the existence of problems in maintaining facilities illustrates an underlying systemic problem in supporting/repairing health centers, technical and other assistance should be offered to the MOH to review maintenance procedures and authorities. There may be improvements possible, for example, through streamlining problem-reporting channels and clarifying delegated authorities for decision-making for repairs or purchasing.

#### *4) Provide the means to back-up data within the HMIS*

The new health management information system could be strengthened and the risk of data loss lessened if there was a facility to automatically back up data in the computer system. A data back-up facility should be added as soon as possible. There is also a need to improve MOH capacity in trouble-shooting and maintaining the Internet system installed at the MOH.

### **B. For Future Improvements in MCH and Other Essential Health Services**

#### *1) USAID should continue to support improvements in basic health services*

USAID has played a substantial leadership role in providing the technical guidance, implementation support and vital funding for transforming the way primary health care is available and accessed Djibouti. Through continued investments, gains achieved could be consolidated and the risk of losing the value of past investments lessened. Further assistance for extending the essential health service package offers the opportunity of even more rapid progress toward health goals within a 5 to 10 year period. Although funding anticipated for the next couple of years within USAID appears to be earmarked for TB and polio, focusing available resources only on a limited number of diseases will not have as broad an impact on the health care system or contribute as significantly to maternal and child mortality reduction.

*2) Expand and vitalize family planning services*

Family planning services should be a more vibrant part of MCH services and the essential health service package in Djibouti. Orienting such services around the themes of healthy timing and spacing of pregnancies could help integrate family planning more easily within basic health services. On the policy level, the specific contributions of longer birth-to-pregnancy intervals to infant and neonatal mortality reduction could be calculated and linked to specific mortality reduction goals.

*3) Strengthen neonatal health services*

To stimulate a more rapid decline in infant mortality, neonatal services urgently need strengthening since about two thirds of the total infant mortality in Djibouti is contributed by neonatal deaths. Several opportunities exist to add improved newborn care services at all facilities offering deliveries. Such services should include the promotion of exclusive breastfeeding of the newborn. Although elements of essential newborn care may be taught during pre-service training, basic life-saving skills for newborns need to be more widely present at rural facilities where increasing numbers of women are delivering their babies. Newly trained midwives, recruited from rural areas, are expected to finish training soon and could be an active force for improved neonatal care.

*4) Increase interventions for malnutrition*

With malnutrition indicators worsening, increased efforts to address malnutrition in children are urgently needed. The supply system should be strengthened to avoid shortages of critical supplemental foods for the treatment of malnourished children. Logistics and supply protocols for facility based warehousing of food stuffs should be reviewed to see if the standard stock inventory in the rehabilitated facilities could include sufficient food supplies for 6 months or longer. Health care outreach should also be strengthened to better identify malnourished children that do not present at health facilities and encourage parents to bring them in for care.

*5) Strengthen and support MOH decentralization efforts*

Future assistance to the health sector should include a special emphasis on enhancing the decentralization program within the MOH. The management capacity of district health teams will be an important factor in the overall success of the decentralization process. The role of the social mobilization activities undertaken with PECSE Project support could become an effective tool in decentralization to the local level and community health committees could play a more active role in both managing health services and advocating for health care improvements. Expanding cost-recovery options and exploring health budgeting/financing options should also be part of the exploration on how health services can be most effectively decentralized.

## **II. Introduction**

### *A. Purpose and Objectives of the Evaluation*

This evaluation was commissioned by the United States Agency for International Development's (USAID) Mission to Djibouti and USAID/East Africa in Nairobi to review USAID/Djibouti's health program that focused on improving maternal and child health (MCH) care, immunization coverage and training for the health sector. Much of the program was composed of the Expanded Coverage of Essential Health Services Project [Projet D'Extension de la Couverture de Services de Santé Essentials (PECSE Project)]. The Mission also provided funding to UNICEF and WHO to serve as implementation partners to improve vaccination coverage. .

Since the objective of USAID/Djibouti's MCH program is to support the Government of the Republic of Djibouti (GORD) in expanding the availability of quality health care that addresses the conditions which contribute to Djibouti's high infant, child and maternal morbidity and mortality, the purpose of this evaluation is to document the accomplishments realized through implementation efforts financed by USAID and assess overall impact. Additionally, the evaluation team (Team) sought to identify any issues or lessons-learned under the program and to make general recommendations for sustaining MCH gains as well as for possible support of future MCH interventions.

To accomplish its overall task, the Team had to assess: (1) how well the Mission's MCH program funded efforts met their expected results; (2) current and evolving needs in Djibouti's Ministry of Health (MOH); (3) the demographic profile of the less-than five year old and reproductive age population; and, (4) the changing factors that affect maternal and child morbidity/mortality. The Team needed to retrospectively assess the accomplishments of the PECSE Project and the efforts of UNICEF and WHO in support of EPI. In particular, the Team paid particular attention to the three intermediate results of the PECSE Project: (1) increased supply of essential health services; (2) improved quality of services; and, (3) enhanced local capacity to sustain health services.

Additionally, the Team prospectively examined the evolving experience of expanding essential health services and the widening process of decentralization of services to the district-level and below. To make recommendations for the future, the Team sought to identify areas in need of further strengthening while considering any gaps or unexploited opportunities for progressing towards Djibouti's MCH goals.

### *B. Background*

#### 1) Project and Program Development

In a continuing effort to address health sector need, the Government of the Republic of Djibouti began to revise health policy and enacted a series of health sector reforms. A main objective of the MOH health sector reform strategy is to: significantly increase equitable access to health care (especially among poorer rural populations); strengthen the quality and efficiency of health services; and, reduce infant, child and maternal

mortality. USAID/Djibouti began supporting MOH efforts and, following the initial obligation of funds in June 2003, a team of experts from USAID/EA visited Djibouti in September 2003 to prepare a detailed design, work plan, and budget for a new MCH project, all of which were submitted for approval under a field support mechanism (TASC II) on October 31, 2003.

After discussions and an agreement with the MOH, the target group for this project (PECSE) was to be the hard-to-reach Djiboutian population (initially estimated at around 150,000) living in rural areas of the country. Under TASC II, proposals were submitted to the USAID mission and a technical evaluation committee selected John Snow Inc (Prime) and Manoff group (sub-partner) to implement the health program. The project design and budget were not actually approved by USAID until May 2004.

The PECSE Project, implemented by John Snow Inc. under, a \$9,195,958 million contract, has an activity life of nearly 4.5 years, from April, 2004 to September, 2008. Additionally, the Mission's health program included complimentary activities undertaken through grants to UNICEF and WHO to provide additional support to the Expanded Program of Immunizations (EPI). Assistance to the EPI program included the provision of vaccines, improving cold chain equipment and logistical support for transportation or increasing access to immunization services.

## 2) Country Setting

Although no national census has been undertaken in many years, Djibouti's total population is estimated to be around 600,000 or 700,000. Of this number, the vast majority of Djiboutians (approximately 80%) live in or just outside the capital city. About 83% of all Djiboutians live in urban areas (including Djiboutiville, Ali-Sabieh, Dikhil, and Tadjourah), giving the country a largely urban profile.

It is estimated that refugees from neighboring countries (particularly, Somalia and Ethiopia) compose around 15 % of the total population and ethnic diversity creates an environment in which linguistic differences between habitation areas can be vast. High rates of poverty, high unemployment and chronic humanitarian and social needs make the country susceptible to social and economic difficulties. Recently, a severe and continuing drought, along with rising food prices have exacerbated problems with acute malnutrition. The physical environment, with a rough terrain that is often rocky, creates challenges of both logistical supply and access to services. Soaring temperatures from May to September (often over 40 degrees Celsius) help to spawn significant population movement out of Djibouti-city and some secondary cities during this annual hot season, to both rural areas and to Ethiopia, Eritrea and Yemen.

Djibouti has a fairly high per-capita income of US \$900 when compared to many Sub-Saharan Africa countries. However, the country's health indicators (with high rates of infant, child and maternal mortality, total fertility, and acute malnutrition) are more typical of countries with substantially lower levels of per-capita income.

## 3) Status of Maternal and Child Health

When the program of assistance began, the child (< 5 years) mortality rate was around 129 per 1,000 live births, down from 175 in 1990 (a decline of about 26%). The maternal mortality rate, in 2002, was high at around 546 per 100,000 births. However, the 546 figure for the rate of maternal deaths represented a 26% decline from the extremely high mortality rate of 740 seen in 1990 (EDSF 2002).

Each year, around 2,800 children die in Djibouti from preventable deaths and about 160 women die in childbirth (UNICEF: 2007 MOH Strategic Plan and Investment Case for MDG 4, 5 & 6). The main causes of death among children less than 5 years of age include: pneumonia, diarrhea, and neonatal complications. Malnutrition is related to about half of all under 5 mortality in Djibouti.

Maternal deaths in Djibouti are due to a variety of causes. The most common, accounting for 67% of maternal deaths include: hemorrhage (27%), eclampsia (27%) and infection (13%).

#### 4) Implementation Context

The MOH has divided the country into six health management zones: Djibouti city and the five health districts of Arta, Ali-Sabieh, Dikhil, Obock and Tadjourah. Four of the five districts have district hospitals; Arta (which is closest to Djibouti city) does not have a district hospital. Currently, each district has one physician based in the district capital and one contract expatriate physician (usually a Cuban) whose work focuses primarily on delivering services through a mobile clinic concept. Each district has several health posts, and most have a mobile clinic. Some districts have other specialized health care facilities including military or refugee health facilities that are not open to the general public or staffed by the Ministry of Health.

Generally, there is a relatively low level of general health knowledge in the population at large. The engagement of communities and civil society for participation in health or other development issues, historically, has been limited. This tendency has affected both the supply and demand sides of the health service delivery. Low literacy rates, especially among women and girls, complicate health awareness and efforts in health communication.

#### *C. Methodologies Utilized*

The Team used both qualitative and quantitative methods in the conduct of its work. Since most of the quantitative information came from existing data sets, our approach allowed the simultaneous collection of quantitative and qualitative information. The use of existing information also included reviews of reports and other documents describing the country, health sector and aspects of implementation activities. One important source of quantitative data was the newly established health information system within the MOH with support from the PECSE Project itself – a major contribution to data availability.

Qualitative information was generated primarily through: interviews with key informants or stakeholders, focus group interviews with members of local health committee and

community residents; and observation at implementation sites in the field. The Team conducted site visits at five rural health posts (Dallay-Af, Sagalou, Mouloud, Dassbiyo and Holl-Holl), and two district hospitals (Ali-Sabieh and Tadjourah), a sample that represents about 20% of the health posts improved/supported by the PECSE Project and 40% of the district hospitals. A question guide was developed for use during interviews (see Annex 1). As patterns in the quantitative data or documents were found, these patterns were probed or verified during subsequent interviews with knowledgeable informants.

