

PN-AY-678

USAID/Rabat Child Survival Strategy

Morocco
6 June 1986

	<u>Page</u>
I. INTRODUCTION-----	1
II. SCOPE OF THE PROBLEM-----	1
III. STATUS OF PROGRAMS AND POLICIES-----	2
IV. MAJOR PROBLEMS-----	2
A. Inadequate VDMS penetration and impact in rural areas of covered provinces-----	3
B. Lack of USAID and MOPH emphasis on health interventions, especially during initial stages of VDMS implementation-----	3
C. Absence of a comprehensive national Information, Education and Communication (IE+C) strategy and related demand creation activities-----	3
D. Insufficient baseline information on infant nutritional status and related health indices/ problems-----	4
V. GAPS IN CHILD SURVIVAL PROGRAMS AND PRIORITY NEEDS----	4
A. VDMS Program Support-----	5
B. National Program Support-----	5
1. Expanded Program of Immunization (EPI)-----	5
2. Oral Rehydration-----	7
3. Child Spacing-----	8
4. Nutrition-----	11
5. Information analysis/program monitoring-----	12
V. USAID LONG TERM PLAN-----	13
A. Resource Requirements-----	13
B. Policy Dialogue Agenda - Child Survival-----	13
C. Monitoring Plan-----	14
D. Staffing Requirements-----	15

APPENDICES

A.	Morocco Population Projections 1986-1990-----	16
B.	Child Survival Benchmarks-----	17
C.	Other Donors-----	18

I. INTRODUCTION

Morocco's recently approved CDSS described the substantial gains made by Morocco over the past twenty years in improving health conditions, as reflected by present life expectancy figures of 59 for men and 60 for women, and a drop in the infant mortality rate to 91 nationwide. Furthermore preventable communicable disease incidence (whooping cough, diphtheria, polio and measles) has fallen substantially. Nonetheless, both infant and child mortality rates (the latter estimated to be between 52 and 22/1000) are unacceptably high for a country at Morocco's stage of development, especially among the poor in the rural and urban marginal areas.

USAID is addressing these problems, as well as that of rapid population growth, through a program of door-to-door delivery of health services, known as Visite à Domicile de Motivation Systematique (VDMS). This program embodies all four key child survival interventions; oral rehydration therapy, immunization referral, child spacing, and nutrition surveillance, including promotion of breastfeeding and correct weaning practices. VDMS, with its already planned potential to affect directly the lives of 70% of the Moroccan population by FY 1983 and to bring health benefits indirectly to an even greater percentage, remains the driving force of the Mission's Child Survival Strategy. In choosing this route the Mission has been mindful of the GOM's absorptive and delivery capability, as well as the Mission's capacity to support and monitor assistance and its results. Simultaneously, we are conscious of gaps in the extent and the effectiveness of coverage in the overall VDMS program and its individual Child Survival aspects. These relate to weaknesses in infrastructure, mobility, supervision, communications and, in some cases, technology.

With that in mind, USAID/Rabat's Child Survival Strategy will focus on strengthening the performance and impact of the VDMS program through the promotion of increased utilization and effectiveness of its package of child survival services by: (1) augmenting both fieldworker and fixed clinic coverage, capabilities and service delivery responsibilities; (2) increasing public awareness of oral rehydration therapy and immunization as key child survival strategies; and (3) reinforcing both GOM and private sector capacities to promote child survival technologies. Support is being provided as well to accelerate the GOM's national Expanded Program of Immunization (EPI), and is programmed to carry out a national child nutrition survey, the first since 1971.

II. SCOPE OF THE PROBLEM

Although the following table reflects the improvements in infant and child health that have taken place over the past twenty years, it also underlines the task remaining.

Infant and Child Mortality

Infant Mortality Rate (IMR)

120/1000 (1960)
110/1000 (1970)
91/1000 (1980)

Child Mortality Rate (CMR)

98/1000 (1960)
69/1000 (1970)
52/1000 (1980)

(Note: 1980 figures from WFS survey reported 1985).

2

Infant deaths comprise 40-50% of total deaths in Morocco, with 35% of these deaths showing diarrhea as a contributory factor and half attributed to infectious diseases, underlying the need for greater use of "child survival" measures. Vaccine-preventable diseases, particularly measles, still contribute to infant mortality. These disease and mortality patterns, are particularly present in rural areas and in urban areas with large disadvantaged populations, where they are often aggravated by malnutrition. Respiratory infections and diarrhea are the major cause of outpatient consultations throughout the public health system. Finally, fewer than 15% of births occur under medical supervision, with approximately 80% occurring at home usually assisted by traditional midwives.

Appendix A provides population data related to child survival, i.e. numbers of children 0-4 and women of reproductive age projected during the planning period, providing an idea of the potential impact of a child survival strategy focusing on these problems.

III. STATUS OF PROGRAMS AND POLICIES

Since 1980, the Ministry of Public Health (MOPH) has given priority to strengthening its primary health services programs. The 1981-85 Development Plan allocated 55% of the investment budget of the Ministry to basic health care, based on funding from a planned IBRD loan to support the Ministry's Primary Health Care program. The Plan also set precise MCH, family planning, immunization, health education and sanitation objectives. Since the loan, was signed only late this spring, however, the resources for the intensification of actions in this area were never made available. Thus, the overall health delivery system is still centered on urban facilities, with hospitals, urban health centers and dispensaries continuing to consume the bulk of available operating resources. In addition, in recent years, between 70-75% of the operating budget went to personnel. This has resulted in an ever decreasing proportion of resources available for materials in support of Ministry programs. This situation, coupled with the severe GOM-wide budget limitations of the past several years, has hindered MOPH efforts to reorganize and expand its basic health programs for family planning, immunization, MCH, and nutrition, leaving these programs incomplete. Nonetheless, a solid basis for action, in terms of the necessary planning at the national level, has been accomplished in three of the four "Child Survival" intervention areas -- immunization, oral rehydration, and child spacing.