Estimations of impact involved the use of client-load data generated by the concerned health facilities through 2007 and, in some cases, through May 2008. Additionally, population based impact was estimated using calculations based on the 2006 MICS survey report.

### **III. General Findings**

Overall, the Evaluation Team has found that USAID/Djibouti's MCH Program to assist the MOH to expand essential health services to rural areas has been a remarkable success. Implementation through a variety of partners has produced impressive progress and improvements in health service delivery. The positive impact on the access to and use of essential MCH services is particularly noteworthy and a testament to the MOH's commitment to rapid improvement in basic health services. More specific findings of the Team are grouped and presented below by implementation partners, MCH intervention area and types of impact.

#### *A. Program Implementation*

##### *1) PECSE Project*

##### *(a) Main Accomplishments*

Overall, the implementation of the PECSE Project has been quite successful. The rehabilitation or establishment of rural health posts has greatly improved access to essential health services. The implementation targets in all three intermediate result areas for the Project have been substantially met.

The most notable accomplishments of USAID support include:

- substantially upgraded health care at nearly 90% (88.5%) of the country's sub-district health facilities;
- enhanced services and facilities at 4 of 5 (80%) district hospitals;
- created a real option for maternity care in rural areas where virtually none existed before;

- the first viable national health information system (automated) established in the country that can regularly generate as well as aggregate facility-specific service-delivery statistics to both the district and national level;
- a social mobilization system introduced that involves communities in local-level health services and a providing important new capacity for community outreach in service delivery through the addition of volunteer health outreach workers;
- widespread official and public recognition of U.S. contributions to improved health care in the country.

Virtually all of these major accomplishments represent huge improvements in basic health care for the country. For example, establishing a national health management information system (HMIS), within the Project's life-span, that operates and has already produced 2 annual reports (2006 and 2007) is a substantial outcome. The data generated by the HMIS will have long term benefits for health service delivery through improved monitoring, management and planning capabilities.

It is unclear how much the increased availability of information from the HMIS has impacted management practices of district health teams. Individual facilities report sending data in regularly and the Team saw how submitted data are entered into a computerized database at district hospitals. However, it appears that the available information may not be regularly incorporated into supervisory or monitoring functions of district health management.

The capacity to sustain health services at local levels has been enhanced. For example, the health committees at the village level sometimes work with health clinic staff to mobilize transport for referral cases that need to reach a district hospital. Community health volunteers received training and are now active in community health matters. Advancements in mechanisms to involve and reach out to the community seem to be having a positive effect on increased utilization of essential health services.

These social mobilization components appear to have been more effective than the use of radio spots or other communication media for motivating clients in more remote areas of the country. Health committees in villages help with community outreach activities and motivation efforts (particularly for immunization). The Committees also help maintain health facilities by regularly cleaning the facilities and helping to tend to the grounds. All the health committees at the sites visited had a membership that included multiple positions filled by women.

Nearly all progress indicators and annual targets under each intermediate result area have been met or exceeded. The main exception was the number of persons trained that was part of the targets established for year 4 of implementation. The training targets for the 4<sup>th</sup> year (200 persons in child health and nutrition as well as 150 persons in infectious disease treatment) were unobtainable because the trainings were cancelled by the MOH

(in part, because Ministry leadership felt training was taking staff away from attending to patients).

A total of 23 health facilities and 4 district hospitals were rehabilitated in varying degrees, receiving structural improvements, equipment and training. The Team's visits to 5 health clinics/posts and 2 district hospitals verified the positive changes produced by the rehabilitation efforts – particularly on the expanded range of essential services now available at the community level due to Project activities. The inclusion of residences in the rehabilitation of facilities has improved the ease with which the MOH can fill nurse positions in rural areas and increased retention rates once assigned. One senior MOH official reported that the Ministry now receives requests from staff who want to be assigned to the newly rehabilitated rural centers. Such requests were unheard of before because of a lack of suitable housing outside of cities.

The specified activities that were designed to improve the quality of care were all implemented and the norms/standards for essential services incorporated within both provider training modules and supervision protocols. The effectiveness of supervision on quality assurance, however, appears limited given issues surrounding the regularity of supervision visits (see issues section below).

Collaboration with the MOH and other donors active in providing assistance for MCH services has been exemplary. Officials of the MOH often expressed their high regard for the all the contributions made by the Project to the MOH's goals. The Technical Advisor to the Minister said it was the best assistance the MOH has received in his 20 years of service with the Ministry.

Similarly, implementation has been undertaken in a complimentary fashion with civil affairs activities of the U.S. Military. Examples include coordinated rehabilitation work at selected rural and district health facilities. Collaboration with the U.S. Military produced new options for improved health services such as coordinating water supply issues for health facilities along with the Military's efforts to drill bore holes to provide water where needed.

The PECSE Project office established an effective internal monitoring and evaluation (M&E) system and identified indicators that produced reliable measurement of progress towards implementation targets. This M&E system creatively incorporated data from other donors and information from the HMIS to deliver a more complete profile of overall impact as implementation progressed. This integration of data was essential since USAID's MCH program involved several implementing partners.

***(b) Issues***

In addition to the impressive progress realized during implementation, several issues were identified by the Team. These include:

1. The planned addition of a radio communication capacity at rural clinics did not occur

The work plan of the PECSE Project, describing activities to be undertaken during the extended period of implementation, included the provision of radio equipment for the rehabilitated rural health clinics. However, difficulties were encountered to obtain a permitted broadcast frequency and in the amount of time necessary to fulfill all the procurement requirements. As a result, it was not possible to obtain or install the radio equipment in the centers before the scheduled close of the PECSE Project. These radios were intended to fulfill an important communication gap between rural facilities and district hospitals or other referral points.

Virtually all the rural sites visited by the Team voiced how the lack of communication complicates the work of health service delivery outside of urban centers. This vital communication need remains un-addressed and is identified by the MOH as a priority concern for the further improvement of essential services.

The establishment of a functioning radio communications system would require significant investments (some estimates suggest upwards of \$300,000, including provision of expert installation support). Given what was seen with clinic equipment, maintenance and repair of a communication network may be problematic. Other alternatives, such as satellite phones, may offer advantages to a radio system and could be explored.

#### 2. Zinc is not part of the diarrhea treatment protocol of the MOH

Although oral-rehydration therapy is increasingly being applied during episodes of diarrhea, that treatment protocol does not reflect the benefits of including zinc and the latest technical information available on optimal treatment for diarrhea. Internationally, the recommended protocols for diarrhea treatment include zinc and the MOH's treatment guidelines should be updated accordingly.

#### 2. Not all capacities rehabilitated at facilities are functioning

Some rural health facilities reported that following rehabilitation, not all infrastructure capacity enhancements were fully realized. For example, at Holl-Holl clinic, the incinerator constructed to better dispose of medical waste has never functioned properly and, as a result, the staff continue to use an old oil drum to burn waste. The clinic at Dallay-Af, the main water pipe leading to the clinic compound has been broken for months and, as a result, there is no running water available in the clinic at all. In Sagallou, the newly established maternity has no water available, due to the fact that the metal frame holding the elevated water tank is rusted and broken - making it impossible to increase the weight on the frame by filling it with water. These observations suggest there may have been a problem with quality control during construction and renovation work at health facilities.

#### 3. Maintenance of facilities and equipment is weak to non-existent

Additionally, several clinic staff reported that they are not using the autoclaves supplied by the Project to sterilize medical utensils because bottled gas was either never provided or not replenished. This pattern illustrates that there are problems within the MOH system to maintain and support the improvements made at health facilities. Other

maintenance issues encountered during site visits included: a broken door, broken door lock, broken door handle and cracks in walls. In each instance, health center staff said that they reported the maintenance issue to their district health management team and are waiting (often for months) for a solution to be provided. All center staff who reported a maintenance issue had received no resolution of the issue.

There is also a need for training MOH field staff in problem solving and methods to apply the various repair and maintenance options available to them. When problems do occur, clinic staff appear to just report it and then wait for some other authority (at the district or in the capital city) to do something about it. Some issues, like the lack of cooking gas to operate the autoclaves, might be solved at the community or facility level if there was a protocol for doing so.

PECSE Project staff themselves reported their concern about host-country capacity to maintain and sustain the improvements made in essential health services. Based on the Team's observations during site visits, these concerns are quite valid and it would appear that the strengthened infrastructure and enhanced capacity for service delivery through the equipment provided are already beginning to erode – even before implementation is complete

#### 4. Supervision of rural services is inconsistent and infrequent

The Project was successful in developing improved supervision protocols and providing training to supervisory staff. However, the MOH staff at centers visited reported having received erratic and infrequent supervisory visits. Some said the supervisory visits from MOH headquarters were more frequent than from their respective district health team. District health team managers said that supervision efforts were limited by: lack of vehicles, lack of fuel, long distances required for travel and staff shortages.

Of all the services supervised, immunization efforts seemed to receive the most attention. Efforts have been made to reinforce the integration of services, including supervision. But, more can be done to have all implementation partners and the MOH reinforce integrated supportive supervision in the districts.

#### 5. Limitations of skilled personnel and staff turn-over hinders advancements in service delivery

One of the main limitations to further improvements in the delivery of essential health services is the lack of sufficiently skilled staff. The scarcity of gynecologists at districts, for example, creates challenges for the health system to respond adequately to obstetrical emergencies occurring in rural areas. Additionally, during implementation, the PECSE Project identified staff-turnover as a factor that hindered the establishment of greater capacities in health service management and delivery in districts. The rapid turnover of staff means that capacities achieved through training could be and sometimes were lost. The result was that capacity once built could have to be rebuilt all over again to stay at a level of service delivery already achieved earlier. The MOH is aware of this dimension of a broader human resource problem within the health sector and placed a high priority on measures to improve the situation.

## 2) UNICEF and WHO Activities

### **(a) Main Accomplishments**

USAID's grants to UNICEF and WHO have financed activities designed to improve health services that have also, in general, progressed well. Efforts by WHO and UNICEF in immunization have produced a positive impact on immunization coverage. For example, UNICEF used the funding it received to supply the MOH with 642,450 doses of various vaccines and 168,000 capsules of vitamin A. Improvements to the cold chain for immunizations resulted in the rehabilitation of the national cold storage facility and an increase in the cold chain coverage from 41% to 100% of the country. Using the financing provided by USAID, UNICEF and WHO trained key host-country personnel for improvements in immunization service delivery.