USAID assistance during this period has supported MOPH efforts to strengthen and expand its family planning and preventive health care programs, principally through support for the development and expansion of the VDMS household delivery mechanism. With the completion of the current expansion, the program will be operating in 28 of the country's most populous provinces and prefectures, comprising more than 70% of the Moroccan population. Continued support for this activity as the keystone of the Mission population and child survival effort is programmed under the approved Mission FY87-91 CDSS.

IV. MAJOR PROBLEMS

The VDMS program has already made substantial progress in the delivery of child survival interventions and has demonstrated significant potential to

reach presently underserved populations with its comprehensive package of maternal and child health services. The program has experienced the logistic and managerial problems normally associated with program expansions of such a magnitude, however, and has been hampered by gaps in MOPH preventive health and ambulatory care service infrastructure. The program's impact has been constrained by four principal factors.

A. Inadequate VDMS penetration and impact in rural areas of covered provinces

Although within-province coverage for the initial 13 VDMS provinces averages between 60 - 70% of the population, it is uneven in rural areas, often leaving substantial segments of the rural population in these provinces without convenient access to MOPH services. This situation is reflected clearly in service statistics for family planning and MCH interventions offered under the program. Indices of program coverage in rural areas are generally less than 50% of those recorded in urban areas.

B. Lack of USAID and MOPH emphasis on health interventions, especially during initial stages of VDMS implementation

In the early stages of the program, less emphasis was placed on general MCH interventions than on family planning. This related more to the principal funding source for the specific activities rather than to any conscious policy decision. The vertical programs--EPI and other MCH activities--upon which VDMS relies for fieldworker supplies and clinic backup services are dependent on the MOPH operating budget. Even UNICEF-procured vaccines are financed on a cost-reimbursement basis. MOPH financial difficulties have made support for MCH-related interventions difficult, leading to problems in training, transport, and logistics; field disruptions of program supplies and materials such as ORS, and relatively weaker supervision.

C. Absence of a comprehensive national Information, Education and Communications (IE+C) strategy and related demand creation activities

MOPH and private sector efforts, largely through the Moroccan Family Planning Association, have been remarkably successful in the promotion of the concept of family planning and have achieved wide awareness of modern methods of contraception as well.* Similar success in promoting the awareness of child survival measures has been noted in areas covered under the VDMS program. Nevertheless, a lack of adequate information on specific obstacles to use of services and child survival techniques, and the limited availability of audio and print materials to complement MOPH person-to-person communications activities, have hampered the translation of this increased awareness into increased utilization. A pressing need exists for the development of national communication and message strategies for the promotion of child survival measures, shifting emphasis from awareness-generation to demand-creation; and the preparation of supporting training, media and materials production plans for their execution. Recent advances in social marketing make this avenue an attractive one to pursue in Morocco, particularly in the areas of family planning, ORT and immunization. (See USAID Interventions Section.)

9
D. Insufficient baseline information on infant nutritional status and related health indices/problems

The absence of reliable and current nutritional, mortality, morbidity and related data has exacerbated recognized weaknesses in MOPH health planning capabilities. The last nutrition survey was completed in 1971, since which major changes have taken place in per capita income, food availability, living conditions and literacy, leaving information seriously out of date. The World Fertility Survey, including an MCH module, was completed in 1980, and a national contraceptive survey in 1983. Although results of both have been published, the scheduled presentation of the data to government officials and to the public has been long delayed, and minimal use of them has been made for planning or programming purposes. Similarly, service statistics, excessive both in terms of collection and what is forwarded to the central level, are generally ineffectively used to improve planning or program management. Although improvement in this area is a major interest of the current management-oriented Minister of Health, an on-going reorganization of the statistical and ADP section of the Ministry has, if anything, weakened MOPH capability in this area in the past year.

In sum, there are several factors limiting the impact of the current program's impact, gaps in MOPH infrastructure and mobility support. In provinces serving more disperse and rural population groups (e.g. Beni Mellal, Sidi Kacem, El Kalaa), existing physical infrastructure averages less than 60% of requirements, using MOPH standards. This disparity is further exacerbated by the absence of lodging for some existing facilities, creating related staffing difficulties, and the lack of appropriate four-wheel-drive vehicles and a sufficient number of mopeds. Provincial supervision needs to be strengthened, and managerial and logistic support at the central level is weak. Consequently supervisory, monitoring, and evaluation systems are inadequate. Finally, resource shortfalls for the purchase of field worker and clinic supplies (ORS, vaccines, limited pharmaceuticals and weaning food supplements) for child survival interventions are a continuing problem.

V. GAPS IN CHILD SURVIVAL PROGRAMS AND PRIORITY NEEDS

As noted above, the MOPH is experiencing considerable difficulty in meeting the managerial, logistic, medical supply and local cost support requirements associated with the maternal and child health components of the VDMS program. In addition, during initial VDMS implementation, USAID was concerned that too much emphasis on the program's health interventions would distract from time devoted to its family planning motivation, service and referral activities, the major objective of USAID project support. Five years of implementation experience, however, have demonstrated that this was a misplaced concern. In fact, experience has shown that delivery of family planning and other maternal child health services are mutually reinforcing, with the health interventions strengthening significantly the credibility and resultant access of MOPH workers to client population groups and households.

*The 1983-84 National Contraceptive Prevalence Survey found 26% of Moroccan married women of reproductive age to be practicing contraception, with more than 91% being aware of at least one modern means of contraception.

With the completion of the current expansion, assuming the identified infrastructural and logistic constraints can be overcome, the VDMS program will be operating in areas covering more than 70% of the population. Experience during the initial implementation phases has demonstrated the program's potential to increase effective MOPH population coverage and to address child survival priorities. Accordingly, USAID/Rabat's strategy for achieving Mission and GOM Child Survival goals will focus on strengthening VDMS performance, coverage and impact in the agreed upon project provinces and prefectures; coupled with support as necessary at the national level to accelerate the GOM's immunization program, and to reinforce the effectiveness of other child survival measures (ORT, child spacing, including birth monitoring, and nutrition), particularly in VDMS provinces. The specific components of the Mission's Child Survival Strategy are detailed below.

A. VDMS Program Support

1. Strengthen Outreach Service Program: USAID will provide support for additional training and fieldworker supplies for VDMS and dispensary staff to strengthen worker capabilities for delivery of child survival measures. Under this significantly expanded role, VDMS agents will schedule and provide vaccinations on site (for the first time); perform medical screening and referrals of pregnant women; and monitor high risk pregnancies in coordination with clinic back-up.

2. Improve Performance of Clinic/Dispensary Backup Services: USAID will provide limited equipment, vaccine, pharmaceutical and training support to improve medical backup services, including tetanus immunization for women of reproductive age and increased pregnancy follow-up; and improved cold chain storage and equipment sterilization capabilities.

3. Increase Rural Penetration and In-province Coverage: Limited support will be provided to assist the MOPH in extending its physical infrastructure to underserved rural areas and deploying staff to these sites. Support will also be provided to improve staff mobility and rural access. This support will primarily include procurement of four-wheel-drive all surface vehicles, additional mopeds for new coverage areas, and repair and replacement support for vehicles in service at the time of initial VDMS launch.

B. National Program Support*

1. Expanded Program of Immunization (EPI)

a. Present Status: The EPI program in its present state basically follows WHO guidelines, and was launched in 1980/81 during a series of planning sessions coordinated by key MOPH administrators, pediatricians and consultants from WHO and the International Childrens Center. A phased plan for national expansion was developed and has been implemented, with coverage theoretically expanded to all areas of the country in 1984. The basic strategy was to incorporate vaccination delivery into existing MOPH infrastructure through fixed facilities, while at the same time utilizing mobile teams for difficult-to-reach areas. This was in keeping with Ministry strategy to integrate service delivery and to use existing personnel to its best advantage. A target of 100% coverage for children less than 1 year was set in the 1981-85 Plan. With UNICEF assistance, an impressive cold chain has been established from the national depot to the dispensary level. The program has shown positive results as reported by MOPH monitoring of the number of

vaccine doses administered and simple epidemiological statistics.

Extent of current EPI coverage

(% children less than 1 year old)

DPT-polio	37% (1981);	51% (1985)
BCG	40% (1981);	62% (1985)
Measles	- (1981);	46% (1985)*

*Measles vaccine was only introduced in 1983.

b. Problems: Present coverage has reached a plateau (averaging 45-60%, depending on the vaccine), with more difficult to reach population groups still unserved, particularly in the rural areas. The Ministry reports that the major constraint to achieving target levels is lack of mobility and the means of support to reach unserved areas. In addition, given the present financial crisis and difficulty in allocating GOM resources in a timely manner, vaccine procurement has become increasingly problematic. Program coordination from the central level as well as resource mobilization outside the health sector has been weak due to lack of a national program director. Use of local community support and local government structures has only occurred on an ad-hoc basis with little central support or coordination. Motivation for program performance at all levels, both within the health system and without, is low.

c. Priorities for USAID Assistance: With the agreement of the MOPH to provide program direction at the top, USAID has agreed to address the problems outlined above during a two year period beginning in January 1987. This support will be financed through the allocation of the bulk of the \$2 million of FY86 Child Survival monies. This support is allocated to the following areas:

- vaccine procurement
- mobility support
- training for supervision as well as for expanded implementation level staff
- cold chain support, including an additional vaccine depot
- communications for public demand creation
- motivation for program performance

This support for an acceleration of the EPI program over a two year period has been coordinated closely with UNICEF, the other major donor in this area. UNICEF will continue its support for mobility in areas not covered by USAID, as well as for vaccination materials and agent training. At the same time, the World Bank Primary Health Care Project will finance the creation of an improved pharmaceutical management supply and distribution system, which will facilitate MOPH vaccine procurement at the termination of USAID assistance.

*An underlying objective of assistance in the areas discussed below is the improvement of the effectiveness of the VDMS program. This to the extent possible, assistance focuses on VDMS provinces.