There was excellent collaboration between the PECSE Project and UNICEF to strengthen immunization. This included activities to improve the district-level cold chain (PECSE and UNICEF each funded part of the equipment) and technical assistance. The PECSE Project also brought in EPI experts from the BASICS Project in Washington to work with the MOH and UNICEF on routine EPI.

USAID funds also supported social mobilization and information campaigns undertaken to support polio immunization efforts. Great emphasis has been placed on polio immunization work and substantial progress has been made. Polio vaccination coverage now reaches 85% to 91% nationally. As a result, Djibouti remains polio-free, despite being surrounded by countries where polio cases are still being reported.

### **(b) Issues**

#### 1. Routine EPI is lagging behind Polio

Although polio immunization work to keep Djibouti polio free has progressed, routine immunization efforts have not enjoyed the same success. For example, vitamin A coverage among children 6 to 59 months of age in polio campaigns has now reached 89%. However, for routine EPI work, the vitamin A coverage is only 31%. The previous focus on polio work seems to have resulted in routine EPI activities receiving less attention. This is unfortunate since the routine EPI work combats on-going, continuing causes of morbidity and mortality.

The MOH is aware of the need to improve the performance of routine EPI and the current vaccination policy includes strengthening routine vaccination work. A representative of the MOH affirmed that routine EPI activities are a current priority and cited the improved cold chain coverage as an important new capacity that will allow vaccines to be regularly kept at all health posts for use in daily service delivery.

#### 2. Provision of motorcycles to improve immunization did not have intended result

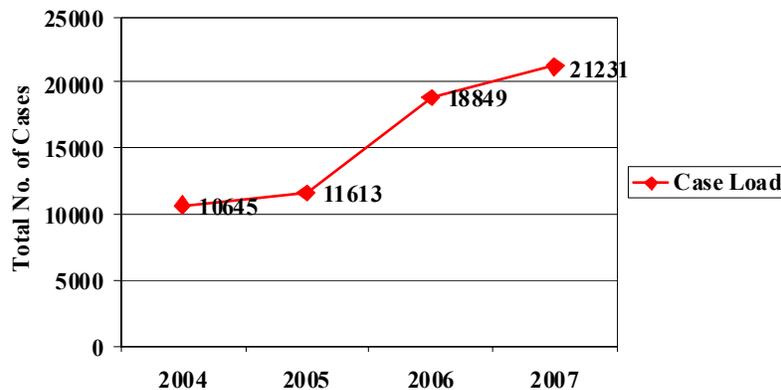
With the intent of strengthening access to and use of immunization services, UNICEF used USAID funds to provide 50 motorcycles to the MOH. Many of these motorcycles

were then delivered to district and rural health facilities. During site visits, the Team found only 2 of 5 rural health clinics/posts that had an operating motorcycle. The other 3 facilities encountered problems and were not using them. Spare parts are not readily available in country so when a mechanical problem develops the motorcycle is no longer used. The motorcycles run on gasoline and this type of fuel is often not available in rural areas (where diesel predominates). Rural health facilities also do not have the resources to obtain gasoline if and when it is available. Consequently, the motorcycles provided do not appear to be making any significant contribution to immunization efforts.

*B. Impact on Access to and Use of Services*

The MOH and the PECSE Project have made impressive gains in increasing access to and the use of services by intended beneficiaries. Between 2004 and 2007, the number of people accessing the facilities improved by the PECSE Project has doubled (see Figure 1). The number of people presenting at assisted facilities rose sharply between 2005 and 2006. This rapid rise in case loads is directly attributable to the increase in the number facilities with completed renovations and the presence of trained health staff.

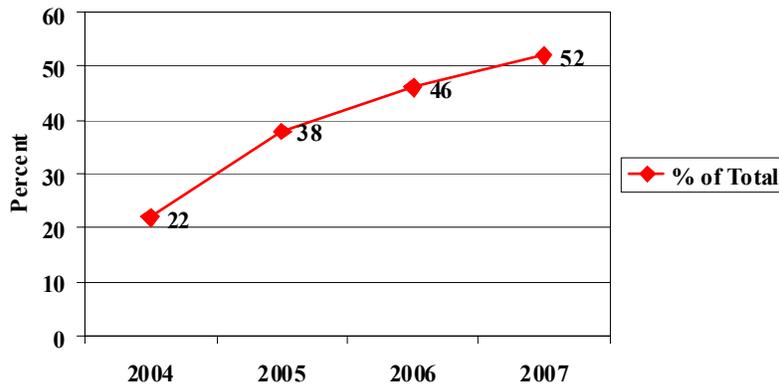
*Figure 1*  
**Total Case Load at USAID-Assisted Health Facilities 2004-2007**



Source: PECSE Project Data Base & MOH Service Statistics

The caseload at district health facilities becomes even more significant when compared with the total population living in the districts outside of Djiboutiville. In 2004, the total number of facility cases represented less than a quarter (22%) of the population living in the districts of Arta, Ali Sabieh, Dikhil, Tadjourah and Obock (see Figure 2). As implementation of assistance activities progressed, there was a consistency rise in the percentage of the total population in these areas that accessed services from health facilities, reaching about half of population by the end of 2007.

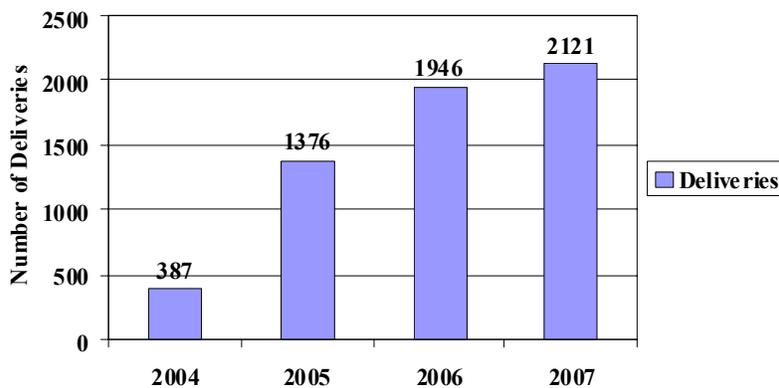
*Figure 2*  
**Portion of Total District Population Using  
 USAID-Assisted Facilities 2004-2007**



Source: PECSE Project Data Base & MOH Service Statistics

The impact of the MCH program on the access of services is particularly dramatic in the case of assisted deliveries. When implementation began, in 2004, the number of deliveries assisted at USAID-assisted health facilities totaled less than 400 (see Figure 3). By the end of 2007, that number had increased five-fold, to over 2,100.

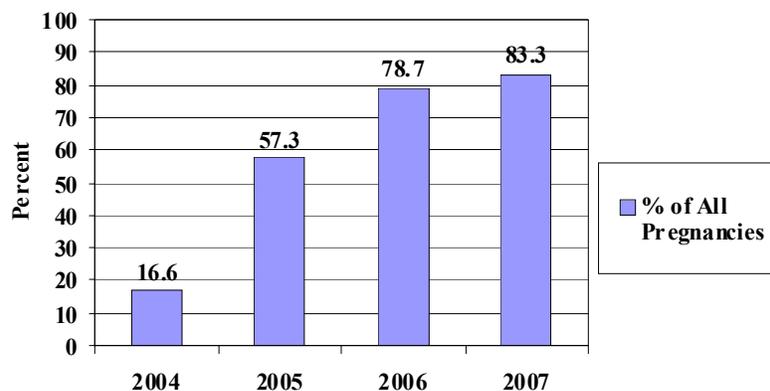
*Figure 3*  
**Number of Assisted Deliveries at USAID-  
 Supported Health Facilities 2004-2007**



Source: PECSE Project Data Base & MOH Service Statistics

The significance of this increase in the number assisted deliveries is best seen when compared to the number of pregnancies occurring in the population of these five districts over the same time period. Using population 2005 population estimates (GAVI 2005) and taking the annual population growth rate (3%), along with the crude birth rate (5%), the Team was able to estimate the total number of pregnancies occurring in the targeted areas annually during the period of USAID assistance. Figure 4 illustrates the fact that in 2004, less than 1 in 5 pregnant women (16.6%) living in the program districts delivered at a facility. This statistic is consistent with the statements made by village representatives during focus group interviews conducted by the Team during site visits. Village members commented that, before health posts were rehabilitated to include maternity services, poverty and difficulty of traveling to a district hospital over rough terrain meant that many women delivered their babies at home.

*Figure 4*  
**Portion of Total Estimated Pregnancies in District Populations Resulting in a Delivery at USAID-Assisted Health Facilities 2004-2007**



Source: PECSE Project Data Base, MOH Service Statistics & Estimated Number of Pregnancies per Year

As health posts in rural areas were rehabilitated, equipped and staff trained, the inclusion of functioning maternities made a dramatic change in how pregnant women accessed care. By 2005, more than half of pregnant women opted to deliver their babies at USAID-assisted health facilities. In 2007, that figure rose to the point that 4 out of 5 pregnant women (83%) chose to deliver at a health facility – a truly remarkable achievement in a relatively short period of time.

### *C. Progress in Intermediate MCH Indicators*

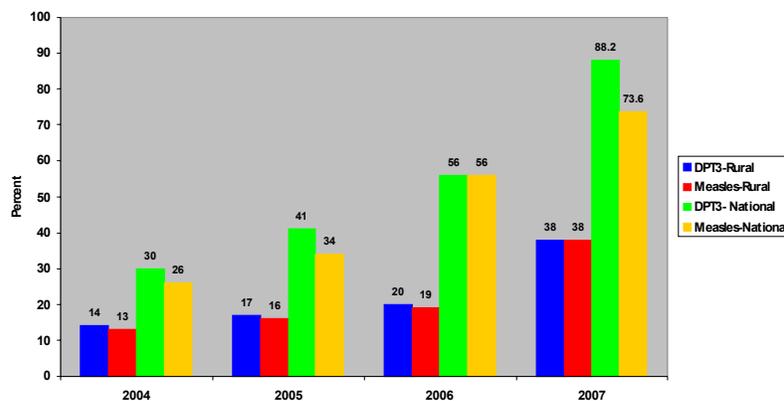
#### 1) Immunization

During the period of assistance, Djibouti realized improvements in both the capacity to both deliver immunizations and the coverage rates for immunization. USAID’s assistance significantly strengthened the national cold-chain system in financing the: provision of vaccines (through UNICEF); supply of cold chain equipment; electrification

(solar panels) of rural health posts which allows long-term refrigeration; training of health staff and volunteers; and, establishment of community-level health committees and outreach workers.

The PECSE Project supported the introduction of a social mobilization program that provided a means for greater community participation and involvement. This program, now adopted by the MOH, offered new opportunities for motivating households to have their children immunized and for expanding the outreach of vaccination services.