2. Oral Rehydration

a. Present Status: In 1979 a clinical oral rehydration trial was carried out under MOPH auspices to test the effectiveness of this simple, new therapy for treatment of diarrhea. The therapy was found to be effective in 80% of cases, even with severe dehydration. The medical personnel taking part in the trial were favorably impressed and supportive of the therapy. Consequently ORT was adopted as an official MOPH policy and introduced using imported packets supplied by UNICEF. From the time of its introduction, top MOPH administrators decided that the therapy should not be over-medicalized and consequently did not spend the organization and training time accorded to the EPI program discussed above. This decision reflected thinking that the national immunization program was more technical, with greater logistic and technical problems than ORT.

A seminar was held with provincial medical officers to launch the program in 1981. The 1981-85 Plan defined diarrheal disease control through the use of ORS as a priority program with the goal of treating 35% of diarrhea cases with ORT. UNICEF supplied ORS packets from 1979-1982. In April 1983 local packaging of ORS began at an MOPH facility in Casablanca with finance and technical assistance provided by UNICEF. This facility has the capacity to produce 6 million packets of ORS per year, but has never gone over 1.9 million to date due to recurrent technical problems. In 1984 mixing from raw materials was begun at the production facility. In addition to the MOPH facility, a private firm produces ORS for sale through private pharmacies and to the MOPH. This company, although indicating interest in improving sales, has reported that it essentially has been producing the product as a service to the MOPH.

b. Problems: As a result of the perception discussed above that the ORT program was "banal," the attention given to its promotion, both to the general public and within the public health professional community has been minimal. Program management at the central level is also minimal, with a trained nurse working under the MCH program director in charge of both the immunization and ORT programs. Distribution and utilization through the VDMS program has been reported as weak. Local ORS production has also been characterized by continuing technical problems hampering production, and consequently distribution of ORS to the provinces. UNICEF has continued to provide technical assistance and materials in an effort to maintain production. Information from UNICEF indicates that production is now back to normal with improved management and repair support, as well as improved laboratory facilities on-site. Planned communication support for increasing public awareness has been disappointing, resulting in low public knowledge and utilization of this simple therapy. In the private sector greater potential for marketing and distribution of ORS exists, but is as yet untapped.

c. Priorities for USAID Assistance: To upgrade this program, USAID will focus first on improving the communications capacity of the MOPH, strengthening its ability to mount large public education campaigns in support of both ORT and immunization. Presently existing, effective social marketing techniques will be used in these campaigns. At the same time, to strengthen program effectiveness, support is programmed for the development of an ORT program manual for implementation level and supervisory personnel. The manual and associated training will strengthen MOPH delivery capability, particularly through the VDMS program. Finally, USAID will continue its policy dialogue with the GOM and encouragement to the private sector to

improve marketing and distribution of ORS. Assistance to upgrade the ORT program will be provided through the PRITECH and PATH projects with central resources, as well as a portion of the FY 1986 \$2 million child survival funds discussed above.

3. Child Spacing

a) Family Planning

1) Present Status: In addition to presenting a serious threat to the achievement of the country's overall development objectives, current high fertility and rapid demographic growth rates also contribute to Morocco's unacceptably high infant, young child and maternal mortality rates. The Government of Morocco, primarily through the MOPH family planning program, has been increasingly successful in efforts to address this problem. Findings of the 1983-4 Contraceptive Prevalence Survey (CPS) show that 26% of married women of reproductive age are contracepting, exceeding the prevalence target included in the 1981-85 development plan. If rates continue to increase as projected, prevalence will reach 30% during 1986.

Much of MOPH success can be attributed to the government's decision to integrate family planning and health service programs and to offer these services in each of its existing 1,585 clinics, dispensaries and hospital outpatient departments, with services also delivered by mobile health units and VDMS outreach workers. The MOPH offers a full range of modern contraceptive services--pills, condoms, IUDs, and increasingly tubal ligations. These services are supported by IE&C activities of the Ministry's Health Education Service.

2) Problems: In spite of these efforts the national program does not reach the entire population, and communications activities have been less successful in translating knowledge of contraception into actual behavioral change. Also, the percentage of covered populations varies greatly between urban and rural areas, with many of the rural areas accessible only by foot. These service gaps translate into reduced contraceptive prevalence and higher fertility rates in rural areas (total fertility rate of 7.02 compared to 4.18 in urban areas and 5.91 nationwide). Furthermore, the 54% of women expressing a desire to have no additional children far exceeds the percentage of women actually practicing contraception.

3) Priorities for USAID Assistance: The key component of Mission strategy in this sector is support planned under the Population/Family Planning Support III Project 608-0171 to institutionalize family planning clinic and outreach services in 28 VDMS provinces and prefectures. This activity is supported by the establishment of surgical contraception centers in 30 provincial hospitals and the provision of all contraceptive commodities required under the program. Complementing these USAID supported activities, the MOPH has implemented family planning/MCH service programs, similar to those provided under VDMS, in 3 additional provinces. This activity is supported with funding provided under the IBRD loan. Therefore, VDMS type services are scheduled for 31 of the 48 GOM provinces/prefectures. The remaining 17 provinces, in the southern part of the country and along the eastern border with Algeria, are sparsely populated and served in principle by existing fixed MOPH infrastructure and mobile clinic units supported with funding provided by UNFPA. Actual coverage is low, however. With the completion of expansion activities listed above, the

MOPH service program will result in modern family planning products and services routinely accessible to the public for approximately 85-90% of the Moroccan population.