*Figure 5*  
**Immunization Coverage Rates for Selected  
 Vaccinations in Djibouti Nationally and for Rural  
 Areas by Year (2004-2007)**



Source: PECSE Project Data Base & MOH Service Statistics

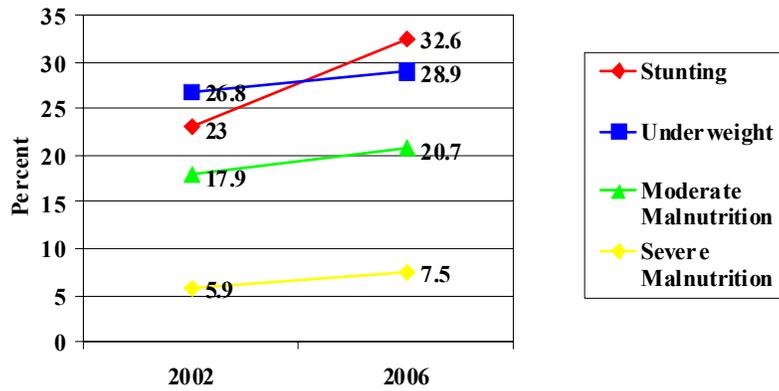
Immunization coverage rates have increased steadily during the period of USAID assistance (see Figure 5). For example, the national DPT3 coverage rate in 2004 was 30% while the same statistic for rural areas was only 14%. In 2007, the coverage rate for DPT3 and measles vaccinations had more than doubled (reaching 38%).

## 2) Malnutrition

The support provided by USAID strengthened an essential health service package that includes growth monitoring and nutritional assessments of children less than 5 years of age. However, food-aid largely comes from the World Food Program. All the sites visited had scales for weighing children and staff trained to identify and address malnutrition. Every site was experiencing a shortage of food stocks and the Team saw empty or near-empty storerooms throughout the areas in which it traveled.

If anything, the malnutrition situation for children in Djibouti appears to be getting worse. Between 2002 and 2006, rates for various malnutrition indicators among children actually increased (see Figure 6). Drought, high food prices and limited economic options exacerbate the problem.

Figure 6  
 Portion of Children (<5 years of age) in Djibouti with Malnutrition, 2002-2006

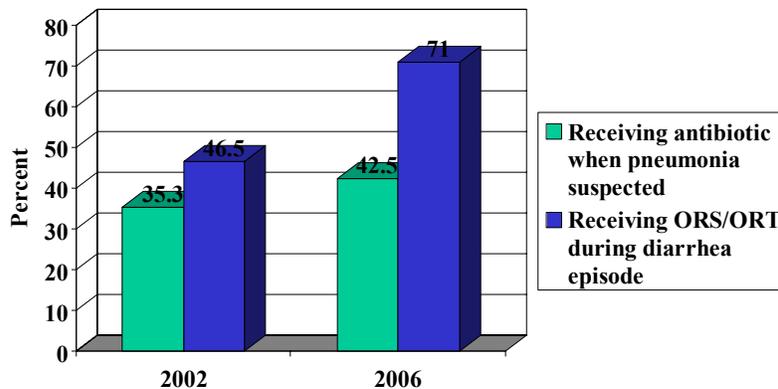


Source: UNICEF 2007 Analyse de la Situation des Femmes et des Enfants en Republique de Djibouti

### 3) Other Interventions Improving Child Health

With pneumonia being the cause of 30% of under-5 mortality in Djibouti and diarrhea the cause of 29% of those deaths, the provision of appropriate treatment protocols for children encountering these health risks is critical for mortality prevention. The portion of children in the under-5 age cohort that receive such treatment when needed has been increasing (see Figure 7).

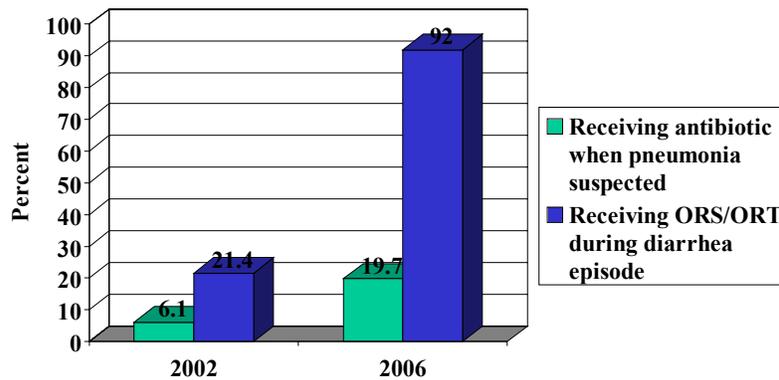
Figure 7  
 Portion (%) of Children (0-59 months) Receiving Preferred Treatment for ARI and Diarrhea



Source: 2007 Rapport Final, Enquete Djiboutienne a Indicateurs Multiples & 2004 Enquete Djiboutienne sur la Santed de la Famille

The portion of children receiving ORS/ORT during a diarrhea episode increased by 53% over the four year period ending in 2006. During the same timeframe, children receiving an antibiotic when pneumonia is suspected experience a more modest 20% increase. USAID’s support for improved MCH services and the expansion of essential health care undoubtedly contributed to the increase in the numbers of children receiving preferred treatment.

*Figure 8*  
**Portion (%) of Children (0-59 months) Residing in Rural Areas of Djibouti Who Receive Preferred Treatment for ARI and Diarrhea**



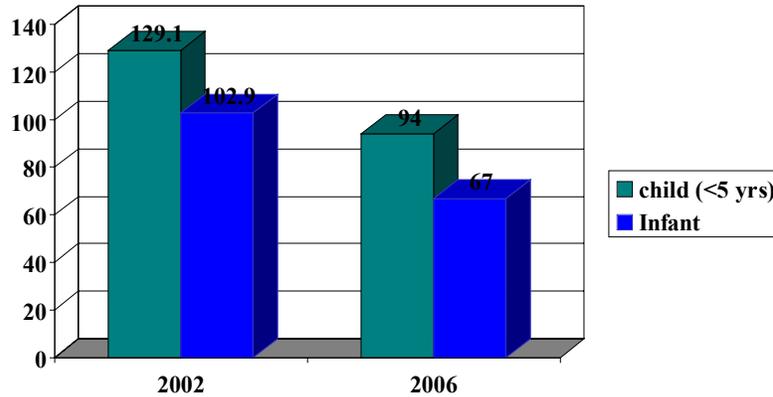
Source: 2007 Rapport Final, Enquete Djiboutienne a Indicateurs Multiples & 2004 Enquete Djiboutienne sur la Santed de la Famille

The progress in extending appropriate treatment protocols to children in need has been different in rural areas (see Figure 8). Although the total percentage of children receiving the preferred treatment for pneumonia in rural areas is less than that for the nation, the portion of children reached with an antibiotic more than doubled. Oral rehydration treatment in the rural areas experienced phenomenal improvement. Increasing nearly 3.6 times, the total coverage for oral rehydration treatment exceeds that of the nation as a whole and benefits 9 of 10 children.

#### *D. Progress in Mortality Reduction*

Mortality rates for children in Djibouti are declining. Between 2002 and 2006, the mortality rate for children less than 5 years of age declined by 27% to 94/1000 live births (see Figure 9). Between 1990 and 2002, the annual rate of decline for under-5 mortality was around 2% (2.2). The average annual rate of decrease for the same statistic in the four years between 2002 and 2006 was nearly 7% (6.75) – a descent that was about three times as fast as the previous decade. During the same period (2002 to 2006), infant mortality dropped by an even greater amount (34.9%) to 67. The four-year decline in infant mortality represents an impressive average annual decrease of nearly 9% (8.7).

*Figure 9*  
**Child (<5 years of age) and Infant Mortality Rate**  
 (per 1000 live births) in Djibouti Over Time

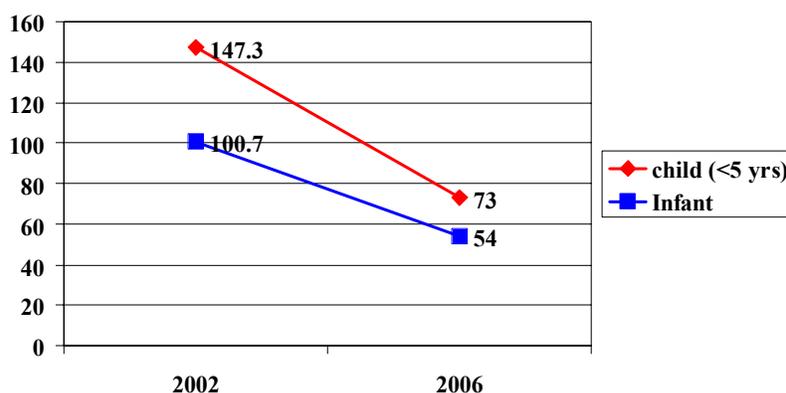


Source: 2007 Rapport Final, Enquete Djiboutienne a Indicateurs Multiples & 2004 Enquete Djiboutienne sur la Sante de la Famille

Interestingly, by 2006, both infant and under-5 mortality rates are lower in rural areas than among urban populations. The infant mortality rate in rural areas in 2006 was 54 while that for the urban population was 68. Between 2002 and 2006, the infant mortality rate in rural populations declined by nearly 50%, going from 100.7 to 54 (see Figure 10). That decrease represents an average annual reduction in rural infant mortality of nearly 12% (11.6) – a rate of change that is about 33% faster than that realized in urban populations. When compared to the rate of change in infant mortality nationally, improvements in reducing infant mortality in rural areas progressed more rapidly than in the cities.

Figure 10

Child (<5 years of age) and Infant Mortality Rate (per 1000 live births) in Rural Populations of Djibouti



Source: 2007 Rapport Final, Enquete Djiboutienne a Indicateurs Multiples & 2004 Enquete Djiboutienne sur la Sante de la Famille

Under-5 mortality for rural areas also dropped by a similar amount (46.4%), with an average annual decline of 12.6%. Thus, between 2002 and 2006, under-5 mortality was dropping at a rate that was nearly twice as fast as experienced for the country as a whole. It is reasonable to conclude that USAID-supported efforts to assist the MOH in improving essential health services in the five districts outside of Djiboutiville has contributed to this more rapid decline in mortality.

### *E. Issues in Access to Services*

#### 1) Family Planning

Within the essential services package, family planning represents a very weak and under-emphasized component. At one of the clinics visited, no family planning services were offered or available. Another clinic had only introduced family planning a few months earlier in 2008. At all facilities visited, very little family planning information was visible. Access to contraceptive services in rural areas appears to be extremely limited and some PECSE staff report the Project was repeatedly asked not to focus on family planning.

Some of the hesitancy to improve family planning services may be due to pro-natalist sentiments. However, the health benefits of birth-spacing are under represented within the essential services package. The connection between birth-spacing and the reduction of mortality and morbidity is not an active part of mortality reduction strategies or service-delivery interventions.

Recent research from a variety of different developing countries shows that timing or spacing of pregnancies can affect the health of both the mother and the unborn child (see

Table 1). For example, analyses, based on data from a variety of different developing countries, show that the risk of a child dying following a pregnancy that occurred quickly after a previous birth is at twice as high as that for longer intervals. Studies also documented that a child born after a short interval of a previous birth has increased chances of: being the product of a pre-term birth; having below normal weight at birth; and, experiencing stunting or underweight conditions during growth.

The timing and spacing of pregnancies also affect the health risks to mothers. When a woman becomes pregnant too quickly following a previous birth, she faces higher risks of suffering such health complications as pre-eclampsia, eclampsia, puerperal endometritis, anemia, third trimester bleeding, premature rupture of membranes and even death.

*Table 1*  
Risks of Selected Adverse Health Outcomes Associated With Very Short-Interval Pregnancies

**Risk of Various Adverse Outcomes When Pregnancy Occurs 6 months After a Live Birth**

<i>Adverse Outcome</i>	<i>Associated Increased Risk</i>
Induced Abortion	650%
Miscarriage	230%
Newborn Death (9mos.)	170%
Maternal Death	150%
Preterm Birth	70%
Stillbirth	60%
Low Birth Weight	60%

**Risk of Selected Adverse Outcomes When Pregnancy Occurs Quickly After an Abortion or Miscarriage**

<i>Adverse Outcome</i>	<i>Increased Risk After 3-5 Month Interval</i>	<i>Increased Risk After 1-2 Month Interval</i>
Low Birth Weight	140%	170%
Preterm Birth	120%	160%
Maternal Anemia	40%	80%

Based on a review of recent research, the World Health Organization (WHO) produced a policy brief in 2006 with recommendations about birth intervals that would reduce maternal and child health risks. That policy brief states, “The World Health Organization (WHO) and other international organizations recommend that individuals and couples should wait for at least 2–3 years between births in order to reduce the risk of adverse maternal and child health outcomes” (WHO 2006: page 1). Additionally, mortality and morbidity risks can be lessened if a woman waits at least 6 months after an abortion or miscarriage before becoming pregnant again. These recommendations are designed to help women avoid the significant increased health risks associated with shorter intervals (Table 1). Similarly, births occurring to women less than 20 years of age carry increased risks.

Using data on birth spacing from the EDSF Survey done in 2002, it appears that about 2 out of 3 (67%) of all pregnancies in Djibouti occur less than the recommended interval. Short birth intervals among 15-19 year old married women are probably less common, due largely to the fact that most pregnancies in this age group represents a first birth. International data show that the general risk of a child dying by its 5<sup>th</sup> birthday, following

a pregnancy that occurred 15 to 27 months after an earlier birth, is 27% to 86% higher than for longer intervals. About 2 in 5 births in Djibouti (EDSF 2002) occur less than a 24-month interval after a previous birth. International data show that such pregnancies can represent a 265% increased risk of a child death. The newborns that are the product of the shortest birth-interval pregnancies also face over a 300% increased risk of a neonatal, post-neonatal or infant death. About 21% of births in Djibouti fall into this category.

Contraceptive use remains low (17% for modern methods). That family planning services are not reaching people effectively is illustrated by the 2006 survey data that show the portion of demand for family planning that is unsatisfied is around 84% in rural areas while the unsatisfied demand in urban areas is 54%.

## 2) Neonatal Health

Many of the causes of newborn deaths in Djibouti are preventable and include preterm delivery, infections, asphyxia and tetanus. Incomplete obstetric care contributes to poor newborn outcomes. Neonatal health services to reduce neonatal mortality are largely non-existent at rural health facilities. Now that these centers have maternities and are offering an increasing number of delivery services, more and more rural women are choosing to delivery their babies at these rural facilities. However, these rural facilities remain largely unprepared to intervene to prevent neonatal deaths.

The current class of midwives being trained (now in their 3<sup>rd</sup> year) was recruited under a new policy to select worthy students from areas where need for these workers exists. The plan is to assign many to health posts in or near their homes-of-origin in early 2009 (upon completion of their training). These more skilled service providers could help to increase the availability of both maternal and neonatal care services. But, even so, much more can be done to improve neonatal care.

### *F. Policy Engagement and Sustainability*

During this period of USAID assistance, both USAID/Djibouti and the PECSE Project implementation team from JSI had discussions with the GORD, particularly with the MOH, on the importance of putting in place sustainable systems and cost recovery options. Several sessions, for example, occurred with the MOH about the need to develop and appropriately staff MOH maintenance functions and provide these sustaining systems with the means to function well. Often, agreements for the GORD to cover recurrent costs were reached and the MOH has put in place a cost recovery program during the past two years.

However, cost recovery is oriented toward the cities and the provision of rural health care remains largely a free service. Also, despite decentralization priorities, district health management is not yet fully functional. Frequent staff turn-over, lack of needed human resources, and other systems issues make the achievement of district health management goals difficult. Since District Medical Officers change so often, capacity established at the district level can be lost and the administrative priority for maintenance of past gains

may not be consistently continued. The speed at which the GORD moves forward with sustainability efforts may be enhanced by further policy dialogue.

In addition to financial and human resources, there may also be a need for continued technical assistance. The presence of an on-the-ground technical partner (in the form of the PECSE Team) has served as an important catalyst for change and an additional implementation resource for the MOH. After this office closes, it is not clear how or where the MOH will obtain the recurrent technical assistance it has found so useful in the past in examining policy and sustainability issues.

#### **IV. Conclusions**

Based on all the data collected, interviews, site visits and findings, the major conclusion from the evaluation is that USAID's assistance and combined achievements with the efforts of the MOH have been a spectacular success for improved MCH services in Djibouti. More specific conclusions are:

- 1) USAID assistance has greatly improved and expanded essential health services for MCH and other health issues. Caseload statistics for rehabilitated rural facilities show that adults are accessing care as frequently or more so than children. The same data illustrate that greater access has already translated into increased use of services at USAID-supported sites.
- 2) Capacities for health care management, monitoring, evaluation and planning have been substantially enhanced. This is particularly due to the introduction of a functioning nationwide health management information system.
- 3) Immunization coverage and capacity to immunize has been increased with visible results and achievements that move Djibouti much further along its objective of reaching Millennium Development Goals.
- 4) The social mobilization program brought principles of civil society to bear on the health care delivery system and increased both the involvement and stake of communities in the process of health care improvement.
- 5) The role that USAID assistance played has had a greater impact than the total value of financing might suggest. The amount of funding provided by USAID in its MCH program was significantly smaller than that provided by some donors since the 1990s and about the same as others over a similar time period. However, it appears that the progress made in this program was far greater than has been the case in most others for health service improvement in Djibouti.

In the view of the Evaluation Team, this is due probably to the mode of USAID assistance that provides on-the-ground implementation and technical support along with financing. Another factor was the quality of technical support accompanying the financing that was consistently available in country, as well as the close collaboration achieved with MOH counterparts. Implementation was a joint effort, in which MOH counterparts worked together with the PCSE Project team to further implementation efforts and assure assistance activities progressed. In the process, the MOH was able to combine its internal resources (whether human or financial) to accelerate implementation and achieve greater results during the four-year life of the MCH program. Given the impressive magnitude of impact, the results achieved represent a huge health sector return on USAID's investment in positive change.

- 6) Credit accorded to the U.S. for assisting visible, widespread improvements in health service delivery at the primary care level has brought broad-based public (and official) recognition of the value of U.S. Government relations to Djibouti. This popular recognition contributes to a positive public image of the U.S., even among the common citizens of far-flung rural villages.
- 7) Since infrastructure improvements are already starting to erode, it appears unlikely that the host-country will be able to sustain or maintain rehabilitated facilities in the next 2 to 5 years without external technical and financial assistance.
- 8) Assumptions that other donors will step forward to provide support similar to what USAID offered in this program seem unfounded and the prospect of another donor filling the gap produced by the cessation of USAID assistance for general essential health services is unlikely. There appears to be no equivalent substitute to USAID's assistance to the health sector in the near future. Consequently, the impressive gains achieved by USAID's recent investments are at risk.
- 9) The full potential contribution of longer birth to pregnancy intervals to mortality and morbidity reduction is not being realized. The health impact of longer birth intervals and reducing the number of early pregnancies does not appear to be an integral part of serious service delivery options to reduce mortality.
- 10) Weak or absent neonatal care at maternities means that an important opportunity to reduce mortality is being missed. With neonatal mortality composing 67% of the total infant mortality in Djibouti, more rapid advances in reducing child mortality would be realized if neonatal care was improved.

- 11) The newly available data from the HMIS is an important additional resource for better management of health services as well as for improved planning nationally and in districts. However, the potential for the use of this information has not been fully realized; nor are the possibilities for application to supervision or other management functions being exploited to the fullest.

## V. Recommendations

The Evaluation Team grouped its recommendations for the future into two categories. Those for the short-term are suggestions that could be implemented before the scheduled close-out of the PECSE Project (August, 2008) and over the next 6 months by the MOH and others. The second category contains general recommendations for continuing to improve MCH services or realizing further declines in mortality

### *A. In the Short-Term*

#### 1) Identify the extent to which capacities intended for rehabilitated facilities are non-functional

A survey of all rehabilitated facilities should be undertaken to identify and inventory all the problems (lack of running water, non-functioning incinerators, non-operable autoclaves, etc.) that prevent the health facility from operating at a fully functional level. If possible, root causes for the problems should also be defined and recommended solutions offered as part of the survey. The survey should involve MOH personnel and the results shared with senior MOH decision-makers to determine if longer-term mechanisms to address such problems in the future can be identified.

#### 2) Assist as many of the repairs as possible before the end of PECSE Project implementation

The PECSE should assist in repairing or directly address as many of the problems with rehabilitated facilities as time and funding allow. The list of repair needs generated by the survey proposed above should also be shared with the U.S. Military to see if some repairs would be suitable for its community outreach activities.

#### 3) Assist the MOH to review facility maintenance procedures and capacities

Since the existence of problems in maintaining facilities illustrates an underlying systemic problem in supporting/repairing health centers, technical and other assistance should be offered to the MOH to review maintenance procedures and authorities. There may be improvements possible, for example, through streamlining problem-reporting channels and clarifying delegated authorities for decision-making for repairs or purchasing.