As discussed in Section III, the provision of the additional mobility, infrastructure, training and technical support required to increase coverage and program performance in VDMS provinces is the foundation of Mission Child Survival Strategy. Secondly, to increase the effectiveness of these service programs, support will be provided to strengthen performance and service delivery capabilities of VDMS agents and clinic/dispensary backup facilities and to improve the MOPH's service statistics and management reporting capabilities. This support will enable the Ministry to assess program impact more effectively and to evaluate other aspects of program performance and cost effectiveness.

Finally, more intensive technical and local cost support is programmed to improve effectiveness of family planning communications activities. Already underway is market research on the attitudes and practices of consumer and provider groups regarding barriers to increased utilization of contraceptives. Results will be used to develop an aggressive demand promotion and IE+C campaign for family planning services. USAID's Population Strategy is described in greater detail in the approved CDSS.

b. Birth Monitoring

Intimately related to efforts to improve child spacing is the need to increase prenatal and birth supervision, both as a means of reducing perinatal and neonatal mortality rates and of promoting family planning.

1) Present Status: The Maternal and Child Health Program operates throughout the country, providing services through fixed centers and mobile teams, as well as through the VDMS household visitor program, as described earlier. Sufficient staff are presently available to operate clinics presently found in all rural health centers and urban dispensaries. Nonetheless, coverage through the program for both pre- and postnatal visits, as well as follow-up of children born is very low. Part of the reason for these disappointing statistics is that as yet few MCH clinic services are made available through the 838 lower level rural dispensaries due to a lack of trained female staff and equipment at this more remote level. This essentially leaves such rural areas uncovered.

In addition to fixed centers, the MOPH, financed by UNFPA, created mobile family health teams in 1981. The teams, 22 at present, travel regularly throughout the regions, providing MCH, health education, vaccination, and family planning services at specified contact points. This approach has not upgraded coverage substantially given the size of most provinces and the dispersed rural populations. To ameliorate the coverage problem, the MOPH has determined that rural dispensaries will be staffed with personnel who can provide MCH services. The following data illustrate the extent of the coverage problems.

Birth Monitoring and Follow-up

- Women of reproductive age represented 24% (4.9 million) of the 1982 population (20.4 million)

- Total number of births per year estimated at 1.1 million
- 3.5 million children aged 0-5 (1985 estimated)
- 5% of total pregnancies receive formal pre-natal visits or consultations programmed through the fixed facilities
- Less than 15% of the births occur under medical supervision
- Fewer than 20% of children aged 0-2 are followed by the MCH program through formal post-natal care from fixed facilities
- Approximately 80% of births occur at home with large proportion assisted by traditional birth attendants
- Maternal mortality was reported as 5.3/1000 in 1972 (no more recent figures are available).
- Information on pre- and post-natal services provided through the VDMS program is extremely limited

2) Problems: Low coverage under the program essentially results from lack of sufficient numbers of appropriately trained personnel, equipment for the MCH clinics or rural maternities, and the means to finance more than a minimal amount of transport for outreach activities through either the mobile teams or door-to-door MCH workers in non VDMS areas. Furthermore, in the existing public hospital system only 7% of the total beds are obstetrical; and the numbers of pediatricians, in both the private and public sectors, are extremely low outside of the Rabat/Casablanca areas.

Finally, the MOPH school for training midwives was closed in 1973, with teaching material from the school incorporated into nurses training in an attempt to integrate services. This has left the public system with a midwife to population ratio of 1:1.8 million, and placed a heavy burden on overworked nurses minimally trained in obstetrics. To help solve this critical shortage and build up the human resource capacity to staff the rural infrastructure, the Ministry has proposed reopening the midwife training facility.

In the rural areas where the great majority of births take place at home, traditional birth attendants are not trained in modern methods, have very little contact with and are suspicious of the public health system, and are not considered serious colleagues by the health system. Women are finally referred to the health system only in cases of grave urgency, often too late to correct the situation. More contact and cooperation between the public health and traditional systems is essential to remedy the problem.

3) Priorities for USAID Assistance: To help extend the required human and physical infrastructure to the rural areas, USAID will seek to support training of midwives for the public system, both through refresher and on-the-job training for existing personnel, and with support for the re-opening of the midwife training facility. Training support will be focused on curriculum and materials development and the provision of teaching equipment and materials. In addition, USAID is encouraging the MOPH to accept UNICEF assistance to train traditional birth attendants and, through the VDMS

program, to bring them into contact with the health system and to use the referral process before they run into trouble.

4. Nutrition

a. Present Status: The summary data presented below are taken from the 1971 nutrition survey, and have been used as the basis for program planning over the last fifteen years. The previous survey found that large numbers of children had ricketts, large numbers of women were anemic, and a wide prevalence of protein-calorie malnutrition existed. These data were used by the MOPH to create a vitamin D distribution program, to introduce iron supplements to the VDMS program for pregnant and lactating women, and to introduce a weaning food, also through the VDMS system. It is recognized that the existing MOPH nutrition program is deficient in a number of areas, however, and that more recent data on the situation is essential for program redirection.

Nutrition (1971 survey)

- 42% of children less than 4 years were moderately malnourished
- 5% of children less than 4 years were severely malnourished
- Malnourishment was most marked in age group 10-33 months
- Marked increases in malnourishment occurred at weaning (6 months)
- one-half pregnant and lactating women were anemic
- Recent estimates indicate malnutrition beginning earlier, with less severe cases, and increased chronic malnutrition

b. Problems: Lack of any recent data on the extent of the nutrition problem makes it very difficult for the Ministry to plan and adapt its programs to existing needs. An updated child nutrition survey has been proposed for a number of years, but has not yet been realised. It was planned that the survey would take place following the national household consumption survey, undertaken by the Ministry of Plan last year, using the same sampling frame. Planning for the study has progressed with UNICEF assistance, but due to personnel constraints the survey has not begun. Provincial pilot testing of the developed survey module is, however, underway.

c. Priorities for USAID Assistance:

(1) Given a request from the MOPH for assistance in undertaking the long-planned child nutrition survey update, USAID is presently exploring with the U.S. Department of Health and Human Services the possibility of programming local currency generations of PL 480 Title I sales under a previously existing agreement. The Ministry has proposed to use these funds to support the field work and analysis of the proposed nutrition survey. The results of the survey will provide important recent information on which the Ministry can base modifications of the child nutrition program. USAID is currently in discussion with UNICEF, the Ministry of Health and the Ministry of Plan on the need to focus the study to assure results are available in a useful timeframe

(2) Coordination between the Ministry of Health and the Ministry of Social Affairs (MAAS), the latter of which is responsible for a mother and child supplementary feeding program supported through the distribution of Title II commodities, has been almost non-existent. An earlier USAID/Catholic Relief Services (CRS)-supported effort to assist the program focused on the training of monitrices from the MAAS MCH feeding centers in nutrition education and growth surveillance. The program had limited success, due in part to the lack of systematic follow-up or referral of cases to the health system. As one element in the phase-over of all aspects of the supplementary feeding effort to the GOM over the next 5 years, USAID, under the population and family planning project, is supporting a collaborative effort between the two Ministries (a) to improve the training of monitrices in the MAAS centers in the range of child survival measures, including child spacing (family planning promotion), and (b) to provide systematic referral to the health system for family planning services and follow-up of malnourished and ill children.

5. Information analysis/program monitoring

a. Present Status: Within the existing Ministry organizational structure, the Division of Infrastructure has been given the ad-hoc planning responsibility for ongoing programs. This includes assessment of existing Ministry programs as well as physical and human infrastructure, and responsibility for analyzing gaps and suggesting solutions for the future. Staff from this unit have drafted proposals for the re-orientation and improvement of the Ministry's physical infrastructure to meet the needs of a diverse and in some cases widely dispersed population. Recent analyses on health program impact in selected provinces were undertaken by this Division in preparation for the World Bank Primary Health Care Project. Much of this work is complete, insightful and high quality material, attesting to the level of analytical capacity that exists in the Ministry.

b. Problems: Given the competing demands of a somewhat unorganized bureaucracy, however, follow-up on proposals is often minimal. In addition, as discussed above, support for analysis of existing epidemiological and program data has been lacking. Enormous amounts of information are provided to the central Ministry in raw form and need to be analyzed to make necessary programming modifications for service improvement. A key example is service statistics from the VDMS program. Very little monitoring or evaluation of the impact of the VDMS delivery package has been done. Under the Population and Family Planning project, support has been programmed to improve the analytical capacity of the population division to compile and utilize service data. Furthermore, the Infrastructure Division has proposed the creation of an "evaluation unit," which could undertake short studies, analyze existing data or do quick field evaluations to address specific issues of interest.

c. Priorities for USAID Assistance: Under the existing Population and Family Planning Project, in addition to assistance to improve service statistics, support is programmed to improve the Ministry's capacity to undertake operational research. To strengthen the total impact of the program on child survival, USAID will support additional emphasis on evaluation and monitoring of the MCH interventions besides family planning under the VDMS program, especially the availability, distribution, and utilization of ORT; and immunization coverage as the VDMS workers begin actually giving vaccinations, instead of only making referrals.

VI. USAID LONG TERM PLAN

A. Resource Requirements

As noted in the approved CDSS and the ABS, to implement its Child Survival Strategy, the USAID has programmed the following resource requirements over the next five years, in addition to those included in the USAID Population and Family Planning Project. The Mission is proceeding with its Child Survival Strategy on the assumption that Morocco's selection as an "emphasis country" will permit the allocation of \$1.5 million per year in additional resources for that purpose between FYs 1987-90. This assumption is set forth in the Mission's FY 1988 ABS.

	(\$000)					
	FY 1986	FY 1987	FY 1988	FY 1989	FY 1990	FY 1991
VDMS		800	800	800	800	-
EPI	1700	-	250	300	200	-
ORT	300	200	150	150	200	-
Birth Monitoring	-	300	200	150	200	-
Other	-	200	100	100	100	-
Total	2000	1500	1500	1500	1500	8000

B. Policy Dialogue Agenda - Child Survival

USAID's Child Survival Strategy contains several items for the Mission's policy dialogue agenda. Although many of these subjects have already been raised at high levels of the GOM, they are being reinforced as a part of the Strategy. Key among these is the Mission's effort to widen consciousness of the implications of Morocco's growth rate on development objectives, and the will to take effective action to reduce that growth rate. This involves broadening the base of interest and action in the GOM beyond the Ministry of Health and to some degree the Ministry of Plan; improving the effectiveness of MOPH family planning programs, especially of VDMS given its potential to reach nearly 3/4 of the population; and increasing the role of the private sector in family planning promotion and service delivery. To date the GOM has limited its family planning effort to the MOPH which has lacked resources to provide adequate support to field programs, including VDMS. Furthermore, GOM attitudes toward efforts to increase the availability and use of family planning services through social marketing, and through more aggressive promotion in the private sector, are very conservative, requiring persistent and careful negotiating to relax. USAID has already had a modicum of success in relaxing these constraints. Specifically, as a result of AID efforts, the Ministry of Social Affairs and Artisanat is now undertaking a family planning promotion effort in collaboration with the Ministry of Health;

Ministry support and supervision of VDMS is to increase, as that program expands this summer; and the GOM has agreed to develop an appropriate social marketing effort, based on the results of on-going market research designed to detect gaps and barriers in current family planning coverage.