#### 4) Provide the means to back-up data within the HMIS

The new health management information system could be strengthened and the risk of data loss lessened if there was a facility to automatically back up data in the computer system. A data back-up facility should be added as soon as possible. There is also a need

to improve MOH capacity in trouble-shooting and maintaining the Internet system installed at the MOH.

5) Engage other donors to increase their support for essential health services

Given that USAID's available funding for non-disease specific support of essential health services are likely to be greatly reduced over the next two years, USAID/Djibouti should engage other donors to encourage them to provide additional support for essential health care in the rural areas. The Mission could urge the MOH to formally request UNICEF to expand its support for routine EPI services and general community mobilization activities for maternal and child health. Additionally, the Mission could play an important role in stimulating donor discussions with the MOH about health financing options and how cost recovery efforts can be developed to benefit such activities as DHMT supervision and community mobilization.

*B. For Future Improvements in MCH and Other Essential Health Services*

1) USAID should continue to support improvements in basic health services

USAID has played a substantial leadership role in providing the technical guidance, implementation support and vital funding for transforming the way primary health care is available and accessed Djibouti. Through continued investments, gains achieved could be consolidated and the risk of losing the value of past investments lessened. Further assistance for extending the essential health service package offers the opportunity of even more rapid progress toward health goals within a 5 to 10 year period. Focusing available resources only on a limited number of diseases (such as HIV/AIDS and TB) will not have as broad an impact on the health care system or the health status of the general population.

2) Expand and vitalize family planning services

Family planning services should be a more vibrant part of MCH services and the essential health service package in Djibouti. Orienting such services around the themes of health timing and spacing of pregnancies could easily help integrate family planning within basic health services. On the policy level, the specific contributions of longer birth-to-pregnancy intervals to infant and neonatal mortality reduction could be calculated and linked to specific mortality reduction goals.

There is a need to increase the existing demand for spacing and to reduce the current level of unmet need for family planning. To reduce the current number of pregnancies that occur less than recommended intervals, couples will need easier access to spacing services that are responsive to their circumstances. Since most of the births occurring among women 15-19 years old are first births, the main issue for this age cohort is the timing of the first pregnancy. Communications, counseling and services for adolescents should focus on the health risks associated with the timing of a first pregnancy and birth.

Specific recommendations for enhancing family planning services as a contribution to improved MCH services include:

- Implement behavior change communication and counseling interventions for healthy timing and spacing of pregnancies as an integral risk prevention strategy in all family planning, child and maternal health communications and client counseling protocols.
- Ensure the two 2006 WHO pregnancy spacing recommendations, as well as information on the specific health benefits associated with the healthy timing and spacing of pregnancy are included in all MCH communications and protocols.
- Develop or strengthen pregnancy spacing services and communication activities for young (20-29 years) clients.
- Help families understand that long-acting and intermediate methods (IUDs and injectables) are safe, and can effectively help them achieve their spacing preferences.
- Expand communications and service delivery efforts among zero-parity adolescents that are oriented to health risks associated with the timing of a first and subsequent pregnancy.

### 3) Strengthen neonatal health services

To stimulate a more rapid decline in infant mortality, neonatal services urgently need strengthening. Several opportunities exist to add improved newborn care services at all facilities offering deliveries. Such services should include the promotion of exclusive breastfeeding of the newborn. Although elements of essential newborn care may be taught during pre-service training, basic life-saving skills for newborns need to be more widely present at rural facilities where increasing numbers of women are delivering their babies.

Other options to strengthen newborn care include: the provision of job-aids at health facilities that reinforce life-saving learning and the regular application of neonatal care within the maternity context. Capacities for newborn resuscitation should be enhanced in maternities and Apgar scores for newborns should be fully recorded. Simple but effective facility-based care such as kangaroo-mothercare could also be used to prevent hypothermia.

### 4) Increase interventions for malnutrition

With malnutrition indicators worsening, increased efforts to address malnutrition in children are urgently needed. The MOH's National Health Development Plan 2008-2012 includes an objective (Strategie 2.5.2, page 65) to strengthen the supply of quality health care for children with several important specific activities for nutrition. The supply system should be improved to avoid shortages of critical supplemental foods for the treatment of malnourished children. Logistics and supply protocols for facility based warehousing of food stuffs should be reviewed to see if the standard stock inventory in the rehabilitated facilities could include sufficient food supplies for 6 months or longer. Health care outreach should also be strengthened to better identify malnourished children that do not present at health facilities and encourage parents to bring them in for care.

5) Strengthen and support MOH decentralization efforts

Future assistance to the health sector should include a special emphasis on enhancing the decentralization program within the MOH. The management capacity of district health teams will be an important factor in the overall success of the decentralization process. The role of the social motivation activities undertaken with PECSE Project support could become an effective tool in decentralization to the local level and community health committees could play a more active role in both managing health services and advocating for health care improvements.

It appears that current practice is for health services in the districts are basically free or at very low, subsidized costs. Health financing studies or technical assessments of cost-recovery options might be warranted. Expanding cost-recovery options and exploring health budgeting/financing options should also be part of the exploration on how health services can be most effectively decentralized.

## Annex 1

### Interview Guide for Key Informants and Stakeholders Djibouti MCH (PECSE) Project Evaluation

Key informants and stakeholders for the evaluation includes several groups: Ministry of Health (MOH) staff, PECSE Project staff (JSI), U.S. military representatives (CJTF/HOA), health care providers, community participants, District Health Management Team members, etc. General questions may be asked of any stakeholder or key informant and responses may vary depending upon the individual's experience with the Project or perspective. The general questions are primarily open-ended to allow the respondent to provide his/her own opinion of, emphasis and significance to Project efforts. Some general questions are designed for specific informant groups and are identified as such below.

The nature and content of responses may suggest the need for additional probing questions to solicit the desired information. Consequently the interview guide also includes some possible probing questions that can be anticipated around the primary intermediate result areas of the Project. Evaluation Team members may also introduce additional questions to pursue interesting topics or examples provided by respondents or to solicit more specific information that would clarify any given response.

#### ***I. General Questions***

##### ***a) For any stakeholder interview:***

How has the Project contributed to health improvements in Djibouti?

In your opinion, what is the greatest contribution the Project has made?

How has the Project increased the supply of essential health services?

*Reminder points for interviewer to further probe responses provided:*

- *Infrastructure*
- *Access by mothers and children*
- *Retention rates for nurses*
- *Guidelines and training*
- *Collaboration with MOH*
- *MOH and community responsibilities*

In what ways has the Project improved the quality of services?

*Reminder points for interviewer to further probe responses provided:*

- *Health information system functionality and use*
- *Minimum service package norms and standards*

- *Training in data collection and analysis*
- *District Health Management Team training*
- *District Health Management Team supervision*
- *General training and service improvement*
- *Technical assistance to enhance MOH capacity*
- *Monitoring maternal/child health data*

To what extent has behavior change communication activities (home and community visits and discussions, radio spots, etc.) influenced client behavior and health-care seeking patterns?

What impact has the Project had on how the MOH approaches social mobilization to achieve its essential health service objectives?

How has the Project enhanced local capacity to continue to provide essential services in the future?

*Reminder points for interviewer to further probe responses provided:*

- *MOH collaboration in community mobilization*
- *Information, education and communication activities*
- *MOH role in supervision*
- *Support for local organizations*
- *Study tour benefits*
- *Enhanced capacity of District Health Management Teams*
- *Behavior change communication application*
- *Availability and use of supplies: furniture, computers, equipment, etc.*
- *MOH maintenance of facilities*
- *Policies and prevailing practices in on social mobilization*

In your opinion would you describe the Project's efforts as successful? If so, why? If not, why?

Looking back over your experience with the Project, is there anything you would have like to see the Project do differently?

What are the greatest challenges to sustaining the gains achieved in the Project?

For the future, what are the most pressing needs to make further improvements in essential health service delivery?

***b) For interviews with service providers:***

As a service-provider, how has the Project affected your work or the way you offer essential health services?

How have you used the training you received in the conduct of your regular duties?

Have you noticed any difference in client load or the frequency with which clients access services?

How regularly is supervision a part of your monthly work experience?

Do you feel the quality of service-delivery is better and, if so, can you give some examples of how or why quality has improved?

***c) For interviews with local health committees, community partners or district health teams:***

What has changed in terms of access to health care as a result of the Project?

How has the quality of care changed in your area?

If you believe the capacity to provide quality health services has been strengthened through the Project, can you give some specific examples?

***d) For interviews with UNICEF staff:***

How has the country's cold chain been strengthened?

In what ways have the activities USAID financed improved vaccine supply?

What has been the overall impact on immunization coverage in the country?

What is the greatest continuing need that faces future immunization efforts in Djibouti?

Given that USAID support is coming to an end, do you see aspects of the program that UNICEF might be best positioned to continue working on with the MOH?

***II. Selected Probing Questions for Use in Any Interview***

What impact has the Project's improvements to health facility infrastructure made on access to essential health care?

How effective has the training been in strengthening DHMT oversight and supportive supervision functions?

Are the revised norms and standards for the Minimum Activities service package having an influence in how services are delivered and monitored?

To what extent have the MOH and/or individual communities taken on responsibility for the maintenance of project-funded improvements?

What impact have health committees and community health workers had on essential health services and the capacity to sustain such services in the future?

## Annex 2

### Summary Interview Notes from the Djibouti MCH (PECSE) Project Evaluation

*PECSE Project Team, May 27, 2008*

Project staff gave a power-point presentation summarizing project objectives and progress to date. During discussion, some of the subjects included:

- An overall description of the public sector health system and facilities in Djibouti
- A summary of the status of cost-recovery practices at the MOH, with descriptions of the fee-structure and rationale to implement minimal service delivery fees only in cities. Fee structure was guided by a premise to augment the funds available to support health infrastructure
- The training efforts of the Project were complicated by the fact that the MOH cancelled several training sessions planned and scheduled by the Project. Some of the reasons for the decision to cancel trainings included: the Minister decided nurses should stay on the job to continue providing services; there was a desire for some staff to obtain more on-the-job experience before going to training; and, elections made travel in some areas sensitive.
- As the Project comes to an end, staff are concerned about sustainability issues and how the MOH will be able to maintain the gains achieved during implementation. Some specific concerns included: how well the District Health Management Teams will be able to plan, manage and supervise district-level service delivery; whether the MOH will be able to maintain the equipment and rehabilitated buildings at hospitals and rural health posts without external financial and technical support; whether or not the social mobilization program pioneered by the Project will receive the support necessary to maintain community interest and sufficient community outreach functions; and, a worry about whether or not the improvements designed for regular supervision of health posts can be sustained by the MOH.