USAID has a similar agenda regarding child survival measures other than child spacing. Notable progress has already been achieved in the Expanded Immunization Program. In programming the \$2 million in assistance to the EPI effort USAID pressed for and obtained GOM agreement to appoint a head of the program within the MOH, to involve other ministries and local authorities in its planning and implementation, and to expand the role of VDMS workers in the program to include actual immunization rather than just referral. Implementation of these agreements will require follow-up at various levels.

In the area of Oral Rehydration Therapy, as in immunization, the need to increase demand, especially by effective publicity regarding effectiveness of the measure, is a priority for discussion at higher levels of the GOM. USAID will seek especially more effective MOPH organization to that end. Equally important, however, is a loosening of the strings that seem to constrain wider and more effective private action in the production and distribution of oral rehydration salts and promotion of that therapy. With contractor assistance USAID will continue efforts to expand private action in this area.

Finally, in nutrition, USAID will continue discussions at high levels of various ministries to assure that the proposed child nutrition study is realistic in design and useful in the near future to GOM planning efforts.

C. Monitoring Plan

Short- and long-term benchmarks established for both the health and family planning aspects of child survival were included in the Mission's approved CDS and Action Plan. They are repeated in Appendix B. Progress against those benchmarks will be reported on an annual basis in the Action Plan. These goals are, for the most part, those defined by the GOM, and will be included in the next development plan, currently 1987-92.

A major mid-term evaluation of the Population and Family Planning Project is programmed for early FY 1987 (second quarter). That evaluation will focus to a large extent on the impact of implementation of the VDMS program, including both its health and family planning aspects. Feeding into that evaluation will be results of the national contraceptive prevalence survey, programmed for late fall, which is to include a family health module thereby permitting updating of results of the 1979-80 World Fertility survey and the 1983 CPS. USAID is presently discussing with other donors and the GOM the potential for a major role for the Ministry of Plan in that study, previously carried out by the MOPH.

In the shorter range, technical assistance is being provided to the MOPH this fiscal year in revising the VDMS service statistics system to permit use of these data to improve program management as well as continuing evaluation.

D. Staffing Requirements

The USAID/Rabat Child Survival Strategy discussed herein has been developed in light of both USAID and GOM staffing and other resource constraints. Given the Mission's overall analysis, accepted in the recent Program Week review, that rapid population growth continues to be one of the most threatening obstacles to achievement of Morocco's development objectives, we remain fully committed to a reduction of that rate of growth as our overall sector goal. This will be achieved largely through the implementation of the VDMS program, the driving force of the Child Survival Strategy. Mission staffing has been programmed with that objective in mind; two persons, the direct hire population officer, and a Moroccan professional, are assigned throughout the strategy period full time to implementation of the population project. Direction and reinforcement of that effort and technical health expertise are provided by the direct hire Division Chief and the Health Officer. Additional support from both health and population contractors as well as from two other Moroccan professionals is provided for specific project activities. A sharpened emphasis on implementation, monitoring and supervision of the VDMS effort has been adopted as the key Division priority over CDSS period, strengthened by policy dialogue to obtain a clearer and broader commitment by the GOM to reduced population growth. This commitment has been communicated to the GOM which has welcomed this strategy as a means of bringing the total package of child survival measures to the majority of the Moroccan population.

APPENDIX A

Based on the census of 1982 the following table presents population in projections for the 0-4 age groups during this planning period.

Morocco
Population Projections 1986-1990
(000's)

Children 0-4

Years	Total Population (0-4 years)	Urban	Rural
1986	3,571	1,347	2,224
1987	3,701	1,418	2,283
1988	3,736	1,447	2,289
1989	3,771	1,475	2,296
1990	3,808	1,506	2,302

Women of Reproductive Age .
(15-44)

Years	Total Population (women 15-44)	Urban	Rural
1986	9,852	4,961	4,891
1987	10,198	5,207	4,991
1988	10,557	5,421	5,136
1989	10,929	5,649	5,280
1990	11,318	5,890	5,428

CHILD SURVIVAL BENCHMARKS

Overall: By 1991 Infant Mortality reduced from 91 to 75 per 1000 live births;
child mortality reduced to 10 per 1000

Short-term Benchmarks (1987)

Long-term Benchmarks (1991)

1. Child Spacing

Contraceptive prevalence increased from 26% to 34% (modern and traditional methods).

Contraceptive prevalence increased to 43% by 1991 (modern and traditional methods).

Number of contraceptive users increased from 980,000 to 1.1 million married women of reproductive age (MWRA).

Number of contraceptive users increased to 1.6 million MWRA by 1991.

Birthrate reduced to 33; total fertility rate reduced to 4.37 by 1991 (currently 5.1).

2. Immunization

Immunization coverage of children under 5 against polio, diphtheria, whooping cough, measles, tetanus and tuberculosis increased to 95% in urban areas; to 80% in rural areas.

95% of all children immunized effectively against polio, diphtheria, whooping cough, measles, tetanus and tuberculosis.