*CJTF/HOA Group Meeting, May 27, 2008*

In a meeting with the U.S. Military, it was observed that the military can and does compliment the program on renovations and sometimes equipment. Examples of health infrastructure improvements undertaken by the Military included:

- Many examples of MEDCAP service delivery days at various locations
- Rehabilitating TB department at a district hospital (Dikhil)
- Renovating the district hospital at Obock
- Adding protection walls for technicians in X-ray rooms at a district hospital
- Refurbishing nurses residences at a facility in Dhora
- Adding an electrical power source (generator) at a clinic

- Upgrading the women's clinic at a district hospital

There has been an effective and beneficial collaboration with such activities and USAID-financed assistance for rehabilitating clinics. In the future, there will be more opportunities for assistance from the U.S. Military to do discrete infrastructure improvement and facility maintenance for MOH health service delivery sites. Civil affairs activities in the north on hold at the moment due to political tensions there. Continued collaboration with the military would be of great benefit to efforts to further improve access to better essential health services.

*UNICEF-Djibouti, May 28, 2008*

The Country Representative appreciated that:

- USAID support made a difference and is appreciated
- Djibouti has stayed free of polio in an area that has recorded several cases
- There have no interruptions in supplies or stock out throughout the USAID support period
- Has provided vaccines-sharps security- incinerators
- Cold chain at all facilities
- Storage capacity and central stores increased
- GAVI application successful
- National vaccination rates are still below 90% target but coverage rates improving annually and at this rate Djibouti can meet MDG 4
- Multiyear EPI plans in place with a full time EPI manager was assigned a week ago

More generally, the Representative's comments included:

- Previously, the EPI program was too vertical and too much time was taken away from routine immunization to concentrate on campaigns for polio and measles
- Although MOH has a budget line item, it is not used for vaccines- budget is largely consumed for staff costs
- Message to MOH should be that they have the capacity to support immunization nationwide since it cost only about 100,000 dollars a year.
- GAVI commitment of government contribution not being observed.
- USAID investment opened up the rural health system
- USAID assistance should now focus on strengthening community health behaviors and ensure essential package is fully applied at the community level (facility, outreach, community).
- UNICEF is focusing on key problems of ARI, Diarrhea, malnutrition, malaria and neonatal health
- Since high percentage of women deliver at health facilities: 87% and deliver with a skilled worker 90% the project should take advantage of this opportunity to address neonatal health
- 17% of global acute malnutrition is Djibouti- There is a need to deal with structural causes and address food security issues

- HMIS needs to disseminate analyzed data more widely. Partners can meet- one day and make suggestion to HMIS on how to analyze and present data to address key indicators
- Given the equipment provided including software MOH should be able to sustain the HMIS.

The gaps that UNICEF can fill are:

- Routine EPI
- Social mobilization/communication
- Supplemental immunization
- Advocacy for strengthened MOH contribution
- Development of community component of program

*MOH, May 28, 2008*

Dr Kassim Issak said, “What USAID has done in the past four years could not have been achieved in 20yrs without them”. He said USAID’s assistance was the best donor support the Ministry has received in his entire tenure with the Ministry.

The MOH sees the program as having:

- Been a catalyst for rural health services development
- Improved access to 23 out of 26 facilities; rehabilitation; annexes- maternity, immunization, nutrition, nurses’ residences and water.
- Ensured regular staffing and access to more consultation rooms, regular drugs supply has increased access
- Created housing for nursing staff in rural facilities and this improved the placement and retention of staff at these posts
- Supported a new automated HMIS
- Supported Community mobilization, a new idea to MOH
- Provided running water in 90% of facilities
- Added 15 cu meters of cold storage space the national EPI storage facility
- There are no disruptions in drug supplies

Currently, the MOH prefers to recruit staff from the region to improve retention at district posts and to strengthen staff continuity. The MOH has made decentralization a high priority. Implementation has been a team effort with USAID’s project team in Djibouti and collaboration was excellent. The flexibility of support, even after work plans were developed, is seen as a key capacity for responding to changing MOH needs.

In the future, the MOH would like to see USAID continue its assistance for improving essential health services and:

- Consolidate gains and focus on sustainability strategy
- Support decentralization process
- Improve community participation

- Provide radio equipment at districts to improve communication with rural facilities

*WHO-Djibouti, May 28, 2008*

Dr. Tyane said he was very impressed with the rapid progress achieved through USAID's support and the improved services now available at rural health facilities. He noted that the decentralization process in Djibouti now makes it possible for WHO to sign assistance agreements with some districts for direct support at that level.

For the future, he sees needs for:

- Further strengthening of training capacities at the MOH
- Improving management skills and capacity at the MOH (both at headquarters at the district level)
- More serious examinations of health financing and cost-recovery options for the health sector and the MOH

*Dalley-Af Clinic Visit, May 29, 2008*

- Renovations completed in 2007
- Four staff, four CHWs in the coverage area and community health committee of 9 people
- One mother and a child were there at time we visited. Mother said she had 2 other children and that before the facility was rehabilitated she often had to take her children to a district hospital 30 kilometers away to get care – a burden that impeded her access to services
- Patient records indicate the center sees 85-100 clients a month
- Mentioned they do immunizations once a month but had no record of immunizations
- Motorbike donated by UNICEF with USAID funding not operational due to lack of fuel and has been send back to district HQ.
- Water pipe got broken in November 2007 and has since not been fixed. Facility has had no running water since
- Broken door lock remains unattended to
- One former volunteer recruited by MOH and trained is at facility as an Aid midwife
- Facility offers no FP services although one mother at facility expressed willingness to use service if it was available.
- Community appreciates service since there was none before and they had to travel long distances
- The health committee active in maintaining cleanliness at facility and in community mobilization
- Very active President of village development committee was concerned that even though there was a good water source in the village, there was no water at the clinic
- Broken water pipe that have not been fixed since November 2007
- Shortage of food stuffs for child nutrition work

*Tadjourah District Hospital Visit, May 29, 2008*

- District health team supervises and supports 7 health posts
- All district hospital staff have received training in their areas of specialization from the program
- Supervision from the districted is limited due to staff, transport and fuel constraints
- District health team credits USAID with introducing social mobilization program and sees the benefits these activities produced for better outreach to the community
- Maintenance a problem – particular concern about x-ray equipment provided with no protective clothing for the operator and is set in a room that cannot control radiation
- Efforts at cost recovery include a fee structure that includes a DF 100 (\$0.56) for a hospital consultation and the equivalent of \$2 to \$3 for certain diagnostics (such as x-rays).
- Shortage of food stuffs for child nutrition work

*Sagallou Clinic Visit, May 29, 2008*

- Clinic records indicate client loads range between 400 and 600 persons per month
- Serves an immediate population of about 5,000 but will see anyone that presents
- Records well kept
- Gas for autoclaves was to be replaced by MOH. This has not happened. Out of gas, autoclaves not working
- Facility has contraceptives and offers family planning services
- Sees many cases of malnutrition
- Has broken door lock to store room making it insecure for drugs and medicines
- Broken water tank next to the maternity means there is no running water for to assist in delivery services
- Neonatal survival services not significantly offered in the maternity
- A mother was present who had given birth to 7 children, one of whom had died.
- Clinic staff report that increasing numbers of pregnant women are coming to the center to deliver their babies
- Nutrition education not based on household foods but rather on food that WFP provides
- Shortage of food stuffs for child nutrition work

*Mouloud Health Post Visit, May 31, 2008*

- Rehabilitated jointly by U.S. Military and USAID; but does not have an incinerator for medical waste nor external toilets for out-patient clients
- Rehabilitation added a maternity and now deliveries are being done
- Neonatal survival services not significantly offered in the maternity
- Clinic staff report that health outreach workers are critical for client follow-up, particularly for clients who are illiterate
- Clinic records indicates client loads are high and growing each year

- The village was electrified so clinic already had access to power for cold chain purposes
- 3 women are on the community health committee
- Communication with district hospital a problem – would like radio capabilities
- Referral of urgent cases a problem because district hospital ambulance is not working and neither is the vehicle at the local police post
- There are 3,800 people living in the immediate village where the facility is located, but the center services an area that includes clients who live 25 kilometers away
- Staff report that PECSE Project personnel have been a more frequent source of assistance for the facilities needs than the MOH
- Stock out of WFP supplied food stuffs for nutrition work

*Ali-Sabieh Hospital Visit, May 31, 2008*

- District health team overseas 5 health posts
- HMIS collection point is computerized and functioning, however aggregation of data do not appear to be up to date
- Supervision of rural clinics was said to be done once a month
- Case loads at the hospital have not declined due to increased usage of rural facilities – reportedly due to the services provided to people living in the vicinity of the hospital
- Shortage of food stuffs for child nutrition work

*Dasbiyo Clinic Visit, May 31, 2008*

- Clinic records indicate client loads range between 100 and 200 persons per month
- Maternity is present and offering delivery services (6 women delivered between January and May of this year)
- Neonatal survival services not significantly offered in the maternity
- Representatives of the health committee and those health outreach workers present had all received training through the PECSE Project
- The health committee arranges for the clinic to be cleaned regularly
- Clinic staff report that they rarely receive any supervisory visits from the district level (none between January and May)
- Sterilizer is present but there is no gas to operate it so it has not been used for 2 years
- Shortage of food stuffs for child nutrition work

*Holl-Holl Clinic Visit, May 31, 2008*

- Clinic records indicate that 3,971 clients were seen in 2007
- District mobile clinic comes once a month
- Last district supervisory visit occurred more than a year before
- One mother present said she had 3 children and her youngest was born at the clinic's new maternity
- Staff report there are about 10 deliveries here a month
- Neonatal survival services not significantly offered in the maternity

- Family planning services and contraceptives available but only started in April, 2008 – no family planning information or communication materials were displayed or available – there was no mention of child-spacing as a means for preventing child or maternal mortality/morbidity
- Health committee members report the community is very pleased with the improvements in the health services now available locally
- The incinerator built during rehabilitation has never worked properly (not consuming medical waste during burning) so it is not used. An open oil drum is the current burn site
- The water cistern installed has leaked from the beginning and is not in current working order, so only 1 of 2 running water sources work
- Clinic staff are concerned about maintenance and how to get equipment repair
- Shortage of food stuffs for child nutrition work

*UNFPA-Djibouti, Jun3, 2008*

- UNFPA provides Djibouti with 100% of the contraceptives being used for family planning service delivery through the MOH
- UNFPA assistance plans for the future include provisions to continue to supply contraceptives to the country
- Injectables were introduced 8 or 10 years ago and the popularity of this method has been growing
- IUD usage remains low, in part due to the lack of skilled providers to insert them
- Service provision capacity for long term and permanent methods remain low
- Family planning communication activities and capacity needs to be strengthened considerably. This is a chronic area of weakness for the program of service delivery – many in the population are not aware of family planning options and the role that birth-spacing can play in reducing health risks for mothers and children
- A continuing problem for planning and policy dialogue on family planning is the lack of current data about reproduction (pregnancy timing, spacing, etc.)