3. Oral Rehydration Therapy

Public knowledge of ORT and immunization increased to 95%.

Child mortality related to diarrheal illness decreased to 10%.

4. Nutrition

Nutrition benchmarks will be established once the national nutrition survey is completed.

OTHER DONORS

A. World Bank

In recognition of the historical urban, hospital orientation of the Ministry's budget allocations, which has continued despite primary health care rhetoric to the contrary, the World Bank was asked to support the Government in expanding a more cost effective primary health care infrastructure, emphasizing outreach to the rural areas. After a lengthy period of planning and negotiations, a \$28.4 million loan was finally signed in April 1986, almost a year later than expected. Funding under this loan should now be available for disbursement through the Ministry of Finance, although final legal clearances were still in process at the time of preparation of this document. The delays already experienced and the fact that disbursements (other than technical assistance) under the loan will be made on a reimburseable basis, coupled with the present economic crisis, make it likely that project implementation will be slow indeed.

This project, the first in the health sector for Morocco, contains the following components:

1. Expansion of primary health services infrastructure: During the design phase, an improved and flexible plan for physical infrastructure coverage was developed, which provided a number of new options depending on the nature of the population and region to be covered. With regard to child survival this includes a new "basic" rural dispensary, the inclusion of MCH services at the rural dispensary level and small maternity clinics at rural health centers, all to extend the numbers of medically supervised births and improve the presently poor MCH service coverage from fixed facilities. The project will finance the construction and equipping of additional infrastructure in three pilot provinces, which presently contain approximately 10% of the Moroccan population. No USAID child survival resources will be programmed for use in these provinces.
2. Management: A continued strengthening of the planning capacity of the Ministry will be undertaken under the project. This will follow on work done during the project design phase in preparation of the infrastructure strategies mentioned above, and the population and facility studies done as background for the project. Support for establishing a capacity to carry out limited evaluation studies and ongoing research will be provided. This unit will then be used and further strengthened by undertaking the required assessments of the MCH portions of the VDMS program described above in the USAID strategy. Under the Bank project studies on revisions of internal MOPH management structure will be undertaken. In addition, a program of special studies have been planned for (1) monitoring the health services improvement aspects of the project itself; (2) a comprehensive look at financing in the entire health sector; and (3) an overview of hospital management alternatives.
3. Training: Educational materials and equipment will be provided to the College of Public Health to improve its capacity to provide quality paramedical training for a wide range of trainees in different paramedical specialities. In addition, equipment, supplies and vehicles will be provided to the health education unit to improve its capacity to produce quality IE+C materials and its ability to reach the rural areas with the messages produced.

4. Drug management and supply: The project will provide support for a reorganization of the entire public health drug supply and management system. Through improvements in its management system the Ministry will increase substantially the availability of necessary basic drugs for support of primary health care, including vaccines. Presently the allocated budget is inefficiently utilized, creating supply problems throughout the system, as evidenced by the continuing vaccine supply problems. In addition, a formulation and packing unit will be constructed for the production of a limited number of essential drugs from imported raw materials. The improvements in management and supply addressed by the project will be accomplished through the creation of a new drug supply unit, which will be staffed and trained to manage the entire process.

B. UNICEF

UNICEF has been the donor with the most involvement in the area of child survival over the past few years, although the total level of its resources is comparatively small. Its largest area of support has been to the national Expanded Program of Immunization (EPI). In this area UNICEF has provided training in program planning and management for supervisors, as well as training in implementation for execution level personnel. This includes support for the development and production of an EPI module for training use and reference throughout the system. As noted above, however, much training still needs to be done particularly at the provincial supervisory and execution levels, which USAID will support when necessary. UNICEF has also provided vehicles within its own limited means in support of provincial mobility for EPI. There is still much to be done in this area, as the Ministry reports that transport is a critical constraint to improved rural coverage. Cold chain and vaccination equipment has been provided for the national EPI program.

Support for the national diarrhea control program has been given, primarily in the form of a packaging plant in Casablanca which has the capacity to produce 6 million packets of ORS per year. Although this unit has been plagued with production problems, UNICEF presently reports that steps have been taken to improve the management and testing capacities of the unit, which has led to regular production again. UNICEF has programmed a national evaluation of both the EPI and ORT programs together, but as yet no concrete plans for its execution have been made.

In addition, UNICEF has assisted the Ministry in the planning stages for the upcoming nutritional study through the production of training materials, support for the training of survey personnel, as well as support for survey pre-testing in pilot provinces. USAID plans to supplement this assistance by the provision of local cost support for the actual survey as discussed earlier.

Finally, UNICEF has provided support for a number of smaller activities, particularly in the three pilot World Bank provinces, in support of the Ministry's primary health care program. This includes support for training traditional birth attendants, vehicles, equipment and material support for the MCH program. In addition, training and spare parts support for the national motor pool has been programmed.

C. UNFPA

UNFPA has provided assistance to the Ministry of Health as well as other Ministries for a number of demographic evaluations and studies. Aside from this study support, 22 mobile family health units have been provided to assure improved rural MCH coverage to areas with widely dispersed and difficult to reach populations. These units provide comprehensive MCH services periodically at predetermined assembly points in the provinces. In addition, UNFPA has provided mofylettes and other vehicles in support of the VDMS program in the provinces. This mobility support is what makes it possible for the mobile health workers to undertake their home visits. In the area of training, 20 training modules have been produced and provided to the MOPH for paramedical training, particularly in support of the MCH and family planning programs.