**Annex 3**  
**Answers to Specific Questions Contained in the Scope of Work and Related to  
Performance Against Planned Activities**

IR 1: Increased Supply of Essential Health Services

- What has been achieved in terms of physical improvements to Djibouti's Health infrastructure?

All 23 facilities targeted for improvements have been rehabilitated and equipped.

- What impact has this made on access by Djiboutian children and mothers to essentials health care?

Access to services has been substantially increased with the result that more mothers and children are using services (see Sections III. B and III. C., pages 17-23).

- Did project built nurses residences increase retention rates?

Yes. Both retention and recruitment improved for rural facilities.

- What impacts have improved facilities had access to essentials health packages?

More of the services within the essential package are available after rehabilitation than before.

- How effective did the project collaborate with MOH, to expand the coverage of essential health package in rural areas?

Collaboration with the MOH was excellent and one benefit of the close working relationship was the rapid progress the Project achieved in implementation.

- To what extent have these improved clinics served as "laboratories" for the implementation of activities under the project's other two IRs?

Rehabilitated clinics became the focal point for the integration of impact for all three IRs. As such, these clinics were the "window" of opportunity through which mothers and children experienced the composite of improvements in MCH services available to them as a result of USAID support. These facilities have become the standard of basic health care for the country.

- To what extent have the MOH and individual communities taken on responsibilities for the maintenance of project-funded improvements been realized?

The social mobilization program was successful in establishing community-level health committees with volunteer health outreach workers. These have resulted in greater community responsibilities and involvement in keeping facilities clean and motivating parents to bring children for immunization. However, MOH maintenance of facilities is weak and slow to materialize.

- Were guidelines on Maternal and child health and school health developed, and were relevant health providers trained in its use?

Yes. Training was widespread but not fully comprehensive in some subject areas due to cancellation of some training courses by the MOH.

## IR 2: Improved Quality of Services

- Is the National HMIS system functional?

Yes. Data are collected regularly and analyzed annually at the national level. HMIS summary reports have been produced for 2006 and 2007.

- Have data collection tools and computers been provided?

Yes, data collection forms, computers and software are present and operating.

- Were norms and standards revised and developed for all services based on the Minimum Activities package?

Yes; these standards were also reflected in the training modules developed as well as within supervision protocols.

- Was development of a new database, computer network, and support to MOH website carried out?

Yes.

- Were health providers trained in the utilization of data collection tools and performing basic data analysis?

Yes.

- How successful was the project in working with MOH to develop a National HMIS?

Quite successful, as evidenced by the rapid progress from design to application and then to regular use for the production of two annual reports within a 3+ year implementation period.

- Were the DHMTs trained in Management and supportive supervision?

Yes; however, DHMT supervision of rural facilities remains weak and infrequent.

- Was DHMT supervised from the central level with support from the project?

Yes.

- Did the project develop all planned training modules?

Yes, 18 training modules were developed.

- Were all health providers trained?

Most were; but not all received the full training that was planned because of training cancellations by the MOH.

- As a result, did the quality of health services improve?

Yes, the quality of services is better, but the biggest change in quality is related to the wider range of services, drugs, vaccines, trained health personnel, etc. at the rural facility and the fact that services are offered in much improved surroundings with water, electricity, fans and clean floors.

- How effective were the supervision tools harmonized?

The tools themselves were harmonized with essential service norms, standards and service delivery protocols. However, the tools do not appear to be regularly utilized in the districts where supervision visits are infrequent.

- How effective was the project in providing technical assistance to enhance MOH overall capacity?

The quality of technical assistance provided was recognized by the MOH and helped expedite implementation. The technical assistance was also well oriented to the Djiboutian setting so that recommendations were practical and easily applied.

- Were data on antenatal care, deliveries and childbirth monitored?

Yes, a system of checks and balances for data quality is part of the HMIS. Entries that depart from past patterns are flagged and can be checked for accuracy.

- What were the results of supporting intensive training, TAs and study tours in building overall MOH capacity?

Training, technical assistance and study tours helped to raise understanding about the improvements that could be made in the Djiboutian context and what methods could be used.

- What impact have these activities had on improving the quality of health care to Djiboutian population?

Perhaps the biggest change experienced by the rural population was the ability to obtain care close by from facilities that are considerably better than most structures in the vicinity. Having running water and electricity contributes to the quality care, as do the regular cleanings provided by the community health committees.

### *IR 3: Enhanced Local Capacity to Sustain Health Services*

- How successful was the project in working with MOH and other partners in the implementation of health committees and community health workers?

The social mobilization activities succeeded in creating health committees with members drawn from local communities. Volunteers from the communities also were found, trained and performing critical out-reach functions for health services, particularly for motivating households to bring children for immunization.

- How effectively did the project promote female role models?

Each health committee at the sites visited included several women members and there were women serving in the role of community health workers. Training for health providers, community volunteers and social mobilization regularly included women participants. The critical role of women in helping to reach other women with improved MCH services was reflected in the Project's planning, monitoring, management and implementation activities.

- What impact have these health committees and community health workers had on sustaining health services?

The main impact of the health committees and health workers for sustaining services has been to create a greater involvement of communities in helping to achieve certain health goals (such as high immunization coverage). The committees have created a new community resource for mobilizing local resources to keep rural health facilities clean and the grounds tended (even with flowering gardens). These new links to the community also have provided alternatives for transport for patients who are referred to district hospitals for treatment. However, so far, the health committees do not to be involved with minor maintenance (changing light bulbs, fixing door locks, etc.) issues that have already arisen at rehabilitated health facilities.

- Were IEC Materials produced by the project, and were community health workers trained in its use?

Yes and community health workers were trained. Most examples of printed communication materials for use at the community level were related to immunizations.

- Did MOH, as a result of the project, implement a new strategy to reinforce social mobilization?

Yes. The MOH has embraced social mobilization for community involvement for essential services and the MOH has begun to hire some of the volunteer community health workers trained under the Project to implement a part of the social mobilization strategy recently adopted.

- Did the project collaborate effectively with MOH to carry out supervision activities?

Yes. Project staff collaborated extremely well with MOH counterparts to oversee implementation activities and to ensure that implementation progress was achieved in a timely fashion.

- How effective did the project support local organization involved in the fight against maternal and child mortality?

The Team saw no examples of assistance to local non-government organizations involved in MCH activities.

- Were study tours and short-term training for MOH staff carried out? How effective were they in improving overall MOH capacity?

Study tours and short-term training were conducted for MOH staff. These appear to have raised awareness within the Ministry about what could be

accomplished and how. These events also seem to have facilitated joint implementation efforts.

- How effective was the training in terms of DHMT supervision, supportive supervision and communication participation?

Training did provide the skills needed for these activities; however, it appears the skills are rarely being used since DHMT supervision seems to be an infrequent event.

- Was the project successful in strengthening the capacity of DHMT to supervise and manage the District Hospital and all health posts in their district?

There is greater capacity now at the DHMT to supervise and manage services within their respective areas. This enhanced capacity is largely represented in the presence of supervision protocols, greater skills and a much improved health information system with data aggregation capabilities at the district headquarters. However, it also appears this greater capacity is under-utilized and managerial capacities remain limited.

- Were internal and external study tours on social mobilization and district health management carried out? How effective were they?

Study tours were undertaken and served to provide examples of how other health systems have developed community involvement in support of better health services. These examples helped to generate new ideas for application in Djibouti.

- How effective was the project in organizing behavior communication for Change activities for the population (home and community visits and discussions, radio spots, plays? To what extent has this changed behavior?

Communication activities were undertaken, radio spots were developed and aired. Since much of the communication was oriented towards immunization, perhaps the best testament to changed behavior is the rise in immunization coverage – this, in turn, means that households are increasingly bringing children for vaccinations.

- Was the planned technical assistance on developing MOH maintenance unit carried out?

Due to time shortages, the Team was unable to ascertain the extent to which the MOH maintenance unit was assisted. However, it would appear that maintenance capacity remains weak.

- Were training departments, regional health departments and six regional mobilization units supplied with in office furniture, training materials and computer packages? Were their capacities improved in results of this support?

Training capacity was enhanced at various levels. For example, 18 training modules were developed and trainers oriented in their use.

- Was the planned TA to support MOH national policy in social Mobilization implemented?

Yes, it appears to have been, with noticeable results.

#### 4. Monitoring and Evaluation

- To what extent did the project identify indicators appropriate for measuring the stated outcomes of the project? Was the project effective in collecting baseline data, setting targets, and identifying information sources?

During implementation, sufficient indicators were identified and used to measure progress toward desired outcomes within each intermediate result area. Baseline data were collected or determined from available information. These baselines were adequate and sufficient for assessing overall change as a result of project activities.

- Did the M&E system provide timely, accurate information to aid project decision-making? How effective was the M&E system overall keeping project management and USAID informed on the impact the project was having as activities progressed?

The Project's M&E system was well developed and provided the necessary information for managers to effectively oversee implementation, while tracking progress toward annual work plan targets. Annual reports regularly included information on the overall progress of activities.

- What was the value of specific studies carried out by the M&E unit but not related specifically to monitoring project progress and impact?

The Team did not examine any special studies conducted by the Project.

- To what extent did the project M&E system engage appropriate government counterparts at the central and local level in its information collection and dissemination activities? What was the fruit of this interaction?

MOH counterparts were actively engaged in information collection and the Project's M&E system utilized information generated by the MOH's new HMIS system. Additionally, the close interaction with the MOH concerning data included data sharing on other levels (reports and data

collection efforts by others working with the MOH) so that the data used and reported by the Project were fully consistent with the MOH's statistics or estimates for the same variables.

## **Annex 4**

### **Persons Contacted During the Djibouti MCH (PECSE) Project Evaluation**

#### **U.S. Embassy/Djibouti**

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Deputy Chief of Mission

#### **USAID/Djibouti**

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#### **USAID/Washington**

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#### **JSI/Expanded Coverage of Essential Health Services Project Office**

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#### *Ministry of Health – Headquarters*

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Dr Ammar Abdo  
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Mohamed Ali  
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**Ministry of Health – District Offices**

Ali-Sabieh Hospital

Tadjourah Hospital

Ministry of Health – Rural Health Posts  
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Sagalou

**UNICEF- Country Office**

Dr. Aloys Kamuragiye  
Country Representative

Dr. Moktar Ahmed Omar  
Nutrition Officer

**UNFPA-Country Office**

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**WHO- Country Office**

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## Annex 5

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